The Consumer Engagement-Interactivity Link: An e-Retailing Perspective

A thesis submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy - Marketing

The University of Hull

by

Naomi Jayne Hedges, BA (Hons), MSc

December 2015
Acknowledgements

I would like to thank my supervisor Haseeb Shabbir for his ongoing support and guidance throughout the PhD process. The encouragement and the high standards set were essential to completing this research. My appreciation is extended to all of the people who participated in my field work, both the interviews and survey; without all of their time and input this process would not have been possible.

I would also like to thank my partner, friends and family for all of their support throughout my academic journey.
## Contents

### 1.0 Introduction ........................................................................................................ 13
- 1.1 Background to Issues within the Marketplace .............................................. 13
- 1.2 The Recession and Consumer Spending ...................................................... 14
  - 1.2.1 Sector Size and Consumer Spending .................................................. 16
- 1.3 The Introduction of the Internet .................................................................. 17
- 1.4 Issues within the Retail Sectors .................................................................. 19
  - 1.4.1 Perceived Risks ................................................................................. 19
  - 1.4.2 ‘Social Shopping’ ............................................................................... 20
  - 1.4.3 Logistical Problems ........................................................................... 21
- 1.5 Research Importance and Justification ....................................................... 22
- 1.6 Shortcomings of Existing Research ............................................................... 23
  - 1.6.1 Conceptual Shortcomings ................................................................. 23
  - 1.6.2 Empirical shortcomings ..................................................................... 24
- 1.7 Research Aim, Questions and Objectives of the Study ............................... 25
- 1.8 Research Contribution ............................................................................... 26
  - 1.8.1 Conceptual Contribution .................................................................... 26
  - 1.8.2 Methodological and Empirical Contribution ....................................... 27
  - 1.8.3 Managerial Implications ..................................................................... 28
- 1.9 Structure of Investigation ............................................................................. 29

### 2.0 Literature Review ............................................................................................... 30
- 2.1 Introduction ...................................................................................................... 30
- 2.2 Relationship Marketing .................................................................................. 31
- 2.3 Consumer Engagement (CE) ...................................................................... 33
- 2.4 Issues in the Conceptualisation of Consumer Engagement ....................... 37
  - 2.4.1 Relationship with Similar Constructs ................................................. 37
  - 2.4.2 Lack of Consensus on Dimensionality .............................................. 40
4.4 Quantitative Methodology and Procedures ............................................ 108
  4.4.1 Data Collection ................................................................................ 108
  4.4.2 Cross Sectional Design ................................................................. 108
  4.4.3 Survey Research ............................................................................. 108
4.5 Sampling Method ................................................................................... 109
4.6 Measurement Format of Items ............................................................... 111
4.7 Pilot Testing ........................................................................................... 113
  4.8.1 Question Order ................................................................................ 115
  4.8.2 Questionnaire Layout ...................................................................... 115
  4.8.3 Questionnaire Instructions ............................................................... 115
  4.8.4 Questionnaire Completion ............................................................... 116
  4.8.5 Questionnaire Length ...................................................................... 116
4.9 Evaluating Research Quality ................................................................. 117
  4.9.1 Reliability ......................................................................................... 117
  4.9.2 Validity ............................................................................................. 117
4.10 Summary ............................................................................................. 118

5.0 Qualitative Research Findings ............................................................. 119

  5.1 Introduction .......................................................................................... 119
  5.2 Interactivity ........................................................................................... 119
    5.2.1 Communication ............................................................................... 120
    5.2.2 Speed of Response ......................................................................... 124
    5.2.3 Customisation .................................................................................. 126
    5.2.4 Navigation ....................................................................................... 129
    5.2.5 Control ............................................................................................. 131
    5.2.6 Affordance ....................................................................................... 133
  5.3 Consumer Engagement ......................................................................... 135
    5.3.1 Emotion ........................................................................................... 138
    5.3.2 Experience ....................................................................................... 140
5.3.3 Conscious Connection ................................................................. 142
5.3.4 Learning & Insight ................................................................. 145

Behavioural CE .................................................................................... 147
5.3.5 Commitment & Participation Behaviour ......................................... 147
5.3.6 Co-Creation ............................................................................. 149

5.4 Nature of Consumer Engagement’s Dimensionality ...................... 151

5.5 Moderating Effects ........................................................................ 154
5.5.1 Trust ........................................................................................ 154
5.5.2 Satisfaction .............................................................................. 156
5.5.3 Self-Brand Connection ............................................................ 158
5.5.4 Tolerance ................................................................................ 160
5.5.5 Gender .................................................................................... 161

5.6 Summary ...................................................................................... 164

6.0 Quantitative Research Findings ................................................ 166

6.1 Introduction .................................................................................... 166
6.2 Preliminary Analysis ...................................................................... 166
6.2.1 Screening and Cleaning the Data ............................................. 166
6.2.2 Assessing Normality ............................................................... 167
6.2.3 Linearity ................................................................................ 168
6.2.4 Multicollinearity ...................................................................... 168

6.3 Descriptive Statistics .................................................................... 169

6.4 Exploratory Factor Analysis ......................................................... 171
6.4.1 Suitability of Data for Exploratory Factor Analysis ..................... 172
6.4.2 Factor Extraction and Interpretation ....................................... 173
6.4.3 Document Reliability ............................................................. 182

6.5 The Measurement Model in SEM: Confirmatory Factor Analysis ... 186
6.5.1 Confirmatory Factor Analysis Interpretation .............................. 188
6.5.2 Post CFA Reliability and Validity Measures ............................ 193
6.5.3 Common Method Variance .............................................................. 194
6.6 SEM: The Structural Model ............................................................. 195
   6.6.1 Controls .................................................................................. 199
   6.6.2 Multi-Group Moderation ......................................................... 200
   6.6.3 Hypotheses Overview .............................................................. 203
   6.6.4 Evaluation of rival models ...................................................... 205
6.8 Summary ....................................................................................... 206

7.0 Discussion and Implications .......................................................... 206
   7.1 Introduction ................................................................................. 206
   7.2 Structural Nature of Consumer Engagement ............................. 207
   7.3 Nature of Relationship between Consumer Engagement and Interactivity ................................................. 213
   7.4 Interactivity Features and Their Impact on CE ......................... 217
      7.4.1 Communication .................................................................. 218
      7.4.2 Customisation ................................................................. 222
      7.4.3 Control .............................................................................. 226
      7.4.4 Speed of Response .......................................................... 229
   7.5 Moderators on the Consumer Engagement-Interactivity Relationship ... 232
      7.5.1 Gender .............................................................................. 232
      7.5.2 Satisfaction & Trust ......................................................... 233
      7.5.3 Tolerance .......................................................................... 235
   7.6 Summary ..................................................................................... 236

8.0 Conclusion, Limitations and Recommendations .......................... 237
   8.1 Introduction ................................................................................. 237
   8.2 Conclusion .................................................................................. 237
   8.3 Limitations .................................................................................. 238
   8.4 Recommendations for Future Research .................................... 241
List of Figures

Figure 1.1 - Stages in this research .................................................................30
Figure 2.1 - Existing definitions of CE ............................................................35
Figure 2.2 - Vivek's (2009) conceptual model for CE ....................................43
Figure 2.3 - Sashi's (2012) conceptual model of CE .......................................45
Figure 2.4 - Vivek et al's (2012) conceptual model for CE ............................46
Figure 2.5 - Van Doorn et al.'s (2010) conceptual model for CE .................47
Figure 2.6 - Schmitt's (2012) conceptual model ...........................................49
Figure 2.7 - Gambetti et al.'s (2012) conceptual model for CE .....................51
Figure 2.8 - Brodie et al's (2013) theoretical model for CE in online brand communities .................................................................54
Figure 2.9 - Existing interactivity research and dimensions ..........................69
Figure 2.10 - Johnson et al.'s (2006) faceted model of perceived interactivity ..72
Figure 2.11 - Liu & Shrum’s (2002) model of perceived interactivity ..........75
Figure 2.12 - Florenthal and Shoham (2010) model of four mode channel interactivity ..................................................................................78
Figure 5.1 - Conceptual Framework and hypotheses ....................................165
Figure 6.1 – Final measurement model .........................................................190
Figure 6.2 – The research framework after CFA ..........................................192
Figure 6.3 – The structural model ................................................................198

List of Tables

Table 6.1 - Multicollinearity statistics .........................................................169
Table 6.2 – Sample demographics overview .............................................169
Table 6.3 – Initial rotated factor matrix .....................................................174
Table 6.4 – List of final scale items after EFA ..............................................180
Table 6.5 – Reliability measures for emotional CE ....................................183
Table 6.6 – Reliability measures for cognitive/behavioural CE .................184
Table 6.7 – Reliability measures for control .................................................... 184
Table 6.8 – Reliability measures for satisfaction & trust................................. 184
Table 6.9 – Reliability measures for communication .................................... 185
Table 6.10 – Reliability measures for customisation ...................................... 185
Table 6.11 – Reliability measures for speed .................................................. 185
Table 6.12 – Reliability measures for tolerance ............................................ 185
Table 6.13 Summary of final measurement model presenting factor loadings, t-value, SMC, Cronbach’s alpha (after CFA), AVE, ASV, MSV and goodness-of-fit indices ................................................................. 189
Table 6.14 – Moderation diagnostics for satisfaction & trust ......................... 200
Table 6.15 – Moderation diagnostics for tolerance ........................................ 201
Table 6.16 – Moderation diagnostics for gender .......................................... 202
Table 6.17 – Original hypotheses list prior to quantitative analysis ............... 203
Table 6.18 – Modified hypotheses list subsequent to factor analysis .......... 204
Abstract

An increasingly turbulent and unpredictable consumer landscape is posing unprecedented challenges for the modern marketer. Faced with a highly fragmented and cynical consumer base, aggressive competitive strategies, a constantly evolving digital and cyber world, and economic volatility characterising the modern macro environment, marketers are under increasing pressure to align their strategic positioning with “consumer hearts and minds”. Compounding this rise in consumer complexity is the development and salience of dual and multiple consumer identities, largely as a result of the growth in online and social media communities. Against this backdrop the Marketing Science Institute (MSI), the global voice and agenda setting body for marketing research priorities, has proposed placing consumer engagement (CE) at the forefront of marketing strategy, identifying the need to understand how to engage through innovation and design.

Whilst academics and practitioners alike have acknowledged the importance of consumer engagement, describing it as the ‘holy grail’ for unlocking consumer behaviour, there is still a lack of consensus as to its conceptualisation and therefore its relationship with other marketing constructs. The salience of the online and digital consumer further compounds the difficulty in formulating a CE framework that is integrative and cross contextual. For instance, the construct of interactivity has considerable overlap with CE when applied to the online and digital domain.

This study therefore moves away from the predominantly adopted exploratory approach to CE investigation, to provide empirical research into consumer engagement’s conceptualisation online and clarify the nature of the relationship between CE and interactivity. A post-positivist critical realist ontology was used to guide the research process, with the initial qualitative stage conducting twenty-eight semi-structured interviews - nine with consumers, eight with academics and eleven with marketing and communications practitioners, possessing online and digital expertise. The subsequent main quantitative phase then surveyed 600 online UK consumers, yielding 496 usable responses. Interview data suggested the centrality of emotional, cognitive and behavioural dimensions in consumer engagement’s structure; highlighted the antecedent
nature of interactivity in developing CE online; and identified potential moderators to the CE-interactivity relationship. The framework developed for quantitative validation was therefore based on these initial findings. The survey data was subject to exploratory and confirmatory factor analysis, structural equation modelling, satisfaction of goodness of fit indices, reliability and validity testing, and rival model comparison.

The most pertinent finding of this research is establishing the CE-interactivity link; with the interactivity constructs of customisation, communication, control and speed of response all being found to be antecedents of CE, in order of influence. The findings also confirm consumer engagement’s multidimensionality; highlighting the online CE facets to be emotional CE (emotion and experience) and cognitive & behavioural CE (learning & insight and co-creation). Gender, satisfaction & trust and tolerance are also identified as moderating factors in the CE-interactivity relationship. Contributions are made through investigation of consumer engagement in the e-retailing context; providing further insight into CE’s relationship within a nomological network of already established relationship marketing constructs; large scale quantitative validation of the proposed CE-interactivity framework; and through a multi-stakeholder approach to data collection, helping to bridge the academic-practitioner divide (Gambetti et al., 2012). The investigation concludes with an in-depth discussion about the managerial implications, as well as providing an overview of the studies key limitations, contributions and recommendations for future research.
1.0 Introduction

1.1 Background to Issues within the Marketplace

Online consumption presents a number of key challenges to the retail industry which must be recognised by both academics and practitioners alike. These issues must be identified in order to grasp the dynamics of an ever-changing consumption environment; whilst an understanding of them demonstrates the undeniable need for consumer engagement in such a marketplace.

Consumer engagement (CE) is part of an extended relationship marketing paradigm (Mollen and Wilson, 2010), and is defined as “The level of a customer’s cognitive, emotional and behavioural investment in specific brand interactions” (Hollebeek, 2011a:555). Many scholars focus on CE being a multi-dimensional construct, involving interactive and emotional experiences, co-creation of value and playing a “central role within a nomological network of service relationships” (Brodie et al., 2011:258, Vargo and Lusch, 2004). Although it is currently a highly debated topic, with little consensus as to its definition or conceptualisation, there is however agreement on its benefits for retailers. With these including value, trust, affective commitment, word of mouth, loyalty, and brand community involvement (Vivek, 2009, Vivek et al., 2012, Brodie et al., 2013); as well as creation of connection and emotional bonds (Brodie et al., 2013), and reputational and competitive advantage (Van Doorn et al., 2010) it is clear to see that an understanding of how CE can be positively influenced is vital in breaking through the noise and concerns of the competitive, crowded retail sector.

By creating retail websites which best fulfil consumer’s needs and facilitate the development of consumer engagement, this can go some way to overcoming marketplace barriers. Environmental issues include the impact of the recession on consumer spending and confidence; the introduction of the internet; shoppers’ perceived risks; the trend of ‘social shopping’; and logistical problems through the online medium- each will be discussed in the subsequent sections.

For example interactive features could be used to: create an emotional experience, so helping to reduce switching behaviours whilst enhancing consumers mood’s who are shopping to feel better; allow easy business-to-
consumer and consumer-to-consumer interaction, to reduce risk through reviews and quick access to support and also increase the social element of shopping through the online medium; enable personalisation and affordance to decrease the perceived risks linked to removal of the senses e.g. through virtual changing rooms; and provide cognitive cues about quality and expertise through easy navigation and detailed content (which could also be linked to increasing trust and satisfaction if it showcased positive customer reviews, security information and logos, returns policies etc.).

1.2 The Recession and Consumer Spending

Some of the recent industry competitiveness in the retail sector is a consequence of the 2008 recession, which brought its own challenges. These impacted directly on consumption patterns and therefore generated a new set of challenges for consumer engagement. Both the economic and political impacts of the recession are still being felt in the UK. There is constant threat of re-entering recession from both instability in the Eurozone (Walker, 2013), and the UK’s own rising accumulated debt of approximately £1.5 trillion (Walker, 2015). This teamed with peoples’ fears of job loss, expected increases in inflation rates, and government spending cuts are having a significant impact on consumer confidence in spending. This is confirmed with a BBC News report (BBC-News, 2013) finding that high street spending was down by 2% year on year in 2012, with 2013 showing little improvement. Even seven years after the recession, UK figures still highlight that consumers are choosing to spend any extra money away from the high street on travel, restaurants and hotels (Inman, 2015). Adding to this is also the feeling of cynicism with almost 50% of all consumers believing that companies take advantage of inflation rises, using it as an excuse to maintain profit margins (Mintel, 2011a).

An example of a high street firm hit hard by these economic conditions is Habitat. The retailer suffered from consumers ‘trading down’ to cheaper alternatives from competitors such as Argos, Ikea and supermarkets. This coupled with reduced spending on big ticket items (Mintel, 2011a) the company was forced into administration in June 2011. This switching behaviour experienced is not uncommon; with many consumers becoming more price sensitive during the recession. Indeed, Mintel (2011a) found that 51% of people
have traded their preferred brand, which they were loyal to in favour of a similar product with a better deal on it at the time of purchasing. This is the still the case in many retail sectors including beauty, household cleaning products and food (Mintel, 2014b, Mintel, 2015e, Mintel, 2015c). Although this can be viewed as a threat to retaining customers it can also be seen as an opportunity to attract new ones too. In such a tough market the importance of recognising that consumer engagement can aid in overcoming these challenges is key for retailers, as it provides a valuable and sustainable source of competitive advantage (Brodie et al., 2011, Van Doorn et al., 2010), and can be a major factor in building brand equity (Bowden, 2009).

It is not all bad news for retailers though. Whilst inflation rates have seen a rise, contrastingly interest rates are at an all-time low recording just 0.5% in November 2015 (BBC-News, 2015); helping to promote consumer spending. Also surprisingly the emotional effect of the recession can have positive outcomes for retailers, with people shopping to cheer themselves up (Quelch, 2008). The purchase decisions linked to this can differ depending on the demographics of age, gender and socio-economic status. For example younger people are most likely to go shopping when they are feeling down with “63% of 16-24 year olds buying clothing and accessories to make themselves feel better” (p.1), women are more likely to buy ‘image boosting’ clothing and beauty products, compared to males who opt for technology and alcohol; and households of a lower socio-economic status usually browse but don’t buy (Quelch, 2008).

The appeal, happiness, and social element connected to purchasing presents opportunities for retailers if they can capitalise on providing an experience for consumers. In this context the feeling of escapism in-store or online would be sought after by shoppers, allowing “them to unwind and escape from the pressures of daily life” (Calder et al., 2009:322). It is vital that retailers provide experiences that fulfil this with many researchers acknowledging this as a factor in creating engagement. Interactivity online is also important, especially with shoppers who browse and don’t buy, or use multi-channel methods as it “engages shoppers, creates social communities and ultimately builds loyalty” (Power, 2007:10). Although they may not buy initially, if the website can aid in restoring their mood and gain their trust and satisfaction on their visits, then this
can help initiate the engagement process. Clearly online engagement presents an exciting avenue for practitioners given the lower cost base compared to traditional offline retail environments. To give an overview of some of the issues in the current marketplace a short overview using three sectors as examples will follow. These are clothing, health and beauty, and technology.

1.2.1 Sector Size and Consumer Spending

Despite the tough climate the clothing industry was expected to grow by 4% in 2015, resulting in a sector worth £53.5 billion (Mintel, 2015b). Although when purse-strings become tighter clothing is one of the first products to be reined in, it is also one of the first spend priorities for women when they have money to spare; making the sector slightly more resilient. With research finding that “over a fifth (22%) of consumers now buy more clothes online than they do in-store” (Mintel, 2011b:1), 74% of people with access to the internet have purchased clothing online, and that online fashion sales are growing quicker than those on the high street (Mintel, 2013b), it is not surprising that marketers are actively interested in this platform. The main explanations for growth link to convenience and consumer frugality, with shoppers trying to seek out bargains and compare products and prices, quickly and easily.

The beauty and personal care industry also saw growth in 2014 of 2.7% to £9.2 billion (Mintel, 2015a). Again this sector is fairly resilient, explaining its forecast to increase by 2.6% this year (Mintel, 2015a). This is due to a low likelihood of consumers trading down in their choices with such products being seen as a necessity, and also the high frequency of gift and treat behaviour in this category. The ‘lipstick effect’ relates to this too; in hard times of recession consumers forego big ticket luxury items and instead seek smaller indulgences such as a premium brand lipstick. Shoppers in 2014 did however actively search for value through promotions and online discounts (Mintel, 2015a).

The growth of the technology sector is also increasing at an impressive rate with Gartner predicting an average worldwide spend increase of $130 billion per year, reaching “$2.7 trillion by the end of 2016” (Gartner, 2012:1). This ambitious forecast may be partially explained through the return of consumer confidence, with it peaking to its highest levels since 2008 in 2015 (Rice, 2015); meaning big ticket sales could be set to rise once again. This contrasts to the
significantly bleaker outlook at the beginning of 2012 when confidence was low, technology purchases were affected by price sensitivity and repairing rather than replacing damaged items was common (Mintel, 2012a). Another explanation relates to consumers’ desires to purchase new and innovative products quickly once they are released (Mintel, 2012a). These factors coupled with ever-reducing manufacturing costs makes this market very appealing to retailers. Again austerity drives internet sales, with over 50% of shoppers stating that they have trialled products in-store to ensure satisfaction and then bought online later, benefiting from quick price comparisons and usually cheaper prices (Mintel, 2012a).

The brief overview of the clothing, health and beauty and technology sectors demonstrates that clearly there is growth within some sectors despite the looming economic crisis. However this growth presents its own set of unique challenges to engage with consumers amongst this climate of recession. One thing that appears to be pertinent is the importance of the online consumption environment and the dynamics of engaging consumers more within this context (MSI, 2010).

1.3 The Introduction of the Internet

To realise such advantages, retailers using the internet as a shopping channel must understand both the opportunities and challenges it presents by replacing some of the human-to-human interactions with human-to-machine ones instead. Consumer’s need to still feel trust and satisfaction with their experience, and ultimately engaged remain the same; if not heightened by the lack of face-to-face reassurance available online. This is especially vital when considering that “competitors are a mouse-click away and peer-to-peer communication subjects brands to forensic scrutiny” (Mollen and Wilson, 2010:919). Price sensitive shoppers can now easily evaluate alternatives and compare prices from retailers across the globe in an instant, all in comfort of their own home. Other challenges companies face include unfamiliarity, longer time horizons, and the removal of the consumer’s ability to assess products using all their senses (Yoon et al., 2008). This weakness of intangibility is reinforced with (Mintel, 2011d) finding that “38% of consumers still want to be able to have the in-store
experience of customer service and be able to look and feel an item before purchase” (p. strengths & weaknesses in the market).

It is not all bad news though, with research finding that even if not all consumers are buying online many have integrated the habit of browsing online into their daily routine and also use to information search and evaluate alternatives (Tuten, 2008). This highlights that a strong website offering is vital in the new phenomena of multi-channel shopping, even if every consumer does not make the final purchase online it can still play a fundamental role in their decision making processes. Mintel (2015d) also finds that 90% of internet users purchased online via their laptop in the last 12 months, with 38% doing so via a smart phone and 37% via a tablet. This is down to the many advantages that the internet can offer shoppers; with the main one being convenience (Mintel, 2011c).

This links into accessibility too. The introduction of the internet allowed for the first time, consumers to shop whenever, and almost wherever (due to mobile technology) they wished to. Drew Green, Co-founder and CEO of Shop.ca, a Canadian retail website with a similar product offering to that on Amazon, recognised that this generated some interesting buying behaviours and trends. He categorised five types of online shoppers: the avid shopper, early adopters who are online bidding and buying most days and have almost expert knowledge about the best websites for deals, returns, delivery rates etc.; the emotional shopper, as described above who shop to cheer themselves up and the act of purchasing itself provides excitement and satisfaction; the impulse buyer, sales and discounts fuel this shopper who is easily influenced into making quick decisions; the deal hunter, these consumers are both strategic and willing to wait if it means that they can get the best price; and the casual shopper, smart in their approach being the opposite to the impulse buyer weighing up the risks and researching before purchasing (Green, 2013). These avid, casual and deal hunter shoppers take advantage of another strength that the internet has to offer by being able to compare products and prices very quickly; 78% of people utilise this to research (Tuten, 2008). Although this can present a challenge, it can also be seen as an opportunity for retailers if they can attract attention, interact and engage with such consumers through their website, during the vital decision making stages.
Other strengths of the internet which brands can exploit include resistance to weather hindrances e.g. rain can and has been shown to cause a dip in high street sales whilst simultaneously creating sales increases online; confidence in security and peer reviews. Gaining ‘real’ feedback on products and services from other customers is an important part of the decision making process today. 42% of internet users state that they use such reviews to inform their purchase decision (Mintel, 2011c). If retailers can integrate such interactivity features into their websites e.g. reviews, ratings and recommendations, and also provide a social experience (having links to social media sites) they can satisfy this need without consumers having to leave their website. With the UK’s population spending £29 billion online last year alone (British-Retail-Consortium, 2012) it is clear to see fulfilling these needs and wants is imperative.

Clearly the growth of online consumption during times of economic downturn presents new challenges for consumer engagement. However to fully appreciate these it is important to examine the set of dynamics that define the retail sector itself and the issues which are currently most salient. A summary of these core issues is presented below.

1.4 Issues within the Retail Sectors

1.4.1 Perceived Risks

One challenge faced by online fashion retailers is linked to apparel being a high touch product and so purchasing through the internet removes the haptic element of shopping; the ability to feel and try on products to assess quality, fabrics, textures, fit and style. For this reason purchasing tactile products online can be seen as high risk (Terhani, 2001). Some brands are already recognising the importance of adding interactive features, prompting the development of virtual fitting rooms, 3D catwalks, 360 degree views and close-up shots of fabric on websites, i.e. taking consumer engagement to new unexplored realms.

This is also the case in the beauty sector, in that a consumer’s selection of cosmetics and fragrances is a very personal, sensory process of assessing what suits that individual. This can be particularly hard to replicate on the internet; causing discomfort and perceived risk; (Mintel, 2011d) finds that “58% of internet users find it difficult to buy beauty products online because they are
unsure of whether a product will suit their skin tone, skin type and hair type" (p. who spends online?). It was also found that 37% of beauty consumers prefer to try products before buying them; however surprisingly online beauty retailing is noted as an area of strong growth (Mintel, 2013a). This may suggest the positive influence of new technology in enabling interactive features such as application videos and skin matching technology; the advantage of convenience and speed; as well as multi-channel retailing enabling shoppers to try a product in-store and then purchase or repeat purchase online once they know they will be satisfied. Clearly the need for greater consumer engagement is vital to reduce the risk attached with such online consumption uncertainties.

Although consumers still like to try products in-store as part of their decision making process, unlike with the other two sectors it appears that purchasing online is often the preferred channel for technology. 44% of shoppers state that sales assistants do not possess the technical expertise to offer useful advice and aid in their product selection (Mintel, 2012a). For this reason online shopping can reduce potential functional and financial risks, providing user guides and in-depth product information. Again interactive website features which show close-ups, 360 degree views and instantaneous feature comparisons are still important for such consumers.

Understanding how to overcome this sensory barrier through the integration of preferred interactivity features into websites is vital in reducing the perceived risks described above; giving shoppers the confidence to make purchase transactions and building longer term engagement. This is especially important considering value seeking behaviour on the internet is increasing (Mintel, 2011b).

1.4.2 ‘Social Shopping’

The social connotations usually linked to shopping on the high street present a further challenge. The bricks and mortar environment enables consumers to undertake a thorough decision making process through information searching, evaluating alternatives, gauging risks (as fashion and beauty reflect the wearer’s personality externally to the world, and all the sectors discussed reflect trends) and acquiring feedback to reduce these risks, through gaining store assistants, friends and families’ opinions. The retailer’s online offering must
utilise features which allow these processes to occur virtually. For example ratings and recommendations to assess products; blogs, online forums and links to social media to gain opinions and socialise. This is important with figures indicating that nearly a quarter of all internet users have used social media sites to get in touch with or discuss fashions brands or products (Mintel, 2012b). Social media also plays a fundamental role in the consumer decision making process for beauty with the majority of consumers consulting between 4 to 6 sources of information before selecting a product (Mintel, 2012b). The technology industry is no different with the main sources for gaining information including retail websites, visiting the bricks and mortar store, asking for opinions from relatives and friends, and examining online customer reviews (Mintel, 2011b).

1.4.3 Logistical Problems

“36% of consumers and 43% of women had been disappointed with products that they had purchased online” (Mintel, 2011d: who spends online?), this may indicate a need for better showcasing of products through interactivity features, as well as the positive influence of multi-channel retailing. This positive impact is highlighted in the technology sector where three in ten shoppers have purchased online after trialling a product on the high street and finding it was out of stock (Mintel, 2011b); in this case reducing the potential of loosing sales. Past problems of delivery charges and difficulty returning items can now also be overcome by being able to click-and-collect and return in store. This is imperative, considering that logistical problems encountered can play a role in the virtuous circle of consumers returning to online shopping; a negative experience can result in deterring use of this channel (Mintel, 2011b).

Clearly there are a number of important challenges in online consumption and by no means do those summarised above offer an exhaustive list. Rather they should be viewed as salient issues that demonstrate the need for relationship marketing and more specifically consumer engagement, in the dynamic and ever changing consumption environment. Therefore, this study aims to understand the dynamics of online CE and the role of interactivity within, and influencing this context.
1.5 Research Importance and Justification

The increasingly turbulent and unpredictable consumer landscape (described in the preceding section) is posing unprecedented challenges for the modern marketer. Faced with a highly fragmented and cynical consumer base, aggressive competitive strategies, a constantly evolving digital and cyber world, and economic volatility characterising the modern macro environment, marketers are under increasing pressure to align their strategic positioning with ‘consumer hearts and minds’. The fickle nature of the post modern consumer is evident in a recent rise in switching behaviour witnessed by the world’s top brands. Compounding this rise in consumer complexity is the development and salience of dual and multiple consumer identities, largely as a result of the growth in online and social media communities. Against this backdrop the Marketing Science Institute (MSI), the global voice and agenda setting body for marketing research priorities, has proposed placing Consumer Engagement (CE) at the forefront of marketing strategy. Although there is no consensus on conceptualising CE, it can be understood to be the process of aligning marketing strategy and communications with emotional bonding in order to secure consumer affiliation. Several authors have described CE as the “holy grail” required for unlocking consumer behaviour.

Given the disjointed and fragmented nature of the CE literature, there exists confusion concerning its conceptualisation and therefore important parameters. The salience of the online and digital consumer further compounds the difficulty in formulating a framework that is integrative and cross contextual. The domain of interactivity for instance has considerable overlap with CE when applied to the online and digital domain. The academic-practitioner divide concerning CE has also been recognised as an important source of contention in formulating an agreed understanding concerning CE. Since the online consumer is set to increase in importance in the consumer landscape of the future, and given the salience of research having social impact for the industry it serves, a study is still needed to provide an academic-practitioner derived conceptualisation for online CE. Also to clarify the relationship between CE and interactivity, as distinct processes or components of the same mechanism but also to generate a conceptualisation that has conceptual and pragmatic value. There is also still a need to deconstruct CE into proximal components previously untested; which
would offer the marketing community an innovative solution to understanding online CE.

1.6 Shortcomings of Existing Research

Given the constantly increasing academic interest in the area of consumer engagement and the MSI’s calls for further insights into this emerging area, it could be assumed that the concept has been extensively researched to develop clear conceptual foundations, dimensions, measurement scales and relationships with other relationship marketing constructs. This section briefly outlines the shortcomings in the existing CE studies.

1.6.1 Conceptual Shortcomings

There is a lack of consensus regarding the overall conceptualisation of consumer engagement, as well as to its definition, dimensionality and relationships to already established concepts such as loyalty, involvement, participation, attachment and trust. There is however agreement that it’s theoretical foundations should be drawn upon from both a “relationship marketing theory and the service-dominant (S-D) logic” stance (Brodie et al., 2011:252) and that it is a multidimensional concept (Brodie et al., 2011, Hollebeek, 2011a, Hollebeek, 2011b, Vivek et al., 2012), which incorporates interactive experience and value co-creation. There is also speculation that “CE occurs within a specific set of situational conditions generating differing CE levels” (Brodie et al., 2011:258). There is also a conceptual disconnect between academics and practitioners use and knowledge of CE, with Gambetti et al. (2012) finding significant differences in the longitudinal stance adopted (long-term strategic vs. short-term tactical); online focus; and practical vs. theoretical application.

A similar debate is also still occurring within the field of interactivity too; surprisingly as this is no longer a new concept, having first being examined in a marketing context over 25 years ago by Rafaeli (1988). Yet still there is no consensus on definition or characteristics. For example Liu & Shrum (2002) highlight active control, two-way communication and synchronicity; whereas Florenthal & Shoham (2010) state the five dimensions of accessibility, customisation, navigation, communication and affordance. From further in depth
examination however it can be seen that there is general agreement among scholars that interactivity does involve control, communication and response (Rafaeli, 1988, McMillan, 2000b, Liu and Shrum, 2002, McMillan and Hwang, 2002, Song and Zinkhan, 2008) – although they may not always labelled this way.

Overall there is still a requirement to create an overall conceptualisation for both interactivity and consumer engagement, which is developed using multiple stakeholder’s knowledge and perceptions, not just academics as is currently the case. This will enable empirical validation and construction of measurement scales. Also to define the two concepts and further understand CE’s key role in the nomological network of service and relationship marketing constructs.

1.6.2 Empirical shortcomings

There is a significant lack of CE application into real-life commercial settings. This is mainly due to infancy of the concepts development, with the majority of its research in the marketing field only occurring in the last 10 years. Most of the existing research is therefore high level, trying to conceptualise the construct from a purely theoretical basis (Van Doorn et al., 2010, van Doorn, 2011, Hollebeek, 2011b, Schmitt, 2012, Bowden, 2009, Sashi, 2012, Gambetti and Graffigna, 2010, Mollen and Wilson, 2010). This may explain the previously mentioned academic-practitioner divide as well as the lack of research into CE’s relationship with other marketing constructs. Also due to this focus there has been very little empirical validation of models, with the few that have predominantly adopting small scale, qualitative methods to construct models rather than test them. Reviewing the researcher’s limitations and suggestions for future research highlights the ongoing current empirical shortcomings:

“There also are several examples that suggest that the dimensions of consumer engagement might play an important role in understanding the engagement of consumers in specific situations. Therefore, an analysis of individual dimensions in different contexts will meaningfully extend this research in the future” (Vivek, 2009:192)
“The final stage of this exploration would be to reach a synthetic interpretive model of CBE, which could then be verified and dimensioned through quantitative research approaches” (Gambetti et al., 2012:684)

“Suggested next steps for researchers include the development of an engagement scale to allow the testing of the conceptual framework and the associated propositions” (Mollen and Wilson, 2010:924)

“However, building a theoretical foundation for the consumer engagement process is a challenging and ambitious task that calls for coordinated effort on the part of academic researchers and practitioners committed to this topic” (Gambetti and Graffigna, 2010:823)

“However, based on the exploratory nature of this research, future validation of the findings is needed. Further, large-scale, quantitative empirical research attesting the proposed curvilinear CE/CV association (i.e., CE/CV optimum) is also required” (Hollebeek, 2012: 7)

These recommendations highlight the need for an agreed upon measurement scale, context specific studies, examination of the nomological network relationships and the validation of conceptual models for CE, through large scale, quantitative research methods.

1.7 Research Aim, Questions and Objectives of the Study

The preceding section describes the conceptual and empirical shortcomings in both the CE and interactivity literature.

The following research aim has therefore been developed:

To critically assess the relationship between consumer engagement and interactivity in the e-retailing context in order to identify to what extent interactivity dimensions influence CE.

Research questions have then be devised to help achieve the research aim. These are:

- What is the conceptual nature of interactivity?
- What is the conceptual nature of consumer engagement?
• What dimensions are used by academics, practitioners and consumers to evaluate interactivity and consumer engagement, and are these the same across stakeholder groups?
• What are the consequences of this interactivity evaluation on consumer engagement?
• What is the nature of the relationship between interactivity and consumer engagement; is one an antecedent, intrinsic feature or a consequence of the other?
• What impact does gender have on the nature of this interactivity-CE relationship?
• What are the moderating factors that can have an impact on this interactivity-CE relationship?

To aid in answering these questions, the following objectives have also been set:

• To understand the nature of the relationship between CE and interactivity.
• To examine how and whether interactivity dimensions have an impact on CE in an online website context.
• To investigate gender differences in which interactivity features influence CE.
• To provide extensive managerial implications and recommendations based on the findings to aid in bridging the academic-practitioner divide.

1.8 Research Contribution

In order to make a valuable contribution of knowledge this thesis aims to fill a number of existing gaps highlighted in the 1.5 shortcomings of existing research section. These can be broken down into conceptual, methodological and empirical, and managerial aspects.

1.8.1 Conceptual Contribution

The study aims to extend the conceptualisation of the two debated concepts - consumer engagement and interactivity by examining their dimensions and nature from a three stakeholder perspective: consumers, practitioners and
academics, bridging the identified academic-practitioner divide (Gambetti and Graffigna, 2010). Previously the majority of the research into interactivity and CE has been from one stakeholder viewpoint only. For example, Bowden (2009) conducting a CE literature review so focussing purely on academia; Gambetti et al. (2012) undertaking semi-structured interviews with marketing and communications professionals to examine CE; Florenthal and Shoham (2010) synthesising the literature, so adopting an academic viewpoint to create their four-mode channel of interactivity; and Song and Zinkhan (2008) utilising an experimental method to examine consumers perceptions of interactivity based on number of clicks, response time and message type. This links to the objective of understanding the nature of the relationship between CE and interactivity.

A further innovative contribution, extending CE knowledge is made through answering the needs for in depth research into CE’s relationship with other already established constructs; to look into specific drivers of CE; and to investigate the online context further (Brodie et al., 2011). Gambetti & Graffigna (2010) also agree with this stating that the online platform is still neglected in CE literature. These gaps will be addressed in this research with retail websites, so the online environment being examined, and through assessing the relationship with interactivity (a further established concept), and the key dimensions of this that influence CE. This links to the objective of examining how and whether interactivity dimensions have an impact on CE in an online website context. It also answers the MSI’s (2006) call to investigate the need and how to engage through innovation and design.

1.8.2 Methodological and Empirical Contribution

This study aims to make a methodological contribution through the adoption of a mixed method approach, which is very rare in the existing literature of both concepts. For example in consumer engagement research to date, with the exception of Vivek (2009) and (Hollebeek et al., 2014) using both interview and survey techniques, the majority utilise a literary review or qualitative methods, so an interpretive approach to create conceptual models; or in some cases a pure positivist perspective to analyse CE through website visit duration, page views, and nature of transaction (Lee et al., 2011).
Therefore the methods employed in this research will be from the post positive/critical realist paradigm, yet to be explored in existing research. This will enable qualitative semi-structured interviews to help in the selection and amendment of a CE and interactivity model, the operationalisation of scales for both concepts, and to hypothesise the relationships within the CE-interactivity link. The second stage will then utilise a quantitative online survey method to validate and test the chosen model, looking for cause and effect relationships therefore establishing if/which dimensions of interactivity influence CE development. The scale operationalisation procedure will be utilised to develop scales with existing high validity and reliability, unless a need arises to construct a new scale. If so the new scale development procedures will be adopted from Churchill Jr (1979). This fulfils the gap still required to validate proposed models through larger scale testing; whilst allowing triangulation to add robustness, validity and reliability, to be able to achieve the research objectives of understanding the nature of the relationship between CE and interactivity; and examining how and whether interactivity dimensions have an impact on CE in an online retail website context.

1.8.3 Managerial Implications

Through the ever-changing and increasingly competitive retail marketplace it is clear to see why understanding how to gain and develop consumer engagement with customer’s is vital to a company’s success and growth, through providing a sustainable competitive advantage (Brodie et al., 2013). To date the integration between academic CE theory and its practical application has been lacking. This study aims to address this whilst making an innovative managerial contribution, through examining the link CE-interactivity link and which website features have the most impact on engagement in the online retail context. The findings will provide insight to marketing managers about how they should build websites to maximise the CE relationships they have with their customers, understand the benefits of doing so and help them to start to move towards a more strategic longer-term viewpoint for their communications plans. This links to the research objective of providing extensive managerial implications and recommendations based on the findings to aid in bridging the academic-practitioner divide. Findings associated with gender differences also provide a further important contribution, with no research to date comparing
gender and CE – this makes the study relevant for most marketing professionals across differing retail sectors whose target audience may prefer specific interactivity features over others. This corresponds with the objective of investigating gender differences in which interactivity features influence CE development.

1.9 Structure of Investigation

Chapter one of this study provides an introduction into the issues in the current UK marketplace, the importance of and justification for the research, its contribution, as well as contextualising the research questions and objectives. Chapter two explores the theoretical grounding of the two concepts using a systematic literature review. Discussed in this chapter is: the relationship marketing foundations of consumer engagement; ongoing debates into conceptualisation of both interactivity and CE; the confusion and clarification of differences with established constructs; the CE-interactivity link; and the theoretical frameworks for both concepts. Chapter three and four then provide an overview of the methodology utilised, dividing it into two stages - the initial qualitative phase conducting semi-structured interviews with the three stakeholder groups, practitioners, academics and consumers to validate models and dimensions; and the second phase quantitatively surveying consumers. An overview of the key themes, the conceptual framework and accompanying hypotheses development, derived from the qualitative findings will be presented in chapter five. Chapter six provides analysis of the survey fieldwork, including demographic profiling, reliability and validity testing and hypotheses testing (predominantly from a structural equation modelling approach). Chapter seven provides an in-depth discussion of the findings from the preceding chapter, highlighting the contributions the study makes for both practitioners and academics alike. The final chapter eight gives an overview of the studies limitations, recommendations for future research and concluding remarks.

Figure 1.1 below highlights the various stages involved in this research.
2.0 Literature Review

2.1 Introduction

The purpose of this chapter is to provide an overview of the existing literature and academic studies into the two concepts of consumer engagement (CE) and interactivity. This literature review overviews and maps the evolution of CE from groundings in the relationship marketing paradigm, to the development of independent (yet still debated) definitions, dimensions, conceptual models, and
measurement scales. Section 2.4.6 then aims to clarify and consolidate the difficulties in conceptualising consumer engagement, through synthesising the proceeding discussion sections. Section 2.5 gives an overview of interactivity and its proposed models. Section 2.6 then critically examines the likelihood and nature of a CE-interactivity link. The theoretical underpinnings of both concepts are discussed throughout this chapter.

2.2 Relationship Marketing

Over the past few decades extensive research has been carried out, investigating the concept of relationship marketing (RM), referred to as a ‘paradigm shift’ (Gronroos, 1994). This new perspective provided a more holistic view whereby the whole process of marketing was considered, incorporating relational aspects of interactive exchanges within and between companies, their stakeholders and consumers and the long-term value that these could bring; an aspect previous downplayed. Since its inception in 1983 by Berry there have been no singular agreed upon or established definitions of RM (Dann and Dann, 2001). Fill (2009) defined it as “a perspective that considers the relationship between buyers and sellers to be of central importance. It is concerned with the long-term frequency and intensity of exchanges, which seeks to retain customers by developing loyalty or preference” (p.932). It has also been cited as having the objectives to “identify and establish, maintain and enhance and, when necessary terminate relationships with customers and other stakeholders, at a profit so that the objects of all parties involved are met; and this is done by mutual exchange and fulfilment of promises” (Gronroos, 1994:9). This is supported with one of the early RM scholars (Berry, 1983), stating that RM plays a key role in attracting, acquiring, maintaining and enhancing relationships with consumers; with both parties- businesses and consumers benefiting from this relational exchange.

Madhavaiah and Rao (2007)’s more recent study conducted a content analysis on all extant relationship marketing literature and found it to have seven primary constructs. These are origin, attracting and establishing initial relationships with customers; development, improving and enhancing these; maintenance, nurturing and strengthening these through further interactions; interaction, mutual and collaborative exchanges; time-duration, ensuring these relationships
are retained and become long-lasting; emotional content, through delivering promises, becoming loyal and committed, and instilling trust; and result/output, the tangible benefits of profitability.

Doyle (2000) also highlights that the creation of customer value is based on three things: customers evaluating alternatives and selecting the one that they perceive to be the best value; fulfilling their needs is the priority not product features; and it is more profitable for a company to establish a long-term relationship with a consumer. Mitchell (2001) concurred finding that consumers who have relationships with companies not only bring transactional benefits but also relational ones through sharing ideas and opinions, adding value, advocating brands, and becoming loyal. Egan (2008) suggests this is vital in the success of a company. Consumers also benefit from such relationships as organisations utilise information about their needs to ensure that the purchasing and information searching processes are as easy as possible, reducing perceived risks (Madhavaiah and Rao, 2007). It is therefore clear to see why the concept is of increased importance to marketers for their longer-term strategic view.

The traditional RM research is however criticised by Vivek (2009) for being too concentrated on retention through business-to-consumer exchanges, and therefore neglecting the acquisition of customers through experiences, co-creation, and also value exchanges during interactions (Vargo and Lusch, 2008). Also ignored are the connections made between existing and potential customers through communications methods such as reviews, social media comments, and blogs. These can play a fundamental role in the evaluating alternatives process of consumer decision making, therefore being a key factor as to whether a product or service becomes part of a consumer’s evoked consideration set. Sashi (2012) also backed this, stating that the introduction of social media changed RM and the seller-customer relationship roles; through making customers not only more active in exchanges, but in fact driving them and therefore allowing them to interact and co-create value.

This is where the concept of consumer engagement (CE) developed; incorporating these highlighted and ‘missing’ elements as part of the extended relationship marketing paradigm. Moving away from mainly concentrating on
customer retention, as existing RM constructs have, CE has expanded on this to examine how to build such relationships with potential customers and also extend already established relationships; hence being labelled as the “holy grail of online marketing” (Mollen and Wilson, 2010). It also goes “beyond the purchase” (Vivek et al., 2012) function traditionally focussed on when examining the benefits of relationship marketing, to highlight the importance of consumers who do not intend to buy, but add value to the brand through interaction, co-creation and participation in events and activities. Therefore evolving traditional relationship marketing from being exchange-centric to experience-centric in nature (Vivek et al., 2012).

2.3 Consumer Engagement (CE)

The first academic application of engagement was by organisational psychologist Kahn in 1990, who defined employee engagement as “task behaviours that promote connections to work and to others” (p.700). These are expressed in physical, cognitive and affective ways, and can have antecedents including boosting personal development and motivation. Three preconditions for employee engagement were found: “meaningfulness, psychological safety and availability” (Kahn, 1990:700). However due to the highly specific context (the workplace) the findings were not applicable and were unable to be generalised further to consumer marketing settings.

Although the concept has therefore only been researched and applied in the marketing domain over the last 10 years, its importance for both practitioners and scholars alike has been recognised. This is due to (as described in section 1.0 above) consumers becoming less isolated through advances in technology and globalisation of markets; making it not only fast and easy to search products/services instantaneously but also to connect, share views and gain opinions from other consumers worldwide. From a company perspective this means constantly finding new ways to effectively communicate and build relationships with consumers, “thus engaging customers through innovation and design” (MSI, 2006:4). The significance of engagement for the academic world is highlighted with the Marketing Science Institute (MSI) calling for further insights into the emerging area both in its 2006-2008 and 2010-2012 ‘Research Priorities’ report (Vivek, 2009). Further support for the argument that additional
investigation is needed comes from Brodie et al. (2011:258) stating that CE “plays a central role within a nomological network of service relationships”, Bowden (2009) highlighting it as a key driver in the consumer decision-making process, and Schultz & Block (2011) emphasizing its fundamentality in brand equity creation. This therefore implies that it is imperative for academics to understand consumer engagement, as it can provide new, significant knowledge which may challenge traditional views of relationship marketing and how the constructs within this (e.g. trust, commitment, involvement, participation, etc.) interact and relate to each other.

As with all concepts in their developmental phase there is much debate about the definition, conceptualisation and theoretical models of engagement. Figure 2.1 below provides a selection of definitions for CE from both academic and practitioner streams.

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practitioner</strong></td>
<td></td>
</tr>
<tr>
<td>ARF (2006)</td>
<td>“Engagement is turning on a prospect to a brand idea enhanced by the surrounding context”</td>
</tr>
<tr>
<td>Shevlin (2007)</td>
<td>“Repeated, satisfied interactions that strengthen the emotional connection a customer has with the brand”</td>
</tr>
<tr>
<td>Sedley (2007)</td>
<td>“Repeated interactions that strengthen the emotional, psychological or physical investment a customer has in a brand”</td>
</tr>
<tr>
<td>PeopleMetrics (2010)</td>
<td>“Customer engagement includes (a) retention; (b) effort; (c) advocacy; and (d) passion”</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td></td>
</tr>
<tr>
<td>Vivek (2009)</td>
<td>“The intensity of a consumer’s participation and connection with the organisations offerings, and/or organised activities”</td>
</tr>
<tr>
<td>Van Doorn et al. (2010)</td>
<td>“Customer’s behavioural manifestation toward a brand or firm beyond purchase, resulting from motivational drivers, including word-of-mouth activity, recommendations, helping other”</td>
</tr>
<tr>
<td>Hollebeek (2011a)</td>
<td>“The level of a customer’s cognitive, emotional and behavioural investment in specific brand interactions”</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Brodie et al. (2013)</td>
<td>“Consumer engagement in a virtual brand community involves specific interactive experiences between consumers and the brand, and/or other members of the community. Consumer engagement is a context-dependent, psychological state characterised by fluctuating intensity levels that occur within dynamic, iterative engagement processes. Consumer engagement is a multidimensional concept comprising cognitive, emotional, and/or behavioural dimensions, and plays a central role in the process of relational exchange where other relational concepts are engagement antecedents and/or consequences in iterative engagement processes within the brand community”</td>
</tr>
</tbody>
</table>

**Figure 2.1 - Existing definitions of CE**

From Figure 2.1 It is evident that the academic-practitioner divide isn’t just constrained definitions but also extends to the nature of engagement and how it is perceived. A number of important observations can be made from this cursory comparison but the key inferences relate well to findings from Gambetti & Graffigna’s (2010) analysis of CE definitions, namely that in academic conceptualisation:

- The word ‘engagement’ is often used in substitution for other relationship marketing concepts (e.g. involvement/participation).
- Strong emphasis is placed on the entertainment (e.g. experience) and relationship factors (e.g. trust, commitment and loyalty) linked to the concept.
- There is an apparent lack of importance placed on managerial issues and the questions that engagement raises (e.g. how it affects ROI, resource allocation and budget, and what is needed and required for internal employee engagement).
The online platform as a channel for engaging is currently very neglected and under referenced in journals.

Contrastingly in the practitioner literature:

- Using the internet and online as a source of engaging is a central focus for marketers.
- There is a strong focus on utilising communication plans to factor in generating engagement with consumers. Senior management within companies recognise its importance and that engaging with their own staff internally is a vital part of the process to ensure effective and positive employee-consumer interactions.
- A longer term strategic outlook for engagement is missing and that instead short term tactical goals are the focus for quick wins.
- Theories and how these can enhance engagement knowledge and add value into company practices is of little importance to marketers currently.

Within the literature there is suggestion that “closer collaboration between academic marketing scholars and professionals could combine the rigour of the former with the relevance and practicality of the latter, to the benefit of both” (Gambetti and Graffigna, 2010:821, Reibstein et al., 2009). Agreement amongst scholars highlights that these benefits of effectively engaging with consumers can be relational (Sashi, 2012, Vivek et al., 2012, Ashley et al., 2011, Brodie et al., 2011, Hollebeek, 2011b, Bowden, 2009, Jin and Su, 2009, Vivek, 2009, De Matos and Rossi, 2008, Schultz, 2007) or transactional (Brodie et al., 2011, Van Doorn et al., 2010, Gallup, 2009). Such advantages specifically include creating a sustainable competitive advantage (Brodie et al., 2013) and being a key factor in predicting a company’s future growth in sales and profitability (Sedley, 2007). From this it is clear to see why increased integration between the viewpoints to create practically applicable and context relevant theories, which are strategically focussed is required; however studies using more than one stakeholder are currently lacking in the literature.

This is also coupled with the belief that research should not only make progress in terms of knowledge and theory, but also be insightful and practically
applicable for marketers and businesses (Reibstein et al., 2009). Baines et al. (2009) found that mutual respect is evident between the two groups with academics possessing skills for longer-term trend, strategy and causal relationship analysis; and practitioners having the pragmatic support for more tactical, imminent decisions. Both academics (88%) and practitioners (71%) also agreed that there should be increased collaboration between research faculties and industry (Baines et al., 2009). For this reason scholars need to start addressing the gap in current research linked to engaging with consumers through innovative channels e.g. the internet, smart phones, and touch point technology. This research focuses on one of these channels; online shopping, and aims to provide valuable insight for marketers into how to effectively utilise its capabilities to generate the highest levels of engagement; whilst also bridging the academic-practitioner divide.

2.4 Issues in the Conceptualisation of Consumer Engagement

As well as this academic-practitioner divide there are also further challenges concerning the conceptualisation of CE. One key issue is the confusion in existing literature whereby the term ‘engagement’ is used “as a synonym of other apparently similar, much better established concepts” (Gambetti and Graffigna, 2010:804). Such constructs include: involvement (Sawhney et al., 2005, Zaichkowsky, 1985); participation (Bolton and Saxena-iyer, 2009); attachment (Klcinc and Baker, 2004); loyalty (Kerr, 2009) and commitment (Alloza, 2008). The next paragraphs will review some of these; assessing what they are, how they differ from CE and also their relationship with the concept to highlight consumer engagement’s distinctiveness in relation to these.

2.4.1 Relationship with Similar Constructs

Involvement is defined by Zaichkowsky (1985:342) as “An individual’s level of interest and personal relevance in relation to a focal object/decision in terms of his or her basic values, goals and self concept”. This is the main construct often cited in CE literature for being most closely related to CE. As with consumer engagement there are differing views regarding its conceptualisation with agreed commonalities being that it is an internal and therefore psychological state that can indicate arousal, interest or drive towards a focal object or context (Andrews et al., 1990). Involvement is important for brands as it is likely to lead
to more in-depth consumer processing, greater information searching, and trialling and experiencing behaviours towards their products and services (Vivek, 2009). Current CE literature highlights agreement that the two concepts differ, with involvement being linked to the level of interest in the brand and so only being a cognitive process. This means that it is likely to be an antecedent of CE prior to the expression (so the behavioural aspect) of a consumer’s actual interactive engagement level with a brand (Brodie et al., 2011, Hollebeek, 2011b, Vivek, 2009).

Dabholkar (1990) states that participation is “The degree to which customer’s produce and deliver service” (p.484), indicating consumer-brand co-creation in specific exchange contexts. Advantages for companies able to evoke and persuade participation include the monetary benefits of substituting staff for consumers during certain activities e.g. in an advertised product design competition, the entries will save time and money spent on paying a design employee to create them internally. Other advantages can include customer satisfaction and socialisation (Bendapudi and Leone, 2003); higher perceptions of service quality; and greater likelihood of participating in co-creation in the future (Dabholkar, 1990). Participation primarily differs from consumer engagement due to the exchange situation being the central focus not experiences. CE is also viewed by scholars as being a reflexive process not simply operative too (Vivek, 2009); with Brodie et al. (2011) stating that participation is again likely to be a pre-requisite for CE. Another concept which is often confused for CE but is also too exchange rather than experience specific is loyalty. Oliver (1999:34) defined this as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour.” However unlike participation many scholars (Bowden, 2009, Patterson et al., 2006) believe that loyalty is likely to be a consequence of a consumer becoming engaged with a brand, and that a positive relationship exists between the two constructs.

Attachment is described by Park et al. (2010:1) as “the bond connecting the customer with the branded…critical as it should affect behaviours that foster brand profitability and customer lifetime value”. Ball and Tasaki (1992:158) build
on this by arguing that there is a strong link between attachment and self-
identity, stating it as an emotional construct that relates to “the extent to which
an object which is owned...is used by that individual to maintain his or her self
concept”. This concept contrasts with CE as it is purely affective, so not multi-
dimensional in terms of its expression e.g. behavioural, cognitive and emotional,
and it is based primarily around ownership of a brand, object or product. Vivek
(2009) highlights that attachment may lead to engagement in specific situations;
therefore identifying it as a potential antecedent. Brodie et al. (2011) however
challenge this assumption stating that an emotional brand attachment, so a
more in-depth affective bond with a brand may be analysed as a potential
consequence as a result of a specific interactive consumer-brand experience.

Another concept often confused with CE in the relationship marketing literature
is commitment; when a consumer values their ongoing relationship with a
brand, and so therefore desires and makes an effort to maintain it. The
importance of this for consumer-brand relationships is highlighted with Morgan
and Hunt (1994) finding that stronger relationships displayed higher levels of
both trust and commitment, and played a vital role in attitude formation. As with
loyalty, there is identification that there is potentially a positive relationship
between the two constructs (Saks, 2006). However, unlike the previously
discussed topics (above) it can be viewed as either a pre-requisite or
consequence depending on the relationship stage. For example for returning
consumers commitment may already be felt prior to a new experience with the
same brand – here it would act as an antecedent to CE. Whereas for new
customers’ commitment cannot be established until they have engaged with the
brand, if positive this may then lead to the development of commitment – so in
this case it is an engagement consequence.

Other related constructs also examined in the literature include trust,
satisfaction and rapport which “are labelled as potential customer-brand
engagement consequences for new and/or existing customers, while these may
also represent engagement antecedents primarily for existing customers”
(Hollebeek, 2011a:794). Also customer value, perceived quality, co-created
value, flow, consumer devotion and self-brand connection (Brodie et al., 2011,
2.4.2 Lack of Consensus on Dimensionality

Difficulties in conceptualising consumer engagement also arise from a lack of consensus concerning its dimensionality; whether is it uni-dimensional or multidimensional. Although there is predominantly agreement throughout the literature that CE is a multidimensional construct it is worth acknowledging the uni-dimensional perspective too, with “over 40% of definitions” (Brodie et al., 2011:254) expressing a single focus for engagement - either psychological, affective or behavioural. Research adopting this perspective from a purely emotional stance comes from the Economist Intelligence Unit (2007:2) which states that engagement is “a deeper, more meaningful connection between the company and the customer.” and Heath (2007:8) referring to CE as “the amount of subconscious feeling occurring when an ad is being processed”. Also agreeing but from a behavioural viewpoint is the research by Van Doorn et al. (2010), who defend this approach by arguing that behaviour is the “main distinguishing element of customer engagement because taking action differentiates engaged customers from others” (p.281). They conceptualise consumer engagement as the behavioural manifestations towards a company/brand (which can include WOM, advocacy and recommendations), however their proposed model does acknowledge the role of cognitive and emotional elements in the process, but simply as antecedents. Less literary emphasis is given to the cognitive only aspect, discussed over a decade ago and only in a social sciences concept (Blumenfeld and Meece, 1988, Guthrie, 2001) however such psychological brand activities could include the level of concentration or intensity of information search for a specific brand. This differs within the multidimensional perspective where the cognitive aspects are highly recognised in conjunction with both affective and behavioural.

The multidimensional perspective is recognised in the practitioner and academic literature alike. A consultancy firm, The Gallup Group created an 11-item metric for CE as a predictor for loyalty. The scale incorporated all three elements which included eight emotional measures such as passion and pride, as well as cognitive and behavioural elements such as intention to repurchase in the future. Academic agreement for this perspective is also evident in the study by Sashi (2012) which proposed seven stages in the CE process. These are connection, interaction, satisfaction, retention, commitment, advocacy and
engagement. The integration of the three dimensional aspects are showcased in the conceptual model with connection and interaction being linked to cognitive processes due to the requirement for extensive information searches and a need for thought about how, where and who to interact with; satisfaction, retention and (affective) commitment being linked to happy consumers and emotions; and advocacy being connected to delighted customers starting to take action to actively share their experience with others through WOM, recommendations and co-creating value. The research also infers that different shopper types: transactional, delighted, loyal and fans may display different levels of the three dimensions based on whether they have a high or low emotional bond, and high or low relational exchange with the company. For example, fans are classed as high in both of these categories, and are described as passionate advocates for the brand. Therefore for these consumers the emotional and behavioural dimensions of CE are very high.

There is further scholarly support for this multidimensional viewpoint, including from:

- Gambetti et al’s (2012:668) findings that CE is a combination of “attention, dialogue, interaction, emotions, sensorial pleasure and immediate activation”, therefore discounting a unidimensional perspective. A quote from their practitioner interviews clearly shows the opinion that the concept is emotional, cognitive and behavioural in nature; “A short time ago we used to focus on the seductive part rather than on the rational part. Today all these levels should be on the stage together with consistency. So the three levels; the rational, the emotional-sensorial and the dialogical level” (Gambetti et al., 2012:668).
- Brodie et al’s (2011:258) fundamental propositions stating “CE is a multidimensional concept subject to a context-and/or stakeholder-specific expression of relevant cognitive, emotional, and behavioural dimensions”. This is backed up by more recent Brodie et al (2013) research, where this multidimensional stance is maintained.
- Hollebeek (2011a:6) defining CE as “the level of a customer’s motivational, brand-related and context-dependent state of mind characterised by specific levels of cognitive, emotional and behavioural activity in brand interactions”.

41
• Mollen and Wilson (2010:924) stating that further research is required to not only develop a measurement scale for consumer engagement, but one that reflects "the construct's multidimensionality".

• Bowden (2009) acknowledging the presence and need for developing rational bonds for engagement to occur with new customers whilst these are already present in repeat customers; emotional bonds for returning customers as well as satisfaction and delight in both consumer groups; and behavioural outcomes such as loyalty and repeat business.

• Ilic (2008) finding CE to be emotional, cognitive, behavioural, aspirational, and social.

Overall it is evident that most of the research in the last decade more readily adopts this multidimensional perspective of CE as opposed to a uni-dimensional one.

2.4.3 Lack of Consensus about Conceptual Models

Another central issue is the lack of a unifying model, framework or measurement scale which has consensus from the CE community. Vivek (2009) attempted to construct one such scale (see figure 2.2), through utilisation of assumptions grounded in consumption values and consumer value perception theories, as well as relying on the previous engagement literature. In his mixed methods study a largely inductive approach was adopted. Respondent views showed that managers shared common beliefs concerning the nature of consumer engagement; that experiences and value were central, and that connections could be established through interactions and participation that were perceived as being relevant, meaningful and of common interest to both parties. Overall the qualitative phase presented five initial proposed dimensions these were awareness, enthusiasm, interaction, activity, and extraordinary experience. These were later incorporated into a final three through quantitative data collection and factor analysis, as activity was shown to be a conscious decision by consumers to become involved, and enthusiasm and extraordinary experience loaded as a single factor. Therefore the final CE dimensions were enthusiasm, conscious participation, and social interaction. The findings also indicated antecedents that were both business orientated so creating an active dialogue, playing a facilitative role in the process and also being authentic in
promises and the personality; and also individual pre-condition orientated, so what they sought from the consumer-brand/business relationship e.g. seeking an experience. Through the mediating effects of intrinsic and extrinsic value, CE consequences in the model included the consumer connecting with the company, showing goodwill, actively participating in word-of-mouth, becoming affectively committed to the brand or firm, and having intentions to transact with the business in future.

Criticisms of the study include that due to utilising a fairly small and non-probability sampling method consisting mainly of student participants the results cannot be representative of or generalised to the whole population; that the products questioned on in the quantitative stage don’t represent all product categories and therefore engagement may differ with others; and that multicollinearity in the data between intrinsic and extrinsic value effected the results. Another major criticism of this research, and also much of the existing CE literature in the marketing domain, is that it doesn’t consider how engagement levels may differ over time, in specific contexts, or at different stages of consuming e.g. a first-time customer vs. returning customer. The model proposed is also very linear in its conceptualisation and doesn’t consider cyclical feedback loops that have been found in later research (Sashi, 2012, Schmitt, 2012, Vivek et al., 2012, Brodie et al., 2011, Van Doorn et al., 2010).

---

**Figure 2.2 - Vivek's (2009) conceptual model for CE**

- **Consumer Engagement:**
  - Awareness
  - Enthusiasm
  - Interaction
  - Activity
  - Extra-ordinary experience

- **Value:**
  - Intrinsic
  - Extrinsic

- Connections with the company
  - Goodwill
  - Word of Mouth
  - Affective Commitment
  - Intent to do Business
For instance, in 2012, Sashi conducted a study of existing literature in an attempt to overcome this linearity criticism and also connect practitioner views with academic concepts and theoretical groundings in marketing—see figure 2.3 below. From this a consumer engagement cycle was developed which cited the stages and antecedents/consequences (depending on how many times the consumer has gone through the cycle) as being connection, interaction, satisfaction, retention, commitment, advocacy and engagement.

Connection in the process can be consumer-business, which is a requirement in establishing a strong emotional relationship (needed to created engagement), but it can also be consumer-consumer to aid in problem solving and evaluating alternatives during decision making. After this initial stage interaction can occur. The introduction of the internet provided businesses with the opportunity to greater understand the needs of their customers and respond to any changes quicker than was previously possible. Such interactions have become central in co-creating value. For consumers to then progress closer to becoming engaged they must be satisfied with these interactions; if so they will continue to participate in dialogue and remain connected, becoming a retained consumer. At this stage in the process retention either means an “enduring relationship” or “emotional bond” (Sashi, 2012), but not both. The retained customer may then start to feel committed to the brand; this can either be calculative or affective commitment, with the ultimate goal being to induce both and develop a long term relationship with emotional ties too. This emotional attachment usually leads to advocacy through positive WOM and sharing their delight with other consumers. This coupled with loyalty are necessary for the final stage in the process, consumer engagement. If the pre-stage emotional and relational bonds can remain and indeed increase in strength then the “virtuous customer engagement cycle” (Sashi, 2012:264) will proceed. A major drawback of this study is that it is purely conceptual; meaning that it is yet to be tested and so therefore there is no evidence as to if or how relevant it is in application in a ‘real world’ context. The developed model also doesn’t take into account or show the consequences of CE, which are valuable for marketers.
Another study which also integrated and tested the cyclic nature of CE is Vivek et al. (2012), see figure 2.4; who utilised a mixed methods approach of in-depth interviews, focus groups and surveys. Their initial phase consisted of conducting eighteen semi-structured interviews with practitioners, from across a range of business-to-business and business-to-consumer organisations, specialising in both online and offline offerings. Executives ranged in hierarchical level too. In the interviews participants were asked “In your opinion, what is consumer engagement?; How would you define it?; and ‘At what point would you consider a customer ‘engaged’ with your company?” (Vivek et al., 2012:130). With the term engagement already being popular amongst practitioners the questions aimed to uncover opinions based on the importance of the construct, its benefits and what it meant to respondents and the business they worked for. The initial findings highlighted CE’s multidimensional nature, it involving two-way interactions and adding value, an understanding of the need to build trust and rapport through an engagement strategy prior to deeper connections being established, that it includes both existing and potential consumers, and that it can lead to advantageous outcomes for the organisation e.g. loyalty, cross-selling and word-of-mouth (Vivek et al., 2012).

Their secondary phase with consumers adopted a two-pronged approach through focus groups and a questionnaire, asking sixty two participants who were university students, to think of something they felt engaged with and to explain how and why they felt this. Overall their findings showed that cognitive and emotional aspects of CE include experiences and feelings, and behavioural and social elements include participation.
This is reflected in their theoretical model which presents participation and involvement as antecedents, “while value, trust, affective commitment, word of mouth, loyalty, and brand community involvement are potential consequences” (Vivek et al., 2012:127). In the process feedback loops can occur when current customers experience value and brand community involvement; these then result in further increased individual involvement and participation. Again this highlights that experience (through participation and involvement) and value are central to CE.

Figure 2.4 - Vivek et al’s (2012) conceptual model for CE

Another proposed model portraying feedback loops, but yet to be tested is Van Doorn et al.’s (2010) examination of CE behaviour, whereby consequences can become both antecedents and also directly impact consumer engagement- see figure 2.5. These can be customer based e.g. antecedents of relationship quality factors, consumption goals or perceived value, and consequences of identity or emotional bonds; firm based e.g. antecedents of characteristics of a brand or the firm’s reputation, and consequences of increased profitability and improved products based on consumer recommendations; and context based e.g. antecedents linking to PEST (political, economic, socio-cultural and technological) factors or competition in the market place, and consequences of improved consumer welfare or positive effects on the economy.
Figure 2.5 - Van Doorn et al.’s (2010) conceptual model for CE

The study also proposed five dimensions for CE behaviour itself; valence, form/modality, scope, nature of impact and customer goals. In their model valence, the emotional aspect of CE, is shown to be either positive or negative. CE behaviours can have both financial and non-financial consequences for an organisation “including word-of-mouth (WOM) activity, recommendations, helping other customers, blogging, writing reviews, and even engaging in legal action” (Van Doorn et al., 2010:253); with the outcome of these, either positive or negative, being dependent on the emotional content included in them. Form and modality refers to how engagement is expressed e.g. transactional or participative. For example a customer may show their engagement through spending time filling in a brand’s survey to suggest improvements to their product or service; or interacting with other customers to make
recommendations. Brands can then respond to such behaviours by apologising after complaints, reviewing products, or undertaking further research to understand their consumers’ needs. Scope can be temporal, so instantaneous but momentary or longer-lasting; or geographical e.g. face-to-face engagement behaviour of advocacy or global e.g. blogging on a global website to customers all over the world. The dimension of nature of impact includes its breadth, so how far CE behaviours such as WOM will spread or the amount of people they will affect; short term vs. long term so how long the CEB will last e.g. a review on line will remain online until deleted whereas a face-to-face recommendation could be forgotten; intensity, the level of change affect within the audience; and how quickly it impacts e.g. with new technologies such as social media this can be instant. Finally customer goals concern why they have chosen to engage. If a firm can understand this and match their goals to fit these need requirements positive outcomes are more likely.

To address the criticism of the literature ignoring the differing levels of engagement, Schmitt (2012) conducted research to integrate findings of previous studies and already established concepts into an engagement framework (see figure 2.6 below), which addresses consumers perceptions and the corresponding underlying processes that occur as they begin to engage with brands. The five processes proposed were identifying (acknowledging and information searching about the brand); experiencing (coming into contact and having sensory perceptions of the brand), integrating (collating all existing knowledge to build an overall picture of the brand or the relationship with it), signifying (the brand starts to signify meaning for the consumer this may be an informational cue or even a cultural symbol), and connecting (how preceding processes affect how connected or attached a consumer becomes). Schmitt (2012) highlighted the importance in understanding that these processes and levels are not necessarily linear and can occur in different orders and also overlap.

Within each stage there were three levels which differ based on an individual’s needs, motives, goals and desires. These are: the initial level which is utilitarian and functionally based resulting in object centred engagement (shown as the inner circle on the diagram above); the second self centred engagement which occurs when the brand is seen as personally significant (shown as the middle
circle on the diagram above); and the final, deepest level social engagement whereby the brand is viewed from an interpersonal and social stance (shown as the outer circle on the diagram above).

Figure 2.6 - Schmitt's (2012) conceptual model

Gambetti et al. (2012) also took this perspective of differing engagement intensities into consideration. Their study utilised a grounded theory approach which collected data via semi-structured interviews, with marketing and communication managers selected as participants. These came from companies with different product categories; however each firm was a market leader in their chosen sector. The initial findings showed CE to consist of “attention, dialogue, interaction, emotions, sensorial pleasure and immediate activation” (Gambetti et al., 2012:668), dimensions that have been found in earlier studies (discussed above) and that ‘brand enacting’, the embedding of a brand into consumers’ lives is at the centre of the engagement process. Their proposed conceptual model (see figure 2.7) also highlighted the importance of “physical or value-based proximity, consumer protagonism and brand communication integration” (Gambetti et al., 2012:669) in the process too. The physical or value-based proximity relates to how actively a brand tries to get
close to its customers and allow them to come into contact with, gain knowledge, feel and ultimately develop an emotional relationship. This is the physical part of proximity by enabling consumers to encounter the brand either in their own homes or on the street. The value-based element of proximity relates to building strong relationships through reciprocal commitment (through communication, interaction, affinity, etc.) and trust by linking to memories and already established bonds. Protagonism links to the fact that marketers see consumers as pragmatic, unpredictable beings who are constantly seeking hedonic fulfilment. The final element, brand communication integration relates to the shift from passive to active consuming in today’s technology driven world. This includes behaviours such as WOM through social media, participation in co-creating value with a brand, attending events and aiding in the spreading of viral marketing messages.

Once these processes have occurred and have enabled brand enacting to begin the levels of this can also increase through interaction and disclosure, affecting the strength of the consumer-brand bond. These differing stages are reflected in Figure 2.7 below as brand appearance, the phase where consumers can see but not feel the brand; brand body, where consumers can have a physical encounter with the brand both allowing emotions to come into play usually through sensory aesthetic characteristics of the brand or its communication techniques; and brand soul, when the brand becomes embedded into consumers lives, they interact with it, possess it and advocate and share its values with others. At this final stage co-creation of values and high levels of both reciprocal commitment and trust occur, creating an emotional bond.
Cetina et al. (2014) also conducted research with practitioners, through examination of CE on the internet. Their in-depth online interview approach with 17 marketing executives (from big brands such as Facebook, Starbucks and Proctor & Gamble) asked two main questions: “In your opinion, what is ‘consumer engagement’? How would you define it in the context of your company?’ and ‘Does your company measure consumer engagement? Please expand” (Cetina et al., 2014:5). The findings confirmed agreement that CE is multidimensional (affective, cognitive and behavioural), whilst identifying the importance of active participation in allowing future enhancement and improvements through consumers being involved in these processes. Personalised experience and emotional aspects were also found to be imperative in overcoming the difficulties of building and maintaining relationships over the internet, whilst fulfilling consumers’ needs, wants and desires. Their findings also highlighted that the intangibility and perceived risks associated with the internet should be overcome by emphasising emotional aspects of CE, in order to develop trust and loyalty.

Whilst they believe their research goes some way to bridging the academic-practitioner divide, through conducting a literature review (so understanding the academic CE theories) and then qualitative interviews with practitioners, a weakness of this approach is that still only one stakeholder group was examined during the field work. Most of the previous studies lack this multiple stakeholder view, tending to only focus on an academic or practitioner perspective and so not fully bridging the academic-practitioner divide. This thesis aims to fulfil this need through conducting the qualitative analysis stage with academics, practitioner and consumers. Cetina et al. (2014) themselves
also recognise the need for further investigation utilising quantitative methods to validate and use the exploratory qualitative findings – a weakness identified in most of the existing literature. On a positive note the research the pure conceptualisation and tries to analyse CE in the online context, which is missing in may previous studies. The calibre of the companies the interviewees work for is also strength of the study too, as these are all very successful and could be thought of an innovative or leading in their marketplaces. The work also consolidates and extends previous CE literature and assumptions, providing further practical knowledge into the holistic view of consumer engagement.

Overall in the studies above a key strength is that they highlight agreement that value creation, experiences and communication are involved in the CE process providing a basis for further conceptualisation and investigation. They are also strong foundations in the development of an established CE model. A weakness with the majority of the studies is that they have been developed from reviewing the existing literature only, making them purely conceptual in nature. Many of the models do not take into account the entire process of CE, for example antecedents, dimensions, consequences and its levels. With most yet to be tested or having only been tested on a fairly small scale, a larger study is necessary to validate the models and add context relevance to the findings to make them more applicable to ‘real life’. Those that have been tested (Vivek, 2009, Vivek et al., 2012, Gambetti et al., 2012, Cetina et al., 2014) have utilised small non-probability samples, not representative of the population therefore making their findings hard to generalise. Another weakness is that most of the research is very high level, in an attempt to conceptualise to construct meaning there are many areas of investigation still untouched. For example: how situational factors impact on CE levels; are specific communication methods/channels more effective for increasing engagement at different stages in the CE process; what relationships exist between CE and already established concepts; etc.

Two more recent papers by Brodie et al. (2013) and Hollebeek et al. (2014) are some of the first to address the lack of contextual consumer engagement application. The first by Brodie et al. (2013) utilised a two stage netnographic methodology, an adaptation of ethnographic qualitative research techniques, to study online brand communities. The first stage involved observing the
communications of six highly engaged users within an online vibration plate training brand community; four of these were then selected for further semi-structured interviews to discuss in-depth key themes that had emerged in the initial analysis. The findings showed that within online brand communities there can be differing engagement objects; these can be the themes being discussed (e.g. brand, product, company, business sector) and then the community itself, their roles within this and also the C2C communications with other members. The study found that when a consumer first joins they will initially engage in the discussion of topics before progressing onto the latter and engaging in synchronised interactions with other group members- therefore potentially increasing CE levels over time. The multidimensional nature of CE is also highlighted in the research. Behaviourally through “the roles of learners, of members sharing their experience and knowledge, brand advocates, companies and/or co-developers of ideas” (Brodie et al., 2013:110); emotionally through the gratification online members feel for being part of the group, so belonging, trust, etc; and cognitively due to openly sharing of information and past experiences. Figure 2.8 shows their findings relating to the overall CE process in online brand communities.

Triggers in this context relate to the needs of consumers joining these communities to reduce perceived risks by obtaining further information from other people familiar with the brand (so eliminating dependency on ‘bias’ company produced messages), as well as cutting down time resources during the information search process of decision making. Brodie et al’s theoretical model shows the main CE processes in online brand communities to be: learning, so acquiring the right knowledge to make an informed purchase decision; sharing, of personal opinions and experience to create further shared knowledge within the community; advocating, active WOM and recommendations (here is when behavioural aspects emerge); socialising, two way non utilitarian interactions; and co-developing, assisting the company in creating new ideas and innovations. The consequences of CE are shown to be higher levels of “loyalty, satisfaction, empowerment, connection, emotional bonding, trust and commitment” (Brodie et al., 2013:105). A key finding, and also a criticism in previous conceptual models is that the consumer engagement
process is not linear or sequential in nature, but rather a two-way interplay of the sub processes that make up its components.

The second study by Hollebeek et al. (2014) also investigates consumer engagement in the online community context, specifically focussing on social media channels. Their research involved four stages to conceptualise, develop and then validate a CE social media measurement scale; with the first involving an extensive review of the literature. For the second phase, ten consumers were recruited for exploratory focus groups and in-depth interviews, where they were asked to concentrate on a brand they had high levels of engagement with and to describe this engagement. The findings highlighted that consumers who felt highly engaged tended to be more “willing to exert considerable cognitive, emotional and behavioural activity in their brand interactions; thus reflecting the core interactive nature underlying the ‘engagement’ concept” (Hollebeek et al., 2014:152). Respondents were also asked to identify a non-engaging brand,
which were predominantly found to focus on for their utilitarian traits. From these initial two research phases the scholars proposed a conceptual framework, comprising of cognitive processing (cognitive element) – the level of brand related thought processing linked to interaction; affection (emotional element) – the level of emotion a consumer has with a specific brand interaction; and activation (behavioural element) – the amount of effort and time a consumer spends on the brand interaction. Hollebeek et al. (2014) then developed a 69-item scale of CE, screening it via a multi-stakeholder panel of six consumers, 2 managers and 4 academics. It should be noted that all of the panel were male, highlighting a limitation of the research as this stage didn’t account for gender differences in what consumer engagement means to the general population. Thirty item deletions resulted from this scale validation.

The third phase of the research consisted of surveying 194 undergraduate students from the same university, using Facebook. The primary aim of this was to reduce the scale items further- which resulted in a ten-item scale. These items focussed on thinking about the brand, stimulating interest to learn more about the brand, feeling happy and positive about the brand, being proud to use it, spending a lot of time using the brand and also favouring it above others in the same product category. For the final stage of the study the scholars utilised two further studies to validate the scale. The first through administering the scale via a questionnaire on Twitter and analysing the results through confirmatory factor analysis and structural equation modelling; and the second assessing CE’s links to involvement, self-brand connection and brand usage intent via a survey to 556 consumers using LinkedIn, using the same quantitative analysis. Both studies validated the ten-item scale, with the second also finding consumer involvement to be an antecedent, and self-brand connection and brand usage intent to be consequences of consumer engagement.

As well as presenting some key findings which help in the advancement of consumer engagement understanding, both studies by Brodie et al. (2013) and Hollebeek et al. (2014) also highlighted some key strengths which aid in this too. Benefits include that their research are one of the first of its kind progressing from simply conceptualising CE at a higher theoretical level, to actually investigating and applying the process to a specific context – online
brand communities and social media. Although this is a big step within the current literature, the authors also acknowledge that further application into other interactive environments and between different stakeholder groups is still required. Brodie et al. (2013:113) state the “need for comparative research…in offline, “physical world,” and in online “virtual” settings”, as well as an investigation into of how brands and companies can self-manage their own online ‘engagement platforms’ (Sawhney et al., 2005). This thesis aims to fulfil these recommendations by examining consumer engagement in retail websites, so online business to consumer interactions, whilst attempting to uncover how brands can manage CE levels and development through implementation of specific interactive features. Both studies also overcome a criticism of many of the previous studies, as their research investigates the whole process including antecedents, dimensions, and consequences. In Brodie et al. (2013) this even extends to the potential for consumers to become disengaged. It also further corroborates with the previously agreed upon CE elements of experience (learning and sharing in the case of online brand communities- innate activities of experiencing in these platforms), co-creation (labelled as co-developing), and communication (through socialising and advocacy). Hollebeek et al. (2014) on the other hand, confirms the multidimensional nature of CE. This is another benefit of the studies; progressing and confirming consumer engagement knowledge.

There are also a few criticisms of the research too. One being that Hollebeek et al. (2014) conceptual framework doesn’t explain consumer engagement’s cyclical nature or present feedback loops, which tend to be agreed up within most of the extant literature. Also with Brodie et al. (2013) the field work only examines one industry, one brand and one stakeholder group (consumers) this is a limitation as the findings cannot be widely generalised or stated to be representative of all online brand communities. Further analysis is still required to test whether the conceptual framework would still be the same for other brands, products, services and sectors. Also with only consumers being interviewed this study doesn’t address the previously discussed academic-practitioner divide. It may be argued that Brodie et al’s previous 2011 work (described below) which adopts a purely practitioner stance, may have informed this more recent research even though practitioners were not used as
participants in the 2013 fieldwork. Whilst Hollebeek et al. (2014) somewhat overcomes this by assessing multiple social media channels, brands and examining a multiple stakeholders; there are still limitations attached to the validation panel being male only and only using undergraduate students from one university (and geographic region) to validate and reduce the original CE scale. This thesis aims to overcome this by qualitatively interviewing academics, practitioners and consumers to construct a blended CE-interactivity theoretical model. Participants will be selected across a range of demographics e.g. age and gender, and with a geographical spread across the UK.

Another weakness in Brodie et al. (2013) work is that a small scale sample was used; only six and then four highly engaged brand community members. Again this means that the results are unable to be generalised. The scholars also acknowledge that this study simply provides “initial insight”, that larger scale samples are still needed, and that “given the complexity of this emerging research area in the marketing discipline, future empirical research employing a pluralistic approach, integrating the use of interpretative and quantitative methods, is appropriate” (Brodie et al., 2013:113). Hollebeek et al. (2014) address this issue, but with this being one of the only studies to date to do so, this thesis is required to further investigate CE from this mixed method, large scale sample approach; especially when examining its application in the new context of retail websites. The scholars themselves acknowledge this stating that validation is required across “other online contexts and brands”, and recognising that their study makes initial steps and has only moderate levels of convergent and discriminant validity, so may require further investigation into the integration of additional constructs into the conceptual framework and scale.

2.4.4 Theoretical Foundations and Stance

The origin of the consumer engagement concept is also unclear, with different theoretical foundations proposed. These include social exchange theory (Blau, 1964) which states that social behaviour can be attributed to an exchange process and that relationships are formed through subjective cost-benefit assessments. This means that if a customer receives benefits from a brand that they regard to superior to those they get from other brands, then they are more likely to reciprocate those benefits back to the company through positive
thoughts, attitudes, behaviours, advocacy and word-of-mouth. Through this perspective CE can be explained as a more rational choice; however this viewpoint has not been readily accepted by the majority of scholars in the engagement field.

An alternative and more recent theoretical foundation for CE is grounded in value exchange theory and service-dominant (SD) logic (Vargo and Lusch, 2004, Vargo and Lusch, 2008). SD logic draws heavily on work into relationship marketing, integrated marketing communication and the resource-based view; extending this by moving from a focus on exchanges to experiences; value in products and services to these plus value co-creation; interactions driven by the company to those driven by customers; and from retaining customers to also acquiring them.

The foundational premises (FP’s) for SD logic are outlined by Vargo and Lusch (2008) as being: “FP1: Service is the fundamental basis of exchange, FP2: Indirect exchange masks the fundamental basis of exchange, FP3: Goods are a distributed mechanism for service provision, FP4: Operant resources are the fundamental source of competitive advantage, FP5: All economies are service economies, FP6: The customer is always a co-creator of value, FP7: The enterprise cannot deliver value, but only offer value propositions, FP8: A service-centred view is inherently customer orientated and relational, FP9: All social and economic actors are resource integrators, FP10: Value is always uniquely and phenomenologically determined by the beneficiary” (Vargo, 2008:213).

FP’s 6, 8, 9 and 10 “in particular, provide a conceptual foundation for the development of the CE concept, which reflects customers’ interactive, co-creative experiences with other stakeholders in focal, networked service relationships” (Brodie et al., 2011). The co-creation of value element is focal, with both customers and organisations creating value for each other, with the development of this relationship occurring through interaction/dialogue. Consumer engagement academics adopting this theoretical stance include Hollebeek (2011b), Brodie et al. (2011), Vivek (2009), van Doorn (2011) and Gambetti et al. (2012). Due to the general agreement of this viewpoint in recent
literature and the calibre of the scholars adopting it, the SD logic foundations will also underpin this thesis.

2.4.5 Measurement Scales

As well as the lack of consensus over CE’s conceptual models there is also debate into its measurement. To date there is no agreement on this; however both academics and practitioners alike recognise the importance and therefore attempted to develop a measurement scale.

From a practitioner perspective Gallup, a strategic consultancy firm, developed CE11 after conducting research with over a hundred different organisations, spanning a variety of industries. Their finalised 11 point metric scale for consumer engagement includes both loyalty measures (L3), so rational assessments; as well as emotional attachment measures (A8), so affective assessments including confidence, integrity, pride and passion. The questions/metrics used to examine CE included how satisfied consumers were with the brand, whether they would repeat purchase, and also recommend it to a friend. Affective statements related to trust, delivery of promises, being treated with respect, fair resolution of problems, pride in being a customer, and also not imaging a world without the brand (Gallup, 2009).

The three loyalty and eight emotional attachment scores added together give the overall consumer engagement level. If this score is high then this indicates a customer who will actively seek out the brand, even if it is not needed at that point in time. This is important with Gallup (2014) recognising that “fully engaged customers buy more, stay with you longer, and are more profitable than average customers - in good economic times and bad” and that these customers represent on average a “23% premium in terms of share of wallet, profitability, revenue, and relationship growth over the average customer” (p.1).

Overall this scale provides a practical way to measure engagement in real-world contexts, whilst allowing diagnosis and subsequent actions to be recommended - additional services offered by Gallup. It also takes into account the multidimensional nature of CE through focus on emotional, behavioural and cognitive (evaluations of satisfaction) aspects. Whilst this is the case it is not readily accepted or widely utilised in academic research, this may be due to its
simplistic measures only looking at loyalty, satisfaction, post purchase 
behaviour and emotional attachments. For example the previous section 
outlining conceptual models lists multiple other dimensions such as: experience, 
commitment, interaction, co-creating, and learning.

From the academic viewpoint Sprott et al. (2009), Keller (2013) and Hollebeek 
et al. (2014) examine engagement measures. Although these scales tend to be 
from a brand rather than consumer engagement stance, they are still worth 
noting as they provide metrics for some of the dimensions debated by scholars 
in conceptual models (discussed in section 2.4.3).

Sprott et al. (2009) examined brand engagement in consumer’s self-concept, 
developing a scale through reviewing both branding and self-concept literature- 
this resulted in an initial list of 36 items. Nine scholars were then asked to 
review these to assess the content validity of each, leaving a total of 32 usable 
items to test. These were then administered to 430 undergraduate students, 
who rated their agreement with each based on a 7-point likert scale. This left a 
total of eight final brand engagement metrics which they believed “captures a 
consumer’s general engagement with brands’ predicting ‘differential attention to, 
memory of, and preference for their favourite brands” (Sprott et al., 2009:92). 
These included having a special bond or personal connection with the brand, 
being able to identify with it, it being part of them and also an indication of who 
they were.

The researchers then utilised this scale in a subsequent programme of studies 
to investigate: brand engagement (BE) in self-concept linked to memory; BE on 
choices and memory of brand; BE on attention to brand stimuli; BE on 
preferences; and BE on loyalty. Findings showed that consumer’s with brand 
engagement in self-concept were less time and price sensitive and had 
increased levels of loyalty.

Keller (2013:349) also suggested a brand engagement scale to measure 
‘consumer perceptions’ and how “consumers are connecting to a brand”. Their 
metrics cover three main areas; collecting information, so searching for and 
learning about the brand and noticing it’s advertising; participating in brand 
activities, so paying attention to marketing activities and getting involved in 
experiential opportunities to try the brand; and interacting with others, so
socialising with people using the brand, recommending it and also being active in loyalty programmes.

Although these two academic scales are not completely usable for consumer engagement due to being metrics for brand engagement (and not focussing strongly on engagement in their literature reviews), they do provide a basis for further CE measurement development. Strengths include that they take into account some of the CE aspects shown in the conceptual models in section 2.4.3. For example Keller (2013) including measures of participation, cognitive learning and searching about the brand, socialising/interacting and behavioural recommendations and loyalty. Sprott et al. (2009) also showcased the affective CE elements linked to emotional connection; however did not take into account the concepts multidimensionality. Another positive of this study is their validation technique and use of the scale in further studies, showing application in real-life, practical contexts.

Hollebeek et al. (2014) provide a more recent academic scale for the examination and measurement of consumer brand engagement in a social media context. They too acknowledge the lack of empirical research to date stating that this is mainly due to researchers focussing on the overall nature of CE; with their study aiming to address this gap. During the initial exploratory analysis phase ten consumers were asked to choose a brand they felt highly engaged with and to describe it during focus groups and semi-structured interviews. Then to ensure understanding they were also asked to replicate this process but with a brand that they bought or used but didn’t feel engaged with; this was then compared to definitions and proposed dimensions found during the literature review stage.

The initial findings showed three separate dimensions for consumer brand engagement; cognitive processing, so the level of consumer thought processing; affection, the positive brand related affect; and activation, the level of energy, time and effort spent. These three dimensions are reflected in the authors conceptualisation of CBE as “a consumer’s positively valenced brand-related cognitive, emotional and behavioral activity during or related to focal consumer/brand interactions” (Hollebeek et al., 2014:154), highlighting their acknowledgement of CE’s multidimensionality which is both a strength and
advancement from the previously discussed scales. From the initial exploratory results a 69-item scale was developed, which was then screened by a multi-stakeholder panel of 12 academic experts, consumers and managers. This reduced the items to 39, where subsequent studies to rate the scales were conducted with 194 undergraduate students linking it to Facebook, 554 consumer associating it with Twitter, and 556 consumers relating it to LinkedIn. After both exploratory and confirmatory factor analysis at all stages a final 10-point scale for CBE was agreed upon. Cognitive scale items included the brand getting the consumer to think about it, especially when they used it and also stimulating their interest to learn more about the brand; affective linked to positivity, happiness, pride and feeling good when using the brand; and behavioural aspects included spending more time using the brand compared to others in the same product category, and also choosing it over other brands (Hollebeek et al., 2014).

The findings unsurprisingly also showed when consumers where highly engaged with a brand they were willing to exert a lot more cognitive, emotional and behavioural activity than when they weren't engaged. Overall when consumers described non-engagement in a brand, the purpose of interactions with it were more utilitarian centred around price and functionality needs.

Overall the study makes positive steps to developing an agreed upon scale for consumer engagement, especially with the authors being recognised as key scholars/contributors to this research area and so understanding the complexity of the concept. This is shown through the acknowledgement of its multidimensionality, interactive and experience led nature, and conceptual distinctiveness. However due to how recently their paper was published it is hard to assess its adoption and therefore agreement amongst other CE scholars that this can be used as a general measure for consumer engagement across contexts, not just in social media. Given the key issues and excessive debates in this research field consensus cannot be assumed until implementation in subsequent studies is documented. It should be noted however that the large sample sizes for the subsequent studies rating the scale items are impressive and add further validity and reliability to the scale too. Another strength is that multi-stakeholder groups screened the initial scale items, helping to start to bridge the academic-practitioner divide, although there
were uneven numbers in each group (6 consumers, 2 practitioners and 4 academics). The panel where also known to the researchers, out of convenience however this could have introduced some participant bias into the methodology. The small number of initial consumers in the first exploratory (ten in total) is also a weakness, making it hard to generalise their results to the whole population.

Other techniques used to measure CE in the academic literature include assessing the mentions and tone of tweets in a social media context (Wigley and Lewis, 2012) and reviewing online CE based on pages views, duration of visits, nature of consumer transactions and the extent of engagement (Lee et al., 2011). However neither of these measurements have received wide-spread agreement or adoption among scholars, maybe due to trying over simplify and over quantify such a complex concept.

2.4.6 Synthesis of Literature

Brodie et al. (2011) attempted to synthesise the extant literature on CE and derive some general agreed principles or propositions for further research. Through literary analysis they consolidated the agreed upon elements from the diverging views of engagement, to derive proposed propositions about its nature. These were then reviewed, amended and enhanced by thirteen independent academic researchers within the fields of engagement and service relationships to ensure consensus. This resulted in five fundamental propositions (FP’s). These are summarised below.

FP1 “CE reflects a psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific service relationships” (Brodie et al., 2011:258). This relates to the essence of consumer engagement, with consumer to brand/company interactive experiences being central to the concept (Van Doorn et al., 2010). For this reason it is clear to see why this complex construct is hard to define and conceptualise, as individual experiences can only be explained first hand (Hollebeek, 2011a). Brodie et al (2011) propose that that CE interactions go beyond a simple dyadic relationship and instead incorporate a wide audience of stakeholders, including customer-to-customer. This is highlighted through the growing importance and role of WOM and consumer communities in social media based consumer engagement. FP2
stated that “CE states occur within a dynamic, iterative process of service relationships that cocreates value” (Brodie et al., 2011:258). The consensus is that consumer perceived value can be generated through stakeholder communications and service delivery. The recurring process spoken about stems from the academic reviewer’s comments about the engagement cycle involving feedback loops over time; “CE relational consequences may extend to act as CE antecedents in subsequent CE processes and/or cycles…varying in intensity and complexity over time” (Brodie et al., 2011:258). For example loyalty may be a consequence for a first time consumer in the process, but an antecedent for a returning one. This antecedent and consequence cyclical process complexity is reflected in FP3, “CE plays central role within a nomological network of service relationships” (Brodie et al., 2011:258), whereby CE is viewed not in isolation but instead as playing a central role in a wider network of relationship marketing constructs. Again there is a lack of agreement amongst scholars as to what these are but suggestions include: involvement, participation, flow, telepresence, trust, commitment, emotional attachment and loyalty. FP4 stated that “CE is a multidimensional concept subject to a context- and/or stakeholder-specific expression of relevant cognitive, emotional, and behavioural dimensions” (Brodie et al., 2011:259). So although CE is multidimensional it can be affected by specific contexts which will reflect the differing ways the concept is expressed e.g. cognitively, emotionally or behaviourally. FP5 linked to these contexts finding that “CE occurs within a specific set of situational conditions generating differing CE levels” (Brodie et al., 2011:259). These levels can vary from disengaged to highly engaged on a continuum scale. Van Doorn (2011) acknowledged the need for researchers to also consider the engagement process and levels that occur when a consumer becomes unsatisfied, which can result in active negative WOM. Very little conceptualisation considers this valence factor.

Overall Brodie et al.’s (2011) work offers salient issues to consider in future conceptualisations of CE, through strongly consolidating the agreed upon elements in the otherwise highly debated subject. The review presents accompanying research implications derived from the five FP’s which highlights the areas still requiring further investigation. Amongst these are questions relating to what the “key triggers” of CE levels are in certain channels or
contexts (linking to FP 5), and also the role of interactivity in the CE process (relating to FP 3). Franzak et al. (2014) also agree that with the brand engagement knowledge still being developed further investigation is still required to “understand how it can be influenced” (p.16); focussing on interactivities role in this and how it impacts engagement development is a useful starting point for research into this area.

These two FP’s have been chosen as the importance of marketers understanding the two concepts of interactivity and CE’s relationship is vital. This is with Crosby et al. (1990) finding that higher quality relationships are required for online purchasing, and also to remain competitive within the marketplace (Tse and Chan, 2004). With many scholars agreeing interactivity is not just an element to be integrated into websites but instead embodied in the internet medium, it is also important to ensure that retail marketers know how to effectively utilise interactivity features in constructing websites that can build these strong emotional bonds, whilst also understanding how and why consumers respond to them (Voorveld et al., 2011). Although businesses understand the importance of this they are not certain as which engagement elements impact most on the bottom line (Vivek, 2009) and relationship building. Other researchers also agree that this area requires further investigation, being listed in their implications for future research chapter. For example: Vivek (2009), to look at antecedents and individual preconditions and their impact; Mollen & Wilson (2010), investigate to what extent CE can be moderated by website factors; Sashi (2012), explore how different Web 2.0 features (incorporated in interactivity) can be used to build CE; Hollebeek (2011b), examine specific drivers of CE; Van Doorn et al.(2010) & Van Doorn (2011), analyse antecedents, paths to guide CE and relationships between CE and related constructs; and Bolton (2011), to research the link between established concepts and CE. This is why these two aspects are the focus of this thesis; exploring the relationship between interactivity and CE therefore is a central aim of this investigation. Understanding the antecedents and consequences of this potentially fused interactivity-CE construct remains an important secondary aim of this investigation. Given the importance of interactivity in understanding CE and advancing its conceptualisation a brief overview of interactivity follows.
2.5 Interactivity

Egan (2008) highlighted the potential links between interactivity and developing engagement, stating that the literature generally agrees that if used correctly ICT can aid in relationship building. This may sound simple however as with engagement, interactivity is a complex concept sparking academic debate into its definition. Proposed definitions include: Steuer (1992:84) which focuses on “the extent to which users can participate in modifying the form and content of a mediated environment in real time” so the process of interactivity; and Liu and Shrum (2002:54) which concentrates on reciprocal communication, describing interactivity as “the degree to which two or more communication parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronised.”

Where there is a lack of consensus on interactivity’s definition, theoretical stance and dimensions, there is however agreement about how fundamental it is for marketers to understand it due to its benefits. From a relationship marketing perspective the more a company and consumer communicate, the higher the strength of their relationship, which can result in increased sales and profitability (Hoffman and Novak, 1996). Cyr (2008) also found that design elements of websites such as layout and content, so interactivity features, have an effect on loyalty, satisfaction and trust. This shows that interactivity should be a key consideration for marketers in building relationships with their consumers.

2.5.1 Theoretical Foundations and Stance

Although interactivity has been extensively researched over the past few decades there are still questions into its dimensionality. Central to this debate are the two main theoretical stances: actual interactivity and perceived interactivity. Actual interactivity states that interactivity depends completely on the technical aspects of the medium, meaning that from this view it can simply and objectively be measured through counting up the number and type of features on a website. One of the earliest studies from this stance was by Steuer (1992) who investigated the computer as a mediated environment, its properties (e.g. speed, range) and how people experienced and built relationships with the actual channel of information; through the ability to
participate and modify its form and content. This is referred to as telepresence theory. Other scholars adopting this technical based viewpoint include Coyle and Thorson (2001) and Sicilia et al. (2005) who found a linear correlation between increasing the number of features and the strength of perceptions towards that website. However Song and Zinkhan (2008:109) criticized this view stating that “simply adding features does not guarantee a high level of [perceived] interactivity”. Voorveld et al’s (2011) later research also confirmed this. Through utilising website content analysis and then a survey method they also established that the relationship between the levels for each is very incongruent. Although the two stances still exist today, much of the later work and this thesis focus on perceived interactivity.

Perceived interactivity “is subjectively experienced by users and therefore often referred to as experiential interactivity (Liu and Shrum, 2002, Wu, 2005). This can be measured by asking consumers about their feelings or experiences during their visit to the Web site” (Voorveld et al., 2011:77). Interactivity theory was developed by Rafaeli (1988); in comparison to telepresence theory it stated that the quality of the communication is the most important determinant for interactivity. Perceptions in this theory are based on the human-to-human reciprocal exchange, with consumers forming their opinions about the level of interactivity and website effectiveness based on this. In the study three processes were also highlighted: two-way communication, reaction and interaction. One criticism of both Rafaeli (1988) and Steuer (1992) is that although they often cited by other scholars, there is little empirical evidence to prove whether either are applicable in real-life (Song and Zinkhan, 2008).

2.5.2 Lack of Consensus about Interactivity Dimensionality

Based on these two theoretical foundations later research has debated and challenged the proposed characteristics of interactivity, with figure 2.9 below highlighting some of the key research’s dimensionality findings.

An early study by Ha & James (1998:456) defined interactivity as “the extent to which the communicator and the audience respond to each other’s communication need”; understanding the importance of individual differences throughout the process. Sometimes consumers want immediate communication and responses for example to get help or support, and sometimes they want the
control and choice to browse on their own without direct communication from the business.

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rafaeli (1988)</td>
<td>Feedback</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
</tr>
<tr>
<td>Steuer (1992)</td>
<td>Speed</td>
</tr>
<tr>
<td></td>
<td>Range</td>
</tr>
<tr>
<td></td>
<td>Mapping</td>
</tr>
<tr>
<td>Miles (1992)</td>
<td>Responsiveness</td>
</tr>
<tr>
<td>Ha and James (1998)</td>
<td>Reciprocal Communication</td>
</tr>
<tr>
<td></td>
<td>Playfulness</td>
</tr>
<tr>
<td></td>
<td>Choice</td>
</tr>
<tr>
<td></td>
<td>Connectedness</td>
</tr>
<tr>
<td></td>
<td>Information Collection</td>
</tr>
<tr>
<td>McMillan and Downes (2000)</td>
<td>Direction of Communication</td>
</tr>
<tr>
<td></td>
<td>Control</td>
</tr>
<tr>
<td></td>
<td>Time Flexibility</td>
</tr>
<tr>
<td></td>
<td>Sense of Place</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
</tr>
<tr>
<td></td>
<td>Perceived Purpose of Communication</td>
</tr>
<tr>
<td>Coyle and Thorson (2001)</td>
<td>Mapping</td>
</tr>
<tr>
<td></td>
<td>Speed</td>
</tr>
<tr>
<td></td>
<td>Control</td>
</tr>
<tr>
<td>Liu and Shrum (2002)</td>
<td>Two way Communication</td>
</tr>
<tr>
<td></td>
<td>Active Control</td>
</tr>
<tr>
<td></td>
<td>Synchronicity (with system responsiveness vital for this)</td>
</tr>
<tr>
<td></td>
<td>No Delay (Responsiveness)</td>
</tr>
<tr>
<td></td>
<td>Engaging</td>
</tr>
<tr>
<td>Johnson et al. (2006)</td>
<td>Responsiveness</td>
</tr>
<tr>
<td></td>
<td>Non-verbal Information</td>
</tr>
<tr>
<td></td>
<td>Speed of Response</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Communication</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Florenthal and Shoham (2010)</td>
<td>Customisation</td>
</tr>
<tr>
<td></td>
<td>Navigation</td>
</tr>
<tr>
<td></td>
<td>Affordance</td>
</tr>
<tr>
<td></td>
<td>Accessibility</td>
</tr>
</tbody>
</table>

**Figure 2.9 - Existing interactivity research and dimensions**

Ha and James (1998) research first reviewed the existing literature and then investigated interactivity through content analysis of 110 business websites offering a range of different products and services, spanning across various sectors. In order to examine these sites coder’s were trained to review them based on the following five interactivity dimensions; playfulness, choice, connectedness, information collection and reciprocal communication. Results found that all elements were present on commercial websites however the most prominent were reciprocal communications and choice.

Playfulness refers to any games or curiosity arousal devices e.g. Q & A tools present on a website that have the purpose of facilitating the audiences self communication need through a playful environment or experience. Unlike Johnson et al.’s (2006) facets, Ha & James (1998) incorporated control and also accessibility into their dimension of choice, which allows the consumer to choose what they want to see, how they see it (giving the option to change language and visual or text browsers) and also navigate freely. Choice is closely associated with playfulness as by giving the website visitor more autonomy they also experience satisfaction and empowerment, often encouraging a longer visit time. The dimension of connectedness refers to consumers wants and needs to feel connected with the outside world, even though they may be interacting through a computer medium. If companies can fulfil this need then benefits of trust and quicker learning will follow. Ha and James (1998) believe an effective way to achieve this via a website is to hyperlink text so a user can easily jump from page to page or site to site; or to include features which reflect real-world environments and make people feel as though they are present in them e.g. using virtual catwalks or changing rooms (Steuer, 1992). Also utilising non-verbal cues such as sounds, images and
videos to replace body language and facial expressions experienced in face-to-face interactions. Connectedness's intensity can strengthen over time. These three factors; playfulness, choice and connectedness are considered to be audience-orientated interactivity as the user plays the key role in the communications.

Both information collection and reciprocal communication are source-orientated interactivity features as they involve two way communications between the company and consumers. The objective for companies is to entice visitors through audience-orientated elements with the intention that they will then interact with source-orientated aspects (Ha and James, 1998). Information collection refers to the need for the communicator to gather data on their consumers. This is vital as it enables companies to develop and learn about their visitors and allows them to provide a more targeted and tailored experience. However it is very dependent on user willingness to opt in to share this data. Reciprocal communication on the other hand is the direct back-and-forth communications either initiated by the consumer visiting the website or sending a message; or the source through the website content. The aim for the company is to involve users and gain their feedback, as the more reciprocal communications the more likely individual needs can be responded to and therefore fulfilled.

A main strength of Ha and James (1998) research is the quantitative validation of their proposed dimensions; something often lacking in the majority of interactivity literature. The study also takes into consideration individual differences and provides an in depth description of website interactivity- which is very useful for this thesis. However methodology criticisms include the training of the coders used to assess website features, due to the researchers doing this personally this could have introduced bias and influenced the results. Also only website homepages were reviewed, neglecting any further interactivity embedded in the rest of the site. Again this could have negatively impacted the results.

Later research by Johnson et al. (2006) reviewed and synthesised the existing literature from a perceived interactivity stance. At the time they believed that practitioners were failing to capitalise on the extensive functionality and
advantages that interactivity had to offer, due to a lack of understanding about its complex nature. This coupled with “shortcomings” in prior academic studies had “partly contributed to this lack of comprehension” (Johnson et al., 2006:35); which their work aimed to address. Such shortcomings included a lack of generalisable definitions and dimensions, stating that much of the previous research had been too context dependent (e.g. through a mediated technology such as a computer), so there was still a need for highlighting aspects relevant for both mediated and non-mediated interactivity.

Johnson et al. (2006) research initially reviewed existing interactivity literature and found four prominent facets believed to be positively associated with perceived interactivity: reciprocity, responsiveness, speed of response and nonverbal information; and that higher perceived interactivity had a positive effect on a user’s attitude and involvement with that medium. See figure 2.10 below. The second phase of their study then experimentally tested these proposed facets examining perceived interactivity on a wine website, using a sample of 180 students; which through a pilot study was predetermined to be a topic that participants had very little prior knowledge of. The sample was split and randomly assigned to 1 of 16 experimental groups which saw the same website information but varied based on high or low reciprocity, responsiveness, speed of response or nonverbal communication. Participants were asked to undertake a task role playing a scenario where they had to order wine from the website for a work’s Christmas party. They were then asked to quantitatively rate how interactive they found the website on a seven-point likert scale. The findings of their experimental web site study highlighted three of the four facets significantly impacted perceived interactivity: responsiveness, speed of response and nonverbal information.
Maybe surprisingly (as often neglected in prior research) non-verbal information was found to be the most influential factor on perceived interactivity, with responsiveness having the second strongest impact. However reciprocity in communications as a factor on its own was not found to be sufficient enough to affect perceived interactivity. One limitation identified that the sub-scale operationalised to measure this reciprocity may not have been reliable which could have caused this result, the authors' state that further studies could potentially find this to be a facet but with a much weaker influence than others.

In this research reciprocity refers to “the extent to which communication is perceived to be reciprocal or to allow mutual action” (Johnson et al., 2006:41); this is a widely accepted component of interactivity within the literature. This encompasses terms often used such as dialogue, participative, talking back, and two-way communication; meaning that consumers have the option to freely and collaboratively converse with brands or organisations. This means they can become both the sender and the receiver, rather than being forced to simply listen through one-way communication channels. The dimension of responsiveness relates to communications that are “appropriate, relevant, and sustain the continuity of the interaction” between two parties or more (Johnson et al., 2006:40). Many scholars cite this as being important within the literature (Rafaeli, 1988, Song and Zinkhan, 2008, Hoffman and Novak, 1996), whilst also highlighting that if interactivity is carried out through the medium of a computer, then the answers given must be tailored to the users query, as in human-to-
human interactions. This helps ensure that the communications are easy and maintainable. Steuer (1992), Liu and Shrum (2002) and Coyle and Thorson (2001) all agree with the third facet found in this study speed of response, so how quickly the message exchange happens. Interactivity is perceived to be higher if this occurs in real time, so instantaneously and without a delay. Johnson et al (2006) criticised the previous literature for overlooking their final dimension, stating that although the primary message is often conveyed verbally, conversation enrichment and meaning are usually provided by nonverbal communication. In a face-to-face context such cues include body language, facial expressions and tone of voice, whereas online this element would be reflected in the selection of “graphics, animation, pictures, video, music, and sound, as well as the paralinguistic codes, to present information” (Johnson et al., 2006:41). The facet of control often cited in interactivity literature (McMillan, 2000a, McMillan, 2000b, McMillan and Hwang, 2002, Coyle and Thorson, 2001, Liu and Shrum, 2002) is discounted by Johnson et al. (2006) stating that it is reciprocity that allows a person to manipulate the flow and duration of information, and control may be a precursor for this. Also with this research aiming to be applicable in all contexts, both mediated and non-mediated; control may not be always apply e.g. when reading a newspaper; the control over the information you decide to pay attention to and the duration you choose to interact with it for versus a face-to-face interaction with a sales person where this is less controlled.

A key strength of this research is that it develops a definition for perceived interactivity that can be used in all situations, contexts and research fields. It is not confined to mediated marketing environments only, which have been the main focus in prior literature. The findings also aid in marketing decisions associated with what is the most important information to communicate for people to perceive high interactivity levels. For example on web pages where space may be limited sounds and visuals may be vital as they are the most influential facet. Another positive is that it uses fairly large scale quantitative testing of the conceptual model, making it more applicable to the whole population.

However the sample is also a criticism of the study, as only one main consumer group was used; students who were likely to be of a similar age, occupation and
salary. This accompanied by only one product type being investigated may mean that the results are therefore not representative of the wider population or for other product types. Also there has been a lot of technological advancement since Johnson et al.’s (2006) paper was published, for example mobile technology, tablets and social media which could mean that the research may not now be applicable to all present day communication channels.

Liu & Shrum’s (2002) conceptual paper reviewing the existing literature further highlights the ongoing interactivity debate, stating that there are still many inconsistencies in researchers’ beliefs about what it is and what is involves. However their study does provide agreement on the importance of communications being reciprocal and responsive; choosing to include two-way communications and synchronicity as two of their three dimensions of perceived interactivity. Two way communication involves reciprocity between users or the user and the medium (e.g. computer). Transactions on retail websites are also part of this too. The introduction of the internet opened up the communications arena enabling previous one way communications to become two-way and instant, and also allowing information to be gathered to gauge consumer interest in products, services or content. This can be done by the company both indirectly through the use of cookies and tracking, and directly through users reviewing, leaving feedback or sending emails. The dimension of synchronicity refers to how relevant and concurrent the responses the user receives back are, in relation to their original input or query. Again with the internet there is now an expectation that this process should be very quick and also easy, so system responsiveness is vital to this. Their third facet of active control however disagrees with Johnson et al’s (2006) exclusion of this element. This facet refers to the user having autonomy over the actions they take on a website, and as a consequence having a direct affect on their overall experience. Features that allow this are hyperlinks and personalisation of content, as they allow consumers to easily navigate through the site and take shortcuts and also act on their wants and needs. See figure 2.11 which provides an overview of their conceptual model.

In their study reviewing existing literature and applying the dimensions to various online marketing platforms (including websites, online stores, banner ads and many more) resulted in varying degrees of the facets.
Song & Zinkham’s (2008) more recent study adopted an alternative method to investigate perceived interactivity. Empirical testing of three main proposed antecedents; number of clicks, response time and message type examined the concept from both theoretical perspectives - interactivity and telepresence theory. The researchers highlight that although the two theories are often cited and used within interactivity literature that in fact there has been very little empirical testing of them; something which their research addresses. From telepresence theory the dimension of speed was used; referring to how quickly the user can input into the medium and get an output in return - the prediction being that the quicker this process is the higher perceived interactivity and also website effectiveness (measured through loyalty, attitude to site, quality, WOM, satisfaction and repurchase behaviour). Speed in this study was represented in the antecedents of number of clicks and response time. From the alternative perspective of interactivity theory the antecedent of message type was used. This was based on Rafaeli’s (1988) research which identified two-way communication, the message flowing between the two parties; reaction, the responses replying to prior messages; and interaction, the content/queries of the responding message addressing that in the original message. Again the prediction being that the more tailored this is the higher the perceived interactivity and website effectiveness.
Two experiments were conducted using a scenario where consumers visited a retail website and then used the online chat function to contact the company. The first experiment created 16 different versions of a website to enable manipulation of the antecedents and also the variable of task (seeing if message effects are the same if a consumer is trying to perform different actions with the site). 341 undergraduate business students, with prior online experience participated in 30 minute sessions and were given extra class credits and entered into a raffle to win five prizes of $30 as an incentive. A second experiment was then conducted with 121 undergraduate students for further in depth examination of message type, looking at three conditions with varying personalisation. Again extra credits were awarded to participants.

The overall findings showed that message type was the most influential factor on perceived interactivity, with higher levels of personalisation producing higher interactivity and also website effectiveness perceptions. The results also showed that the impact of message type is increased in a negative situation compared to a positive one e.g. complaining vs. asking for further information.

There are both strengths and weaknesses in this research. Advantages include that this is one of the first studies to empirically test the proposed models of interactivity, with quantitative validation previously missing in the literature. Also both theoretical perspectives were considered in choosing the antecedents to investigate. However criticisms include that participant bias could have occurred with the undergraduate student receiving course credits for their involvement in the study. This could have meant they acted or gave results the way they thought the researchers wanted, rather than providing true results. Also with the participants being mainly from one demographic group; so undergraduate students likely to be of a similar age, annual income group, occupation; and also looking at only one type of website (retail selling university souvenirs) it means that they findings may not be representative of the whole population or other sectors. Therefore they wouldn’t be generalisable. Another potential weakness would be that they only tested two website interactivity features (speed and message type), as opposed to Florenthal and Shoham (2010) who investigated five including non verbal cues such as affordance features. Their study is discussed below. The setting of a chat function is also very limited,
meaning further examination of the entire website is still required—something this thesis will address.

Through the identification that most previous research focussed purely on perceptions of interactivity alone, Florenthal and Shoham (2010) synthesised the existing cross-disciplinary literature to create an alternative 4 mode interactivity framework which addressed both perceptions of, but also preferences for interactivity across various online and offline channels. The modes (shown in figure 2.12 below) highlight agreement that interactivity is not just exclusively a feature of communication (Liu and Shrum, 2002, Song and Zinkhan, 2008) and also that it includes non-verbal cues or communication (Johnson et al., 2006, Ha and James, 1998).

Figure 2.12 highlights the more holistic approach adopted by Florenthal and Shoham (2010) through the 4 interactivity modes of human, medium, message and product. Through these modes the key aim of clearly being able to differentiate them in an online vs. offline environment was incorporated.
The human mode refers to the commonly agreed dimension of interpersonal communication, however through reviewing existing theories such as social interaction and social presence the researchers relate this to how consumers socialise with friends and sales assistants when shopping in a retail environment. When social presence (being able to communicate through both verbal and non-verbal cues) is high, so is interpersonal communication. For this reason some scholars argue that offline relationships are likely to be deeper as they facilitate the use of non-verbal cues (Kraut, 2002), especially when the encounter is perceived as being a one-off. The message mode focuses on the content of communications and also the user’s ability to control and customise these to meet their own requirements; as well as their comparative behaviour in evaluating alternative products and stores. To assess the message-related mode of interactivity in this model customisation is used as it is applicable to both mediated and non-mediated environments. The medium mode “refers to human interface relationships (McMillan and Hwang, 2002)” (Florenthal and Shoham, 2010:30). As a user’s experience improves as does this medium interactivity. This can be measured through both navigation and accessibility. Accessibility is the speed and ease of accessing the retail setting and its information, and the ability to do this at any time and from any location. This incorporates other speed related dimensions from previous studies including connectedness, responsiveness, and feedback (Rafaeli, 1988, Miles, 1992, Wu and Wu, 2006, McMillan and Hwang, 2002, Johnson et al., 2006, Song and Zinkhan, 2008). Navigation on the other hand is their ability to locate the desired information or products quickly. This aspect is prominent in consumer’s evaluations of interactions with retailers. The product mode relates to direct experience with the product so involving the shopper’s senses. Interactions with physical products are found to be valuable, with this affordance aspect (linked to product) being especially important online. Purchasing through this medium removes the ability to use senses to assess a product, making the process higher risk. Online retailers need to try to recreate this online through the use of close-ups, 360 degree views, virtual changing rooms, colour matching makeup
applications, etc. to reduce this. Especially with Florenthal & Shoham (2010:33) stating that “the fewer perceived affordances a channel provides, the less interactive it is perceived”.

Based on these modes, their propositions showed that consumer’s may choose certain retail channels (offline vs. online) based on the fact that they offer different interactivity modes which may match shopper’s preferences better than others. Personal or situational circumstances can determine this preference of an interactivity mode. For example shopping in a traditional store may be perceived as having higher levels of product interactivity, so a shopper may choose to go to a physical shop if they would prefer to try new products on or use touch to assess quality before purchasing them.

There are some key strengths to this research, with its scope being a lot wider than in previous literature; through examining both online and offline contexts, adding in interaction with products, and examining consumer’s interactivity preferences as well as perceptions and their impact on channel selection. There are also criticisms too. As with other studies this is also still very high level, investigating the conceptual foundations and dimensions of interactivity with no scale developed for measuring the construct and no validation through quantitative testing. After 20 years of being researched this is still lacking in the literature and something which this thesis aims to address by assessing it’s features impact on online consumer engagement.

Figure 2.9 provides an overview of the proposed dimensions within some of the existing literature. Overall it can be seen that there is still disagreement as to the dimensionality of interactivity: McMillan & Hwang (2002) finding real time conversation, no delay (so responsiveness) and engaging; Liu & Shrum (2002) highlighting active control, two-way communication and synchronicity; Johnson et al. (2006) emphasising responsiveness, non-verbal information and speed of response; and Florenthal & Shoham (2010) showing the five dimensions of accessibility, customisation, navigation, communication and affordance. However from this it can be seen that it is generally agreed upon that interactivity does involve control, communication and response (Rafaeli, 1988, McMillan, 2000b, Liu and Shrum, 2002, McMillan and Hwang, 2002, Song and Zinkhan, 2008) – although not always labelled this way.
2.6 Consumer Engagement (CE) and Interactivity Link

It is apparent from figure 2.9 that there is a link between CE and interactivity, with research highlighting elements of engagement as dimensions of interactivity; Ha & James (1998) - playfulness and connectedness, and McMillan & Hwang (2002) - engaging. Research by Power (2007:10) further highlights this by stating interactivity as an antecedent, which “engages shoppers, creates social communities and ultimately builds loyalty”. Keller’s (2013:348) more recent definition of engagement “the extent to which consumers are willing to invest their own personal resources - time, energy, money and so on- on the brand beyond those resources expended during purchase or consumption of the brand”, indicates that it involves behaviours such as information searching, participating in marketing activities, interacting with other brand consumers – all which can be done through website interactivity features. This link is also acknowledged in the CE literature, for example Hollebeek (2012:17) discusses engagement in terms of consumers no longer being “passive recipients of marketing cues, but increasingly as proactive participants in interactive value-generating co-cocreation processes”. However to date most of the literature is not explicit in identifying the link between the two concepts, this is currently only inferred and so is yet to be empirically tested. Also there is still debate over the nature of this relationship; is interactivity an antecedent or an intrinsic element/feature of consumer engagement?

Along with Power (2007), other researchers adopting the antecedent stance include Brodie et al (2011:253) who suggest that the conceptual foundations for consumer engagement may be drawn upon through existing “interactive experience and value co-creation theories”. Within their fundamental propositions, FP1 states that “CE reflects a psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific service relationships” (Brodie et al., 2011:258); the wording suggesting that interactivity proceeds CE, whilst further highlighting a definitive relationship between the two concepts. Ha & James (1998:456) also state that “the outcomes of interactivity are engagement in communication and relationship building between a company and its target consumers”. Hollebeek’s (2011b:792) examination of engagements’ conceptual relationships also led to her adopting this stance, finding that “involvement and interactivity are viewed
as antecedents required prior to the emergence of customer brand-engagement levels”. This therefore suggests that perceived interactivity will have an impact on how engaged a consumer is with a brand.

Sashi (2012) and Gambetti et al. (2012) also advocate this viewpoint with interaction being shown as a stage within the process which must be fulfilled before the subsequent stages, and therefore consumer engagement can occur. A criticism of Sashi (2012) is that the term ‘interaction’ is used more to describe communication which is one dimension of interactivity, rather than the concept as a whole. In the case of Gambetti et al. (2012) interaction is viewed both as an element of commitment and value based proximity, but also something which is vital in ensuring increased levels of CE (so progressing from brand appearance, to brand body, to brand soul). In this case it is referred to as consumer interaction, meaning “that consumers directly take part in an exchange process with the brand” (Gambetti et al., 2012:675), and by constantly but gradually adding marketing communication tools into the mix it is stated that this will “foster consumer-brand enacting” (Gambetti et al., 2012:673) and also increase CE levels.

Although again ‘interaction’ is used to refer to communication within commitment and value based proximity, other elements of interactivity are also mentioned within the depths of their conceptual model. Examples are:

- user-generated content within unconventional online communication, and manipulation within home physical proximity - linking to customisation and control.
- socialisation within unconventional online communication - linking to communication and response.
- aesthetic pleasure within hedonic fulfilment - linking to affordance.
- exploration within street physical proximity - linking to affordance and navigation.

Mollen & Wilson’s (2010) research also highlights interactivity as an antecedent; stating that interactivity and telepresence are actually phases within a tiered perceptual spectrum of responses towards a website. Although their work is purely conceptual based on the commonalities within previous literature, their
model illustrates how experiential consumer responses can range from “perceived interactivity to telepresence (cognitive immersion in and perceived mastery of the heuristics of the medium and website) and finally, to engagement” (Mollen and Wilson, 2010:920), with engagement shown to be a separate discrete construct. Although this research takes initial steps to analyse the online consumer experience further investigation into this context utilising an empirical approach, whilst bridging the academic-practitioner divide, examining the nature of the interactivity-CE link and analysing if specific interactivity features affect CE is still required. Especially with their work being purely literature review based, and mainly defining consumer engagement in cognitive and emotional terms (not factoring in behavioural aspects).

The other, less supported argument within the literature is that interactivity is part of engagement. Cho & Leckenby’s (1999:163) definition of interactivity assumes this perspective stating that it is “The degree to which a person actively engages in advertising processing by interacting with advertising messages and advertisers” – so grouping the two concepts together. Calder et al. (2009) also adopt this viewpoint within their research into consumer experiences on websites. They find two types of engagement; personal and social-interactive. Personal being characterised with the consumer experiencing both stimulation and inspiration from the website, utilising it more for utilitarian functions and benefits in order achieve goals. Social-interactive engagement on the other hand still fulfils the same experiences as personal engagement, but with a stronger emphasis on the community features websites can provide by enabling the user to participate and socialise with other users. This engagement type is more specific to the online environment. Their study highlights the argument that interactivity can be an intrinsic feature of engagement when social-interactive engagement occurs, as the research and its findings does not decipher between the two constructs instead assuming and loading them as one throughout. Vivek’s (2009) conceptual model also takes this stance with interaction being categorised as a dimension of engagement which is defined as the “interchange of ideas, thoughts, feelings about the focus of engagement with others” (Vivek, 2009:60). Again a criticism of the use of interaction in this study is that it is used to refer to only one element of interactivity, communication.
2.7 Summary

This chapter has highlighted that consumer engagement and interactivity are still very much debated constructs; however it is important to sum up areas of agreement within each, to inform the subsequent research methods and analysis techniques. Within more recent CE literature, and amongst recognised ‘expert’ scholars there is overall consensus that it is a multidimensional construct (including emotional, cognitive and behavioural aspects), grounded in value-exchange and service-dominant (SD) logic (Hollebeek, 2011a, Hollebeek et al., 2014, Brodie et al., 2011, Brodie et al., 2013, Vivek, 2009, Vivek et al., 2012, van Doorn, 2011, Van Doorn et al., 2010, Gambetti and Graffigna, 2010, Gambetti et al., 2012). Therefore highlighting that it includes constructs (amongst others) linked to experiences, value co-creation, and interactions/behaviours between customers (Vargo and Lusch, 2008, Vargo and Lusch, 2004). There is also acknowledgement that it is an extension of relationship marketing so it is likely to play a “central role within a nomological network of service relationships” (Brodie et al., 2011:258) with suggested associated constructs including those which CE is often confused with: involvement, attachment, participation, commitment, trust, rapport, flow and satisfaction – making it likely that some of these will be stated during the qualitative phase either as a feature, antecedent or consequence of CE.

Commonalities are also shown within the interactivity literature. Again, although it is debated there is however general agreement that it does include constructs of control, communication and response (Rafaeli, 1988, McMillan, 2000b, Liu and Shrum, 2002, McMillan and Hwang, 2002, Song and Zinkhan, 2008). There is still a lot of dispute over its other constructs which have been found to potentially include playfulness, choice, connectedness (Ha and James, 1998); sense of place, activity, time sensitivity (McMillan, 2000b); and customisation, navigation, affordance and accessibility (Florenthal and Shoham, 2010). With the advancement in technology and the growth of internet usage for information searching, e-commerce, entertainment and social networking this may explain the difference in debated constructs as the years have progressed; with early studies primarily focussing on interactivity in traditional media, whereas more recent ones incorporate the online aspect too. More recent research also tends to concur that the perceived interactivity theoretical stance should be adopted.

The literature review also showed that whilst there is some inferred agreement amongst scholars that the two constructs of CE and interactivity are associated, there is still a need to confirm the nature of this - so whether interactivity is a feature or antecedent. This accompanied by the fact that there is still no agreed upon measurement scale for consumer engagement (possibly explaining the absence of research utilising quantitative methods in this area to date) and the lack of collaboration between academics and practitioners greatly informs the mixed methods approach that will be employed. This will be to qualitatively confirm the constructs of CE and interactivity from a multi-stakeholder perspective, explore the nature of the relationship between them, operationalise existing scales for each theme if possible, and then quantitatively test them via a survey to validate the theoretical framework. This methodology is described in the following chapters 3 and 4.

3.0 Research Philosophy

3.1 Introduction

The next three chapters provide an overview of the methodology implemented whilst conducting this investigation. Chapter 3 aims to justify the underlying philosophy, strategy and design adopted, whilst identifying the logic for utilising an abductive approach. This chapter provides an introduction, before chapter 4 delves into detail about the qualitative and quantitative methods adopted. It discusses the process of developing and evaluating the interview guide, sampling for semi-structured interviews, and the overall interview process for this phase of the field work. It then explains the key procedures for the creation and evaluation of the survey methodology, as well as the sampling technique employed for this second phase of the research. It also discusses the data analysis techniques employed and how validity and reliability were ensured and tested.
3.2 Methodological and Philosophical Issues

A multi-combinational system to research enquiry is adopted for this study, consisting of abductive logic which integrates both inductive and deductive approaches. A deductive approach to research goes from the more general to the specific by conducting a literature review to look at theories, operationalise concepts to ensure standardisation, hypothesise causal relationships, and then collect data to test these. Such data collection and analysis requires quantitative methods. A benefit of this approach being that findings can be more easily replicated and generalised (Bryman and Bell, 2011). On the other hand the inductive approach goes from the more specific to broader generalisations by means of data collection and analysis, to then create theory; with a literature review being conducted to inform the reader rather than to find and test theories. This approach is all about sense-making so qualitative methods to find out the ‘why’s’ are employed (Saunders et al., 2012).

Abductive logic describes the combining of both existing theory with empirical study. This research design is often referred to as post-positivist design with a proceeding social constructionist element supporting a main positivist phase. In this study this is the initial exploratory semi-structured interviews, which support the subsequent survey methodology. The term abductive explains the logic which underpins a post-positivist critical realist paradigm and is regarded as more productive in exploring social realities as it “alternates between (previous) theory and empirical facts whereby both are successively reinterpreted in light of each other” (Alvesson and Sköldberg, 2009:4).

With both interactivity and consumer engagement being so debated in the literature this iterative approach of enhancing existing theory with new empirical analysis, to develop new theory into the constructs conceptualisation and relationship nature is very appropriate. The initial conceptual examination phase for this study involves both inductive and deductive approaches through reviewing the extant literature on both concepts and in doing so critically assessing their appropriateness and identifying the research gap and problem. Next the semi-structured interview phase findings are used to create theory and conceptualisation, so inductive; whilst the final survey phase is deductive to test these emergent theories and models.
3.3. The Research Paradigm

To be able to conduct the proposed research effectively the study must formulate a suitable research paradigm. A paradigm is “a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, [and] how results should be interpreted” (Bryman, 1988:4). It is important as it sets the context for the study, guiding the researcher’s assumptions about the nature of reality, what we they can ‘know’ about the world and the subsequent methods they should employ (Denzin and Lincoln, 2000).

It should be recognised that researchers will have differing beliefs and ways of viewing the world around them, and that their research interests are likely to be personally driven. However the identification of the paradigm in which they locate themselves can offer some commonality and also guidelines for their research actions “by providing lenses, frames and processes through which investigation can be accomplished” (Weaver and Olson, 2006:460). Selecting a suitable paradigm to answer the research questions is therefore vital as from the paradigms assumptions central questions should be able to be answered. These relate to: ontology; epistemology; and methodology (which will be examined in chapters 4 and 5) (Guba and Lincoln, 1994).

Ontology refers to how we broadly structure reality (Angeles, 1981), concerning itself with the ‘what is’ and how we understand the nature of the world. These can either be seen as internal, subjective or external, objective in nature. A subjective stance looks at the world from the viewpoint of humans and that reality only exists through the cognitive social construction of people; therefore it can only be understood from the perspective of social actors. Some engagement scholars would argue this ontology. For example (Hollebeek, 2012) who conducted interviews and focus groups with consumers, asking them to describe their thoughts and feelings of interacting with various hedonic and utilitarian brands. Also (Schmitt, 2012) who investigated the different psychological explanations for different levels (social, self-centred and object centred) of engagement. Such researchers believe that consumers become engaged based on how they cognitively interpret perceptions, experiences, and interpersonal aspects of interacting with a firm.
Contrastingly, an objective ontology states that there is an external reality and that “social phenomena and their meanings have an existence that is independent of social actors” (Bryman and Bell, 2011:19). This research coincides with the objectivist opinion believing engagement and interactivity exist independently from consumers own interpretations, as they arise from being fixed entities in exchanges, technological advances and economical requirements of firms in the environment. Under this view both concepts can be measured. An example of this is Lee et al’s (2011) investigation into website characteristics, operational performance and engagement. Using quantitative analysis of click stream data to look at causal relationships between the nature of transaction and the extent of consumer engagement and how many pages were viewed and the duration of visits, they highlighted patterns between consumer engagement behaviour and website characteristics.

After deciding the nature of reality, the next question concerns ‘what can we know about the world?’ This question links to epistemology, which what is seen as “acceptable knowledge in a discipline” (Bryman and Bell, 2011). Again this can also be divided into two main groups; interpretivism and positivism. Interpretivism is based on a view that the world cannot be studied utilising the same methods and principles as those applied in the realm of natural sciences. Instead research should try to understand (not explain) human behaviour and cognition; including the meanings people place on world artefacts (Yanow, 1998). This means trying to uncover individual differences, feelings, perceptions, emotions and relationships (Saunders et al., 2012). The studies by Hollebeek (2012) and Schmitt (2012) described above show this approach.

Positivism opposes this viewpoint that “social reality doesn’t exist in a concrete sense” (Morgan, 1980). Many scholars in the field of engagement and interactivity support this positivist approach, with their research aiming to investigate the concepts in a natural science way (Ashley et al., 2011, Florenthal and Shoham, 2010, Lee et al., 2011, Calder et al., 2009, Vivek, 2009, Tse and Chan, 2004). This is through seeking to develop measurement scales and definitions, test hypotheses, fact gather to provide ‘laws’ or principles, in order to be able to test and generalise findings (Remenyi et al., 1998, Bryman and Bell, 2011). This research will be based on this epistemology as through an extensive literature review the researcher believes that the knowledge that can
be known about the two concepts includes: their characteristics; how they can be applied in different situations e.g. online and offline (more so for interactivity); what they ‘look like’/how they are shown; and their levels. These are all aspects that can be measured in an objective way.

This approach could be criticised by interpretivists for being reductionist, objectification of humans, and also removing the ability to answer the ‘why’s?’ the research may present. However with the concept of engagement only recently being examined in marketing, lots of the research to date has been purely conceptual in attempting to develop theoretical frameworks, meaning to date many ‘how’s?’ are yet to be investigated. For example: how is it related to other already established concepts?; and how does it differ across different contexts and demographics? Due to this many scholars still highlight the need for the large scale, quantitative testing of frameworks and answering some of these questions (Brodie et al., 2011). This research therefore owes itself to this positivist approach which will mean its findings can be replicated and generalised.

Identifying these differing ontological and epistemological viewpoints also raises the further methodological questions as to whether there is only one ‘correct’ way to gather this ‘acceptable knowledge’? and has led to the division between objective, quantitative and subjective, qualitative research. “Quantitative research usually emphasises quantification in the collection and analysis of data” (Bryman and Bell, 2007:154) with the aim of making generalisations about the population based on statistics. Whereas qualitative research focuses on analysing words rather data, focussing on interpreting the emotions, experiences and views of individuals.

A further breakdown is also suggested by Burrell and Morgan (1979) proposing four competing paradigms for social sciences: functionalist; interpretive; critical theory and post-modern. The functionalist paradigm corresponds to an objective, positivist perspective whereby human action is believed to be both rational and measurable through hypothesis testing (so quantitative methods). Contrastingly interpretive denotes a subjective, phenomenological view with reality being socially constructed and so differing from one individual to the next, requiring the use of qualitative methods.
Burrell and Morgan (1979) were adamant that “a synthesis between the paradigms cannot be achieved” (Jackson and Carter, 1991:110). However more recent research suggests a ‘paradigm soup’ may have emerged (Buchanan and Bryman, 2007) due to “epistemological diversity within business and organisational research” (Bryman and Bell, 2011:26). This may help in explaining the increasing use and acceptance of mixed method approaches; the integrating of both qualitative and quantitative research within one study. Mixed methods enable insights into “phenomena of interest that cannot be fully understood using only a quantitative or a qualitative method” (Venkatesh et al., 2013), exploring it through various paradigms and theoretical perspectives, as well as allowing both exploratory and confirmatory research questions to be addressed. An understanding of the strengths and weaknesses of each paradigm is therefore critical when using a mixed method approach.

3.3.1 Post-Positivist Critical Realism

For this research a post-positivist paradigm will be used with a critical realist ontology. This approach is thought to be less extreme than a purely positive stance (Brennan et al., 2011). This is suitable with their being a major focus on the use of statistical analysis to investigate the relationship between consumer engagement and interactivity, assess if specific interactivity characteristics affect CE and also to validate a conceptual model. This lends itself to a methodology which examines cause and effect relationships. However with both interactivity and CE being so debated, to be able to do this, an initial stage to aid in creating rich themes and meaningful theory must occur. This phase therefore requires an exploratory approach utilising a phenomenological/social-constructivist view, to explore the concepts at an in-depth micro level.

The critical realist view (Bhaskar, 1989) acknowledges that “social phenomena are produced by mechanisms that are real, but that are not directly accessible to observation and are discernible only through their effects...” and also that “…the scientist’s conceptualisation is simply a way of knowing reality” (Bryman and Bell, 2011:17) and doesn’t always reflect it; meaning that structures or categories employed by scientists will always be somewhat subjective. Due to this any claims of reality must be critically assessed so that the reality can be understood with a degree of certainty.
Such claims of reality include existing theory, which from a critical realist perspective would state should be revisable. Once revised if such findings cannot be falsified then they can be considered true through replication (Guba and Lincoln, 1994:110). Through the use of a modified manipulative/experimental approach (with the qualitative inquiry and quantitative phases explained above) the focus will be on the falsification of hypotheses, rather than as with positivism, the verification of them. Pawson and Tilley (1997) advocate this used of mixed methods in a critical realist ontology. This is also drawn from critical multiplism, whereby theoretical underpinnings justify the mix of methods chosen and employed; and with their being extensive debate in the concepts and so still unknown aspects of reality, the initial exploratory interviews must be conducted to further understand it.

As such critical realism doesn't link to one form of research method, instead it understands the advantages and shortcomings of the both the positivist and interpretivist paradigms and instead delves into and aims to understand why things are as they are, and how their mechanisms work.

3.3.2 Philosophical Assumptions for Mixed Method Research

In this study the post-positivism worldview guides the mixed methods research conducted. Post-positivism believes that the researcher and researched are independent of each other, and it acknowledges that the researcher’s own knowledge, experiences and values can have an impact on their observations. Post-positivists seek objectivity in recognising that these biases can occur and therefore have an effect on how reality is interpreted.

The critical realist ontology adopted in this research allows for the combination of positivist and social constructive epistemologies to be combined, through the different mixed methods phases. Bryman and Bell (2011) state that the use of differing paradigms combined to complement each other (and overcome their limitations) is becoming more and more readily accepted and utilised amongst scholars. This is due to providing deeper insights and the best view of reality, through examination of differing perspectives, to provide deeper and sometimes alternative insights.
The initial phase in this research employs constructivist principles, utilising interviews to guide theory construction, provide hypotheses and facilitate relationship interpretation/direction between the variables found. The second phase then moves towards post-positivist principles to validate the models and theory created, and measure their relationship and impact through data collection and analysis. This supports the harmonisation of these principles through the critical realist ontology to provide the clearest understanding of reality, which informs the research process.

3.3.3 Research Design

“Once the researcher has identified that the research problem calls for a mixed methods approach and reflected on the philosophical and theoretical foundations of the study, the next step is to choose a specific design that best fits the problem and the research questions in the study” (Creswell and Plano Clark, 2011:53). Research design refers to the systematic plan of how a research problem will be investigated, guiding collection, analysing and reporting processes.

This study utilises a mixed methods design, which is a combination of both fixed and emergent elements (Creswell and Plano Clark, 2011). This is with the author planning to use a qualitative stage followed by a quantitative phase from the beginning of the research, however the details of the second phase emerged from the interpretations of the initial findings. This is consistent with an exploratory sequential design, whereby the ‘mixing’ occurs during data collection. With both interactivity and consumer engagement still being debated or in the developmental stages this design is relevant as there are no universally agreed measures, variables or guiding models (Creswell and Plano Clark, 2011). The challenge of the extra time resource needed in this design has been considered and factored in by the author, with a smaller sample being used in the first phase, and a larger representative one in the second. Also considerations as to the development of instruments from themes, and ensuring validity and reliability are discussed in chapter 4.

The stages in this design include an initial phase of pre-understanding, developed through in-depth reading into the topic area, which was further enhanced by discussions with both academics and practitioners. The original
The research idea was to develop a CE scale through adapting existing conceptual models. However, through these discussions, identification of the extensive debates and practitioners' need for real-life application and solutions were found. This led to a revised focus centred around the online context, investigation of the nature of CE and interactivity's relationship, and effects on CE; with their research need further strengthened through scholarly suggestions for future research found in the next phase— the systematic literature review.

The second stage involved collating and analysing theoretical concept data, through conducting a review of the extant CE and interactivity literature. This was to gain a clear understanding of the debates within the scholarly fields, analyse existing research, and synthesise the findings from the studies in order to be able to fully identify: gaps, outstanding research questions, and needs for future investigation.

The third stage utilised the knowledge gained through the review to conduct and analyse semi-structured interviews. The aim of this being to address debates and ask exploratory questions to aid in the validation or amendment of conceptual models by providing rich themes; establishing conceptual dimensions; understanding the direction of their relationship; and identifying potential moderating factors—all from a multi-stakeholder perspective.

The fourth stage was to develop the conceptual framework for the online CE-interactivity link, highlighting dimensionality, structure and relationship nature.

The last stage presents the final framework. This was based on validating the hypothesised conceptual framework, through the quantitative survey method's empirical findings. During this phase, testing of the framework's reliability and validity occurred, providing a guide for future research based on any limitations.

From the outline of the stages above the justifications for using the chosen research design are shown to fit with Bryman (2006) typology of reasons for mixing methods. These include: triangulation; offsetting of research methods weaknesses and capitalisation on the strengths of each; completeness of inquiry; scale development/operationalisation of scales through initial qualitative findings; strengthening credibility; and confirming and discovering, using qualitative research to generate hypotheses.
Another key consideration centred in mixed method design is the extent to which the qualitative and quantitative phases of the research will interact with each other (Creswell and Plano Clark, 2011); independently or interactively. In this study an interactive approach is chosen, with both phases informing each other before the final interpretation and reporting stage. Priority is also given to the quantitative method, with the paradigm associated to this having greater synergy in answering the research questions linked to causal relationships.

3.3.4 Research Ethics

Blackburn (2001) defines the ethical environment as “the surrounding climate of ideas about how to live”. From this definition it is clear to see why considering ethical issues is so vital and should be viewed as a fundamental aspect of conducting research (Bryman and Bell, 2011), as these ideas link to how the researcher views the world/reality (so their ontological and epistemological stance) and therefore what they consider to be right or wrong. Hegel (1967) reinforces this stating that our ethics shape who we are. A range of ethical issues must therefore be considered by the researcher throughout the research process. In this study all guidelines and procedures outline by the University of Hull were followed.

For instance even the seemingly transparent validation of why the researcher chose to conduct a study is not without ethical implications. In this research, by investigating the nature of the relationship between interactivity and CE this will: aid in adding to the sum of human knowledge (which as described above has been called for by the MSI and other scholars); ensure that a PhD can be attained; and inform companies about how they can improve their retail websites, increasing profitability. A Marxist approach would criticise this as being unethical as it could be seen that by allowing retailers access to such knowledge it is aiding in making the profitable more so, whilst exploiting consumers lower down the economic and power scale. However a utilitarian view would disagree arguing that this is ethically ‘right’, as providing information to firms to help improve their retail websites could result in a more pleasurable shopping experience for the majority of consumers. This is due to the recommendations being based on findings regarding their needs. Also with the majority of organisations now undertaking corporate social responsibility
activities it means additional profits can result in greater contributions to society. Another example would be that by utilising a relatively small number of participants to gather data in relation to the population who will benefit from the knowledge; whilst not causing them harm or taking up much of their time could be seen as ethical from this perspective. This is because it is positively maximising value and pleasure to the greatest number of people (Driver, 2007), including the researcher wanting to qualify with a PhD.

As this study requires primary research to answer its objectives, ethical issues both of informed consent and privacy have also been considered. The author complies with the Market Research Society's (MRS) Code of Conduct ensuring that all participants in both the qualitative and quantitative stages are told about the research purpose, their involvement, that they will remain anonymous to help in protecting their privacy, and what their data and findings will be used for. This satisfies a Kantian deontological view that advocates carrying out ones duty and never lying regardless of consequences (Driver, 2007). It argues that the researcher doesn’t have the ‘right’ to use participants as a means to their own satisfaction (in collecting data). However this stance is often criticised and can be in this case for being too inflexible; assuming rational decision making and this is not the case for everyone or all of the time; being too individualistic; and in the case of informed consent (for surveys) assuming high enough literacy levels to understand. For example, in this research the initial stage requires access to marketing professionals through company contacts. This deontological view does not consider that this is in most cases gained through senior management, which could result in interviewees feeling pressured into participating due to employee/power differentials. The solution adopted in this study is to gain consent again, although this is criticised in making the relationship between the researcher and researched very contractual (Bryman and Bell, 2011); through keeping anonymity; and also taking field notes to add context and aid interpretation as to whether the participant felt they had to participate.

Deception is another issue which must be considered throughout research as to some extent most involves a degree of it, to ensure participants respond naturally and in an unbiased way (Bryman and Bell, 2011). In the case of this thesis other aspects of responsibility to the academic community (Saunders et
al., 2012) are considered. These include telling the truth, so not plagiarising or falsifying findings; linking with deontological ethics again. This is important as the current research if published could be utilised in future literature reviews, which inform the next round of research into these highly debated concepts (Vivek, 2009). Deception could cause a chain of inaccuracies in future investigations, which could be detrimental to ongoing knowledge. The researcher overcomes this by being transparent in acknowledging any failings and limitations in the research, reporting findings accurately and by complying with the obligations set upon them in gaining a PhD.

From a utilitarian viewpoint this study will also ensure that the findings are understandable to various stakeholder groups. These consist of participants, academics, retailers, and also the companies who aid in the initial qualitative stage. One aspect of deception that the researcher is aware of is concerning these companies, and if they wish for the findings to be presented back to them. This will have to be conducted in a way that doesn't offend or cause harm to any of the participants in terms of their job security (for example, if they were not very knowledgeable on an area that they should be for part of their role). Although this could be perceived as deception, from utilitarian ethics this is seen as the greatest good as it wouldn't impact the findings, they will still gain the overall knowledge found from the research, and it avoids offending the company/participants.

It can also be argued that quantitative methods are unethical as they reduce humans down to numbers, therefore denying full humanity and excluding the richness of contexts by using participants as a means to an end, ignoring feelings and needs. This links to the criticisms of an objective ontology and positivist epistemology. As described above such research lacks explanatory power as it only provides insights into the ‘what’s’ and ‘how’s’, and not ‘why’ something occurs.

Although this ethical consideration cannot be completely overcome a few solutions are proposed. These include the researcher constantly reflecting throughout the study and the use of qualitative methods initially to try to add context and views, for the selection theories and measures to be used in the quantitative phase. Also as discussed in the literature with most of the
engagement literature to date being purely conceptual, even the ‘how’s’ and ‘what’s’ are yet to be answered; so this study will provide valuable knowledge, tested on a large scale as required (Brodie et al., 2011).

3.4 Summary

Critical realism can make a significant contribution to CE and interactivity studies and knowledge, through the formation of new insight and theory. The abductive approach to the utility of both critical realist ontology and the post-positivist paradigm provides a framework for a mixed methods design. The use of both qualitative and quantitative methods is justified due to the ongoing debates within the two concepts under investigation and therefore a need for deep understanding from various perspectives. A mixed method approach of semi-structured interviews followed by a survey enables rich themes to be initially found, to aid in validating or amending the highly debated existing conceptual models. The new conceptualisation and accompanying hypotheses can then be tested via the second methodology to statistically validate the model and test causal relationships. Chapter 4 provides an in-depth explanation of the qualitative and quantitative procedures implemented in this research.
4.0 Qualitative and Quantitative Methodology Overview

4.1 Introduction

The purpose of this chapter is to provide an account of the procedures adopted during both the qualitative and quantitative phases of the research methodology, including the approach taken to data collection.

For the qualitative phase details and justifications are provided about how the interview guide was developed and used throughout the interviews; the sampling process; and the measures taken to ensure research quality. In this exploratory phase, semi-structured interviews were used to find themes and validate or adapt existing models and theories. The aim of this phase was to identify consumer engagement and interactivity’s dimensions and also the nature of their relationship. Findings from this qualitative phase helped to determine the subsequent research direction, through the creation of the conceptual model and accompanying hypotheses for quantitative testing.

This chapter also details the methodological procedures followed for the quantitative stage to operationalise the survey, in order to validate and test the conceptual model derived from the initial exploratory research phase. It describes and justifies the use of cross sectional design and survey research; overviews the sampling approach and measurement format applied; and discusses pre-testing, questionnaire design and quality evaluation considerations. The data analysis techniques employed i.e. confirmatory factor
analysis and structural equation modelling are discussed in the subsequent quantitative results chapter.

4.2 Interview Design and Implementation

A total of twenty-eight exploratory interviews were conducted across the multiple stakeholder groups in the UK: with nine consumers, eight academics and eleven practitioners, in an attempt to help bridge the identified academic-practitioner divide. These occurred between November 2013 and March 2014. All were carried out at a convenient time and location to suit the participant; with many taking place at head offices, university institutions, and in the case of consumers places such as coffee shops, work places, etc. The majority of these were face-to-face, however where interviewee geographic location and time availability posed a challenge these were conducted via telephone instead. Although not frequently used in qualitative research methods, telephone interviews still provide a rich and versatile data collection tool, found to aid in putting participants at ease, maintain interviewer safety, reduce social pressure, increase the interviewer-interviewee relationship and decrease overall project costs (Carr and Worth, 2001, Sturges and Hanrahan, 2004). In total only ten interviews were not conducted face-to-face. Prior to each interview permission was gained to record the conversation, enabling accurate transcription to take place no longer than a week after speaking to the interviewee. In the case of some telephone interviews in-depth notes were also taken throughout to overcome the difficulties with recording via this method.

A non-probability purposive sampling technique was used across the stakeholder groups to help in overcoming the time, area of expertise and accessibility issues. All participants were chosen based on their knowledge of the context from differing perspectives, and in the case of practitioners and academics their level of expertise and experience within the area of investigation. Conveniently many of the organisations and consumers were already known to the researcher and had expressed a prior willingness to participate. Practitioners were selected from four separate organisations, all with their head offices based in the UK but varying from a small online marketing consultancy business to an international company providing digital marketing services across verticals to reputable brands such as Argos,
Homebase, Arcadia Group, etc. All interviewees were marketing and communications professionals with expertise in the online and digital domain, who had been selected by senior management based on their level of experience and department they worked in. This was to aid in providing a variety of viewpoints from across the business. Once identified each was contacted directly via email to gain their permission and also provide a brief summary of the research and outline their involvement.

Academics were also chosen based on their expertise, with a pre-requisite that their research areas include relationship marketing and/or consumer engagement, preferably in an online context. Possessing knowledge or conducting research into interactivity was also considered beneficial. To select interviewees an initial process of reviewing the marketing staff’s bios in the top fifty UK business schools occurred. Once a list of potential participants was collated, a tailored email (see Appendix A) was sent to each explaining the research, how it fit with their area of expertise, involvement and time required, and inviting them to participate. The research title was slightly amended in any communications to academics; not mentioning the studies aim to also investigate the potential relationship between interactivity and CE. This is due to the quick developments in CE, so it being excluded to try to prevent the research being undertaken by another scholar before thesis completion. This did not harm participants as the questions posed clearly indicated the areas of investigation. From a total of forty-three emails sent there was a 19% response rate.

A purposive sample was also utilised for the consumer group, with some basic selection criteria applied to encourage a wider range of perspectives. These were based on aiming to gain a 50/50 split of genders, with one male and one female across each of the age ranges of 18-24, 25-34, 35-44, 45-54 and 55+, due to the view that online perspectives and shopping may differ based on these categories. Also a pre-requisite was that they shopped online and an additional question was used to ensure they understood what consumer engagement was. These participants were also contacted via email.

Theoretical saturation was reached during the process, explaining the differing quantities of interviews held in each stakeholder group. Theoretical saturation
refers to the point at when theorising the topic being investigated comes to a comprehensive end (Sandelowski, 2008) and new themes or information are no longer emerging. Once saturation of themes was identified in each group, two additional interviews were conducted as confirmation. No incentives were offered to participants, except for the knowledge that their expertise and answers would be instrumental in the development of understanding and theory into CE (sought after both in industry and academia).

A semi-structured interview procedure was followed, using open ended questions to allow key dimensions to emerge under non-laboratory conditions. Such questions also enable rich, detailed discussion; unanticipated findings to be discovered; and the recognition of interviewees thought processes and references/examples to be made. Based on this protocol an interview guide was developed and used throughout. Also to comply with ethics the University of Hull’s ethics form was completed, approved and complied with prior and throughout the data collection process starting. This included ensuring both interviewee and interview safety, gaining informed consent (see the informed consent form in Appendix B), assessing participant risk, and maintaining confidentiality. For this reason company and institute names have been removed throughout the thesis to protect anonymity.

4.2.1 Using the Interview Guide

A semi-structured interview guide was used (see Appendix C) to provide consistency and a structure to ensure the key areas of enquiry were covered. However the guide was also designed to allow flexibility in the order to which questions were asked and their phrasing; and to enable the interviewee to lead the interaction based on their experiences, emotions and opinions (King and Horrocks, 2010). This fits with the critical realist approach by allowing reflection throughout the interview to enable adaption of the guide based on answers given and the direction of conversation if necessary. The same interview guide was used across stakeholder groups, however for consumers additional questions were required to ensure the pre-requisites of understanding what CE was and being an online shopper were met.

The interview guide was based on the prior discussions with academics and practitioners which focussed on their needs for future CE research, the extant
literature review, the gaps identified and also the research questions. The open ended questions included gathering ‘facesheet’ information (age, sex, name, job title, number of years marketing experience, etc.), specific and probing questions, as well as prompts if needed. Prompts and probes are often used interchangeably however for clarification probes are “follow-up questions that encourage a participant to expand on an initial answer” and prompts “interventions that seek to clarify for the interviewee the kind of information a question is seeking to gather” (King and Horrocks, 2010:40) if there is any confusion. The variety of questions helped in categorising the constructs’ variables for the conceptual framework; whilst delving into the nature of their relationships to understand the direction of antecedents and/or consequences.

4.2.2 Selecting Participants

As stated in the previous sections a non-probability sample was adopted in the study, through purposive and then convenience (where accessibility was already granted) sampling. Despite criticisms linked to systematic bias and not being representative, the technique is acknowledged as being advantageous and in certain situations “too good an opportunity to miss” (Bryman and Bell, 2011:190) for overcoming access challenges and utilising the researcher’s contacts. Purposive samples also reduce time and money due to only focussing on the most appropriate participants for the study and eliminating those who do not possess the required knowledge. Whereas the convenience element helped ensure a good response rate and allowed for links to be forged with existing findings in the literature; the main purpose of this exploratory phase being to extract rich themes in order to validate, modify and extend conceptual models.

With CE and interactivity being so debated the main consideration in selecting participants was their knowledge and experience, and also their clarity and willingness to share this. Through selecting participants in this way this can overcome arguments linked to sampling method and size, with Patton (1990) stating that “Sometimes individual people…are the unit of analysis” (p.166) based on this. All participants were therefore questioned at the beginning of each interview to determine their level of experience and understanding of consumer engagement; with consumers needing to understand and shop in the online context. Years of experience can be used as an informal measure for
sample expertise. Overall the practitioners had combined experience of 119 years and an average of 11 years marketing experience; academics had combined research experience of 146 years and an average of 18 years; and the consumers all possessed CE and interactivity experiences online and shopped online regularly, with no one stating a frequency of less than once a month – making their selection based on knowledge a valid one.

4.2.3 Interview Process

Within qualitative research there are two main types of interviews; unstructured and semi-structured. Unstructured interviews tend to be similar in character to a conversation, with the interviewer simply having a list of topics to cover during the process, so questions often differ from one participant to another. Semi-structured interviews on the other hand tend to use an interview guide which is flexible in the order questions are asked, encourages interviewee dialogue, but usually ensures that all questions are covered and the wording remains the same throughout (Bryman and Bell, 2011). A semi-structured interview technique was adopted in this study to ensure all key areas of enquiry were covered and to maintain a level of consistency within and across stakeholder groups, allowing comparison. This also encourages rich detailed information and two-way conversation to explore views and opinions about topics relevant to the research, and allow follow-up or clarification questions. Questions were included or omitted based on the direction of conversation (Leech, 2002), for example in some cases interviewees answered the subsequent question when discussing prior ones. Participants were encouraged to answer as fully as possible and without hesitation, which sometimes led to digression from the question. To aid in overcoming this, the interviewer tried to steer the conversation back on topic whilst not discouraging interviewees to express their experiences, interpretations and emotions.

All interviews were conducted on a one-to-one basis, and lasted between twenty-five to forty-five minutes; with academic interviews being on average shorter, with the majority tending to only express their knowledge and definite answers rather than experiences or emotions. This may have been due to anxiousness that their words were being preserved on a research area that they are expert in. However with the permission of participants, interviews were
recorded and manually transcribed (no longer than a week after the interview). For telephone interviews in-depth notes were also taken, as it was found during the pilot stage that recording quality tended to be low and often hard to hear. This occurred during the data collection process too. Heritage (1984:238) lists a number of advantages of recording and transcribing, including: allowing multiple replays of answers; enabling secondary analysis from other researchers; permitting a thorough examination of what people say as well as how they say it; overcoming our memories limitations; and ensuring closeness of data. Bryman and Bell (2011) also state that it is best practice to record so the interviewer is not distracted making notes instead of following answers, probing and clarifying. In some cases once the recorder was turned off further relevant conversation ensued. When this occurred notes were taken of the unsolicited accounts and added alongside transcriptions. Notes were also taken after the interview about the setting, how comfortable the interviewee appeared to be and also any interesting new avenues that presented themselves, so these could all be taken into consideration.

Both the face-to-face and telephone interviews enabled rapport and trust to be established, which was important in maintaining a safe and confidential environment for participants. This was significant for some stakeholder groups where perceived risks linked to job security, due to senior management volunteering their employees; and saving face as an academic expert in the research field, may have been key participation considerations. The interviewer also remained unbiased by any preconceived notions throughout.

4.2.4 Data Analysis Process

Thematic analysis is the process of encoding data through the “categorizing or the comparing and contrasting of units and categories of the field texts to produce conceptual understandings of experiences and/or phenomena that are ultimately constructed into larger themes” (Butler-Kisber, 2010:47); these themes capture something important or relevant in the data linked to research aims or questions, and “represents some level of patterned response” (Braun and Clarke, 2006:10). This is the qualitative data method employed in this study. “Through its theoretical freedom, thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet
complex account of data” (Braun and Clarke, 2006:5); making it clear to understand why this method is commonly used.

The theoretical flexibility of thematic analysis fits with a critical realist ontology working both to reflect and unravel reality through individuals’ interpretations of experiences. For this reason a primarily semantic approach to themes was employed by the researcher to uncover surface meaning from what participants explicitly said. This semantic content was organised, summarised and then interpreted, to enable theorisation based on response patterns in conjunction with the extant literature (Patton, 1990). Identification of such patterns of meaning and potential points of interest can occur throughout the data collection, continuing through to both the coding and analysis phases.

Braun and Clarke (2006) propose six stages of analysis, with the first stage requiring the researcher to familiarise themselves with the data through reading, rereading and reflecting on the transcripts and notes. The subsequent phases then involve generating initial codes, searching for themes, reviewing themes, defining and naming themes, and then producing the findings report. Tuckett (2005) also argued that referring back to existing literature throughout the analysis process can enhance interpretations by “sensitising you to more subtle features of the data” (Braun and Clarke, 2006:16), so this ongoing phase occurred throughout.

Although the key themes derived from the codes will be explained in depth in Chapter 5, the coding process is outlined here due to its centrality in the theoretical framework and hypotheses development. Coding involves reviewing interview transcripts and accompanying notes, and adding labels or tags to sections which appear to be theoretically significant, answer the research questions or are particularly important in the reality being examined. In qualitative analysis coding is used to help generate theory, with codes acting as potential indicators of concepts and dimensions, rather than the data management function it tends to adopt in quantitative analysis (Bryman and Bell, 2011).

Both open and axial coding were used in this research. Open coding is the interpretive phase where the raw data is broken down, compared, analysed and initially grouped and categorised (Price, 2010); whereas axial coding is the
process of “relating categories to their sub-categories”, therefore “reassembling or disaggregating data in a way that draws attention to the relationships between and within categories” (Wicks, 2010:154). This involves linking the codes to the context, antecedents and also consequences. A manual approach was utilised by printing out transcripts and field notes, highlighting each one individually and then collating the extracts together via an Excel spreadsheet for each code. Several authors including Guba and Lincoln (1994) have suggested that utilising a manual approach offers greater flexibility in the constant comparative method required in deriving themes from qualitative data.

The process of coding into categories and subcategories allowed for significant convergence of the data, enabling formation of the theoretical framework and accompanying hypotheses. These are presented in Chapter 5 alongside the qualitative findings and discussion. Through the discovery of constructs’ dimensions and the interpretation of data, some additional themes which emerged were not included in the final framework. A valid argument for choosing or not choosing themes is through reviewing the related literature, therefore allowing the researcher to make informed inferences about the interview data (Aronson, 1994). When categories become stable or saturated this can also create a rule for including them too (Butler-Kisber, 2010).

The data analysis in this qualitative phase was simpler than expected due to participants’ statements tending to be clear and explicit, making it easy to categorise and sub-categorise. As previously stated Chapter 5 presents the proposed theoretical framework, which will be quantitatively tested and validated via a survey method.

4.3 Evaluating Research Quality

The main canons for evaluating research are reliability and validity, although these inherently link to a positivist approach and therefore quantitative methods in assessing research quality. Whilst quantitative studies therefore focus on whether the results and procedures are replicable and generalisable to the wider population, qualitative studies take a different approach to evaluating this due to their epistemological stance.
There are two viewpoints relating to the adaptation of these two quality evaluations; one is to use the alternative criteria of credibility, transferability, dependability and confirmability (Guba and Lincoln, 1994) and the other is to maintain the criteria but play down aspects of measurability (Mason, 1996). This study adopts the latter, reviewing both internal and external validity and reliability.

4.3.1 Validity

Hammersley (1992) describes validity in qualitative research as being when “an account is valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain or theorise” (p.69), therefore relating to the integrity of the research conclusions. It is argued that validity is inherently considered in qualitative research as “it takes context seriously and grounds its development of concepts in close, detailed attention to the data” (King and Horrocks, 2010:160). Internal validity is concerned with whether there is a high level of congruence between the researcher’s observations and the theoretical ideas they create from this (Bryman and Bell, 2011). This was ensured through the researcher’s constant reflection and consultation with extant literature throughout the process.

External validity on the other hand relates to whether findings can be generalised across various social settings and populations. This is often difficult in qualitative research where sample sizes tend to be small, so it is often replaced with the measure of transferability instead. In an attempt to increase validity the author wrote in-depth descriptions about the assumptions and context of this study, to aid future transferability. Other aspects of validity also include level of trustworthiness and authenticity. These were kept high through the selection of expert participants; by thorough transcriptions taking place shortly after the interviews, representing their exact and therefore authentic words; and by putting interviewees at ease through informal conversations beforehand to ensure they felt comfortable in giving honest and unbiased answers.
4.3.2 Reliability

Reliability relates to whether the research could be conducted by another researcher, on another project and it would still obtain the same findings. In qualitative research however it is not necessarily whether data interpretation would be the same but instead if the findings are worth paying attention to, as they reflect a reality and context that could change over time, and so are true at the time collected (Baker et al., 1992). External validity concerns how easily the study can be replicated; whereas internal validity is about whether new researchers would agree with the observations and concepts matched to the data.

Procedures employed in this research to ensure validity included utilising an interview guide to maintain a level of consistency in the questions asked and their wording; in-depth evaluation of transcripts to check for obvious mistakes; constant reflection with a second evaluator (supervisor) to avoid drifts in code definitions; and continuing until theoretical saturation. Participant validation was also conducted by presenting the proposed framework for empirical testing back to a sub-sample from each stakeholder group to confirm their agreement with the interpretation, before progressing it to the quantitative stage. Lincoln and Guba (1985) acknowledge this process as being crucial for claiming research credibility and accuracy when interpreting the social reality.

Further credibility was ensured through pre-testing the interview guide before the field work commenced to highlight any potential issues or areas of investigation/gaps missed through the questions selected. From this the wording was slightly adapted for the consumer group to facilitate understanding of academic terms, gather evidence of their understanding about what CE was (before further questions commenced), and restructure the questions overall. Also ‘thick descriptions’ are used throughout the analysis chapter of this thesis, to enable “a reader to judge whether interpretation emerging from the analysis seems consistent with the description presented” (King and Horrocks, 2010:164) by the interviewee. Another procedure also employed was to ensure all participants received relevant information about the nature of the research and the themes under investigation, prior to the face-to-face interviews taking place; enabling them to consider the research issues and gather relevant
information. This meant any confusion or misunderstanding was quickly cleared up beforehand, helping to further put the interviewee at ease and ensure the correct topics were considered in their answers.

4.4 Quantitative Methodology and Procedures

4.4.1 Data Collection

The data collection method choice is important as it outlines the procedures to be employed, as well as the assumptions of the researcher. In this study a survey method was utilised after the variables identified in the qualitative phase were operationalised into constructs ready for use. These were distributed via a market research company to participants across various demographic spreads including age, sex, occupation and ethnicity who met the specification of being an online shopper (shopping at least once a year via this channel).

4.4.2 Cross Sectional Design

Cross sectional data is ‘usually collected from respondents making up the sample within a relatively short time frame’…therefore ‘time is not considered one of the studies variables” (Liu, 2008:171). Given the nature of the research and also the time and cost restraints, this approach was deemed more appropriate than a contrasting longitudinal study, which gathers in-depth data over a long period of time.

The main purpose of the study, as outlined in the research questions was to understand the relationships amongst and between the identified variables for CE and interactivity, and also to examine if specific antecedent interactivity variables had more influence on CE. Cross-sectional design is ideal for detecting such “patterns of association” (Bryman and Bell, 2011:53); with a survey being the best method for enabling identification of correlations and therefore establishing the strength of such relationships.

4.4.3 Survey Research

This research adopts a survey method, which allows participants to answer only predetermined questions in a set order ensuring both efficiency and that the type of data collected is relevant in answering research questions. Due to this an effective survey therefore doesn’t allow further probing, gives the researcher
very little control over who completes it, and utilises simple and easily to understand questions and instructions, especially in the case of self-completion.

There are both advantages and disadvantages to utilising a survey method to collect quantitative data, with one of the main advantages including it being “an efficient method for systematically collecting data from a broad spectrum of individuals” (Check and Schutt, 2012:160). Other benefits include its versatility to be administered across channels (e.g. telephone, face-to-face, email, web, post); wide geographical reach; low cost; time efficiency; ability to measure many variables quickly; generalisation of results and convenience for respondents. The limitations of using this method include the inability to probe or prompt participants further if required; an increased risk of missing data; errors in measurement; lower response rates (especially if no incentive is offered); less control over ensuring the sample is representative of the population and also the threat of reductionism. Reductionism “is used in a general sense to indicate the view that complex explanations can or should be reduced to simpler ones” (Williams, 2004:934) - a philosophy that qualitative researchers would disagree with when analysing human behaviour, emotions and experiences. The researcher acknowledges and reduces this danger through the use of mixed methods and understanding the drawbacks of both of the qualitative and quantitative data collection methods used.

4.5 Sampling Method

A population is “the universe of units from which a sample is to be selected” (Bryman and Bell, 2011:717). The total population of the UK was estimated as 64.1 million in mid-2013 (ons.gov.uk, 2014a), therefore it is necessary to take a sample of this to make data collection more practical (Saunders et al., 2012).

The sample frame was drawn from using a professional market research company SSI, a global leader in the sector with over 37 years experience, specialising in conducting panel research to consumers. The survey was initially created and hosted by the researcher and then passed onto SSI to test the questionnaire, select the panel from their database, and then design and invite participants. The only prerequisite for participation was being an online shopper.
The procedure for inviting participants to take part involved respondents accessing SSI’s platform and being faced with a range of ten live surveys with separate pre-screener questions. Respondents were then randomly allocated to one of the surveys providing they qualified when answering the pre-screener question, e.g. assessing them to be an online shopper. With the researcher have little control over who completed the self-completion survey this helped eliminate researcher bias and interviewer variability.

Although the online mode of delivery restricted members of the population without internet access from inclusion in the sample frame, this was seen as acceptable with online retail being the context of the study and therefore the sample frame requiring access to this channel. Survey Monkey software was used to create the questionnaire online and also generate a web link to direct respondents to it. Web surveys are often criticised for having low response rates and due to their need for technical ability to be able to select question formats, apply controls, filter questions, and design the layout (Bryman and Bell, 2011). However there are significant advantages of utilising the online format including: extensive options for creating a professional design; convenience for respondents; quick response times; direct exportation into analysis software, with closed questions already coded (particularly important given the time restrictions imposed); and the ability to add filter questions and controls (Wright, 2005, Saunders et al., 2012).

A non-probability sampling technique was deemed most appropriate for this study, due to the sample needing to fulfil the pre-determined criteria of being an online shopper. This is viewed by scholars to be inferior to probability sampling due to its decreased ability to be generalised and statistically accurate (Saunders et al., 2012). However to overcome such limitations the researcher requested the panel invitation be sent to a pool of people with a demographic profile similar to that of the UK population, based on a range of ages, sex, occupations, and ethnicities. By requesting such participants in the potential sample frame and then randomly selecting the final panel, this enabled the sample to more representative of the UK population of online shoppers.

From a total of 600 consumers surveyed via the panel, a total of 496 useable responses were gained. Responses were deemed unusable based on the
following criteria: did not complete the entire survey; did not answer the initial question to ensure an understanding of engagement with a sector or a brand; answered every question on the survey with the same response, indicating a keystroke pattern of the participant skipping through the survey without reading the questions; and answered all reversely worded questions (both with positive and negative questions relating to the same variable) with the same response. Outliers were also removed during quantitative analysis.

Scholars agree that whilst there is very little guidance relating to suitable sample size, that larger samples decrease the likelihood of sampling errors (Bryman and Bell, 2011, Beaman et al., 2004). Due to this and considerations around non-response, time and cost restraints, personal safety, and also the identification that a large scale quantitative study is still required in the CE research, the researcher after consultation with other quantitatively focussed academics decided a sample size of 450-500, gained through a market research company was appropriate.

4.6 Measurement Format of Items

A sequence of steps should be followed to ensure a good questionnaire design: specify information needs; determine type of interviewing method; determine individual question content; design questions to overcome respondents’ inability/unwillingness to answer; decide upon question structure; determine question wording; determine order of questions; decide on questionnaire layout and reproduce the questionnaire; and pre-test, revision and final version of the questionnaire. Rowley (2014) states that one of the first and main considerations when designing a questionnaire is to ensure that it generates relevant data to answer the posed research question/s. To ensure this phraseology is important and technical terminology; leading, loaded or double-barrelled questions should be avoided in favour of short, clear, and un-invasive ones (Rowley, 2014) that provide clarity for participants.

Following these guidelines a detailed questionnaire was created (see Appendix D). As well as Likert based scale questions for each of the construct variables in the proposed conceptual framework for CE, interactivity and the moderating factors, additional questions to record basic demographics, frequency of online shopping and internet usage, and to establish participant understanding of CE
were also used; mainly as control variables. The construct variables were operationalised and adapted from existing scales developed by reputable scholars, with established internal scale reliability. In cases where more than one scale was frequently cited and presented within the literature, the source and journal publication was examined as an indicator of quality. If further scrutiny was required the scale with the highest Cronbach’s alpha coefficient (Cronbach, 1951) was selected. Rowley (2014) advocates this deductive approach to creating a questionnaire stating that "it may be possible and even advisable to use part or all of a previous questionnaire from a published article on a similar topic… you are using questions that have already been “piloted” and making it easier to compare your research with previous research and to make a clear claim about what is new in your findings (Bryman and Bell, 2011)" (p.312). The final survey item list used for data collection, after the pre-testing phase is shown in Appendix E.

The Likert scale is commonly used in marketing research due to its simplicity and ease in quantifying responses. Using the scale allows participants to indicate their level of agreement or disagreement with a statement, whilst providing intervals to express the intensity of their feelings (Creswell and Plano Clark, 2011, DeVellis, 2011). In this study a 7-point Likert scale was utilised; with 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither disagree nor agree, 5=slightly agree, 6=agree and 7=strongly agree. These were signposted throughout the survey, close to each question to remind respondents of the category descriptions.

By providing an odd number of response options this allowed respondents to express neutrality and also avoided bias by having an equal amount of positive and negative options to choose from (DeVellis, 2011). Churchill Jr and Peter (1984) found a direct positive relationship between the amount of scale points and scale reliability; with an increase in points improving reliability. Dawes (2008) also stated that increased scale options may also result in less skewed data. Based on this and with most scholars now opting for the 7-point scale format, this was selected.

Although this measurement scale can be criticised for not allowing a ‘no opinion’ option, filter questions were asked prior to survey completion to ensure
respondents possessed the relevant knowledge to be able to answer questions. For example, being an online shopper and so having prior knowledge of the retail website channel and also understanding CE, through listing a brand or product they felt engaged with (after reading pretext which described CE based on the qualitative findings). For the demographic questions multiple choice, categorical scales were used throughout.

The questionnaire used both positively and negatively worded scale items for several reasons. Due to operationalising existing scales, it was decided to only make small adaptations to wording to fit the context or for participant understanding, so any items which had both positive and negative items originally were maintained so not to reduce their internal validity. For years scholars have advocated the use of both in an attempt to avoid acquiescence bias (DeVellis, 2011, DiStefano and Motl, 2006); “the tendency for survey respondents to agree with statements regardless of their content” (Holbrook, 2008:3). Also with the survey being conducted via an online platform, negatively worded items act as ‘cognitive speed bumps’ to ensure respondents were more controlled and took time to think about questions before responding (Chen et al., 2007). These items also aid in checking response validity after data collection, highlighting responses which had been sped through and where participants had chosen the same answer throughout. With the negatively worded items being used as a control in this way, they will be removed prior to conducting the exploratory and confirmatory factor analysis. The internal reliability of each scale will be retested, to ensure their removal still provides a high cronbach alpha score and is therefore suitable for measuring each factor. DeVellis (2011) acknowledges this approach stating that negative items can often correlate together suggesting them to be a separate scale, when in fact they are “merely tapping different aspects of the same affective state” (p.116).

4.7 Pilot Testing

It is undisputed in the literature that pilot tests are best practice, with Creswell and Plano Clark (2011) stating that “the only good question is a pretested question” (p.163). Although the operationalisation of existing scales mitigated some need to pre-test the survey, a small sample size was used to check issues with language, style, length and format (Bryman and Bell, 2011), rather
than to exclude item scales. Both Fink (1995) and Rowley (2014) agree that the use of small samples are credible to assess questionnaires, provided that the richness of respondents is framed and it includes members of the target population. The questionnaire was tested with a total of six respondents comprising of one academic, two practitioners and three consumers. The pre-test checked both the questions and the questionnaire; assessing respondent interest, question order, timing, flow, and difficulty in understanding and meaning (Baker and Foy, 2008). The survey took approximately fifteen to twenty minutes to complete.

Issues identified from the pilot stage included:

- Rethinking the design and layout to make it easier to complete and aid flow; using different colours to identify questions, sections and answers. Also splitting sections by page breaks to provide manageable chunks.

- Adding further detail to some of the item scales to provide a frame of reference, e.g. for affordance adding examples of desirable actions that can be performed on products via the website such as 360 degree views and close-up/zoom options.

- Revising the wording of some questions where feedback was received that words weren’t fully understood, especially by consumer respondents e.g. ‘concurrent communication’.

- Adding a preliminary question to ensure respondents had a brand or product that they were engaged with in mind, before asking them to complete the questionnaire.

The table of finalised questionnaire items and final questionnaire are in Appendix D and E.

4.8 Questionnaire Design

The questionnaire was designed based on basic criteria for facilitating responses and also in light of feedback from the pilot test. Key considerations include question order, layout, questionnaire instructions, completion and length.
4.8.1 Question Order

Question order is an important issue, with many scholars agreeing that initial questions should be easy, interesting, apply to everyone within the sample and non-sensitive (Dillman, 2007). The simple question used in this questionnaire asked respondents to list which sector the website they had in mind belonged to, e.g. food, technology, fashion/clothing, etc (after asking them to think about a brand or product they felt engaged with). This followed recommendations by Creswell and Plano Clark (2011) that the first question should signal what the survey is about and also how easy it will be to complete, which is especially important for self-administered questionnaires. A second consideration is where to place questions requesting personal, demographic information; with acknowledgement in the literature that these are normally positioned at the end of the survey to encourage completion of the rest of the questionnaire before reaching potentially sensitive questions (Rowley, 2014). Therefore questions relating to age, gender, occupation, education level, ethnicity, etc. were placed towards the end. Questions were also sorted into logical parts, separating sections based on their thematic categories, to aid in respondents navigating through the questionnaire.

4.8.2 Questionnaire Layout

The physical characteristics of the questionnaire are also important to consider. Dillman (2007) observes that an attractive appearance can often lead to higher response rates, with a professional appearance also indicating to the respondent the importance of the topic to the researcher; often influencing their choice to participate. Following the guidelines within the literature this questionnaire used a simple yet professional layout, with the questions split in sub-sections and adequately spaced to avoid confusion. Colour was also used based on feedback in pretesting, to identify questions, answers and the start of new subsections. Bryman and Bell (2011) state that this and effective use of space ensures that questions aren't mistakenly omitted.

4.8.3 Questionnaire Instructions

It is a common error for researchers to omit instructions regarding how to complete their questionnaire (Saunders et al., 2012). However, clear
instructions both at the beginning of the questionnaire and for different question format types are imperative for providing clarity to respondents and to ensure that each response is valid for use. For example if only one answer is required but this is not explicitly specified and therefore more than one is given, this invalidates the response (Bryman and Bell, 2011). Through conducting the questionnaire via an online mode and utilising survey software this was not an issue as it enabled controls to be set, allowing only one response to each question. A cover letter was also created to provide background information about the study and brief instructions about how it should be completed. Clear and repeated guidance on Likert scale weightings was also given.

4.8.4 Questionnaire Completion

Evidence shows that response rates can be increased by utilising a professional design (Dillman, 2007); highlighting university sponsorship (Ladik et al., 2007); emphasising the importance of the research (Saunders et al., 2012); providing an incentive (Bryman and Bell, 2011); and making assurances about confidentiality (Rowley, 2014). It was therefore decided that to facilitate a higher response the Hull University logo and contact details would be presented within the cover letter accompanying the questionnaire; respondent contribution would be thanked both before and after completion; declarations would be made about confidentiality and anonymity; and that a survey software package would be used to ensure a professional appearance. The market research company also offered an incentive in the form of panel points for completion of the questionnaire equivalent to approximately £1.50. The points are saved until a threshold is reached, at which point they can be redeemed as cash, gift vouchers or donated to charity.

4.8.5 Questionnaire Length

The questionnaire was split into four sections: A, B, C and D. Section A was concerned with the website chosen and how it worked, so interactivity; Section B the respondents thoughts and feelings about the brand, so CE; Section C the respondents thoughts and feelings about the website, linked to the moderating factor variables; and Section D the control demographic variables.
It is very much debated as to whether questionnaire length effects response rate. Rowley (2014) states that questionnaire length depends on “the nature of your research questions; the variability in your sample/population with respect to your research topic, and, the types of data analysis that you are planning to conduct…” and that if it needs to be a longer survey that “up to the equivalent of four sides of A4 is acceptable” (p.316). Saunders et al. (2012) increases this to cover four to eight sides. Following this guidance the questionnaire length was four and a half sides plus a cover letter, determined by the statistical analysis being utilised to investigate the data e.g. factor analysis for which a large number of items are needed.

4.9 Evaluating Research Quality

As discussed earlier in this chapter the main canons for evaluating research are reliability and validity.

4.9.1 Reliability

Reliability in quantitative research is usually concerned with the consistency of measurement either over time, so its repeatability; or internally, so if the grouping of questions in the survey measure the same concept (Saunders et al., 2012). In this study reliability was already established by operationalising existing peer-reviewed scales. Internal consistency was ensured through evaluation of the Cronbach’s alpha, with an acceptable level of 0.70 or above being chosen based on the recommendation by Hair et al. (2006). The reliability tests are discussed in further detail in the next chapters.

4.9.2 Validity

“Validity refers to the issue of whether or not an indicator (or set of indicators) that is devised to gauge the concept really measures that concept” (Bryman and Bell, 2011:159). There are a number of different types of validity; these include content, construct and criterion validity. Content validity is defined as “subjective but systematic evaluation of the representativeness of the content of a scale for measuring the task at hand” (Malhotra and Birks, 2003). Whereas criterion validity relates to “the extent to which one measure estimates or predicts the values of another measure or quality” (Eaves and Woods-Groves, 2007).
Construct validity on the other hand examines whether the items being measured reflect the construct theoretically. All of these types of validity will be discussed in the quantitative results chapter, in the section focussing on confirmatory factor analysis.

4.10 Summary

This chapter provided an in-depth description of the methods employed in both the qualitative and quantitative data collection and analysis.

In the qualitative phase a total twenty-eight semi-structured interviews were conducted across multiple stakeholder groups, consumers, academics and practitioners via a non-probability purposive sampling method. Through thematic analysis key themes of both interactivity and consumer engagement were able to identified, therefore helping to fulfil the objectives of understanding the nature of the relationship between consumer engagement and interactivity, and also starting to bridge the academic-practitioner divide. The results from this stage and the conceptual model, with hypotheses are then presented for the subsequent quantitative phase.

The quantitative stage employed a cross-sectional research survey design to gather 496 usable responses via an online panel sampling frame. The overview in this chapter describes the chosen construct measurement, through the operationalisation and adaptation of existing scales from reputable scholars with proven internal reliability (shown through Cronbach’s alpha coefficient). The questionnaire design and structure are also overviewed describing the question sequencing, survey layout, instructions, questionnaire completion and length. The researcher believes that knowledge of the basic criteria and best practice for this, alongside findings from pre-testing ensures ease of response for participants and facilitates questionnaire completion. The next chapters describe the findings from both phases; with Chapter 5 summarising the inductive qualitative findings derived to form the conceptual model and hypotheses, and Chapter 6 forming the main analysis section through testing and validating the model, using the survey method.
5.0 Qualitative Research Findings

5.1 Introduction
The purpose of this chapter is to highlight the findings from the qualitative research phase, providing an overview of the emergent themes which were used to develop the conceptual framework and accompanying hypotheses. Only the themes which were confirmed during the participant validation stage, by all stakeholders were used in the final conceptualisation. Preceding this Rossiter (2002)’s criteria of at least a third of all respondents citing the same theme for it to be included in final categorisation was also employed.

The conceptual framework is depicted in Figure 5.1 at the end of the chapter. For each construct the key literature and illustrative quotes from the in-depth interviews are discussed, alongside critical analysis of whether the findings support, challenge or add to existing literature.

5.2 Interactivity
Six key themes were found as interactivity constructs; communication, speed of response, customisation, navigation, control and affordance. Key literature has highlighted these previously; however this collaboration of dimensions has never been presented in one conceptual model before. For example, Florenthal and Shoham (2010) use interpersonal communication, customisation, navigation and affordance as part of their five dimensions; Coyle and Thorson (2001) use speed and control within their three dimensions; and McMillan and Downes (2000) use responsiveness, direction of communication, control and time flexibility as part of their six dimensions.
A fundamental aim during the in-depth interviews was to determine the nature of the CE-interactivity link and its relational direction, to aid in constructing the theoretical framework. All respondents except for two academics believed the two concepts were connected in some way; with the majority of respondents, 20 out of 28 stating that interactivity preceded consumer engagement, either explicitly through direct questioning or inferring it when answering general CE and interactivity questions. Statements across the stakeholder groups included:

‘It definitely needs to be interactive; this keeps you on the site longer and makes the experience the same as shopping in a store, which makes me more likely to engage’ Linda, Consumer

‘Yes undoubtedly. Consumers interact with brands and become engaged with brand through their experience…I think there must be some interactivity for consumers before they engage, and that one can’t work without the other’ Jane, Academic

‘Definitely because in a positive sense if people are…if people are enjoying the interactivity side of things they’re more likely to engage with you about that.’ Rob, Practitioner

These findings develop and corroborate the existing inferences that interactivity leads to consumer engagement (Power, 2007, Brodie et al., 2011, Ha and James, 1998, Hollebeek, 2011b, Sashi, 2012, Gambetti et al., 2012, Mollen and Wilson, 2010). However to date there has been no explicit exploratory or explanatory research to investigate their connection, only highly conceptual literature review studies into CE or interactivity separately. This study therefore makes an important conceptual contribution by finding interactivity to be an antecedent of CE. Further quantitative analysis is required to investigate whether specific interactivity dimensions (identified as the key qualitative themes) have more influence on CE than others.

5.2.1 Communication

Communication is defined as the “the imparting or exchange of information, ideas, or feelings” in the Collins English Dictionary (2011). In marketing communications this can either be one-way with information being transferred in one direction only; or two-way where communications are reciprocal and both
parties can send and receive messages and feedback. Traditional forms of media e.g. television, newspapers and magazines tend to only facilitate this one-way direction, whereas newer forms of media e.g. websites and social media now facilitate and actively encourage this to be two-way. Yoon et al. (2008) found that communication features are often desired as they reduce consumer feelings of discomfort through online purchasing. Indeed many scholars agree that two-way communication is a core component of interactivity (Song and Zinkhan, 2008, Florenthal and Shoham, 2010, Liu and Shrum, 2002, McMillan and Hwang, 2002, Johnson et al., 2006, Ha and James, 1998, Rafaeli, 1988, McMillan, 2000b). This scholar agreed significance of communication as a predictor of perceived interactivity was further verified during the in-depth interviews, with every respondent across all of the stakeholder groups also citing it as a key element. The following examples highlight its centrality when interviewees were asked, ‘In your opinion what is interactivity?’ And ‘From your experience what makes a website interactive?’

‘Any form of contact whether initiated by customer or supplier – visual, verbal written…product ratings and customer reviews…keeping buyer informed during delivery process…ease of asking questions & getting appropriate responses…type and amount of contact after ordering & before and after delivery’ Lisa, Consumer

‘It’s about 2-way communication and taking consumer’s views into consideration to improve the process and experience…social media, communication tools and the ability to spread the word’ Rita, Academic

‘Some people want to be a bit more social with it and encourage comments and discussions through forums and that sort of thing…it’s got to have that community feel behind it…kind of it’s almost like a sales person on the sales floor chatting to people and kind of going through that sales process, but online’ Tom, Practitioner

This provides strong support for previous conceptual models which highlight communication, and in particular two-way communication, as a key construct of interactivity. For example Ha and James (1998) definition spoke about responsiveness and “the extent to which the communicator and the audience respond to, or are willing to facilitate, each other’s communication needs”
(p.461). Rafaeli (1988) focussed on message exchange and the importance of quality communication and message content; citing that it is the most important determinant of interactivity. Song and Zinkhan (2008) also found message type (coupled with personalisation) to be the strongest indicator; Florenthal and Shoham (2010) highlighted interpersonal communication as their sole construct within their human-mode of interactivity; and Johnson et al. (2006) stated responsiveness, so appropriate and relevant communications as a facet of interactivity.

Other themes which also emerged but which were later grouped into communications were content, two-way inputs and outputs and communications as a CE construct. After in depth-analysis of the categories and through referring to the extant literature (which showed no separate construct for it), content was shown to fall under two types visual and written. Visual was grouped into affordance (see section 5.2.6) due to the following types of statement:

‘the big thing is how people consume content and they’re happy to sit there for two, three maybe four minutes through…through some sort of videos’ Jon, Practitioner

Whereas written content was grouped with communications due to the following examples of statements, referring to how the retailer communicates product information to the consumer in a one-way only direction:

‘Regular updates to content…lots of interesting products, regular offers and updates‘ Shawn, Consumer

‘We have moved heavily towards content being of value…and if you’re clicking on a site and you don’t get what it is straight away you’re gone. You’re gone, you’re straight back out to your search results and you’ll go somewhere else’ Jon, Practitioner’

Two-way inputs and outputs were grouped with communication too (as well as control discussed in section 5.2.5), with extensive literature citing that in order for communications to be perceived as interactive they must be two-way in nature. Quotes corroborating this include:
"When you feel that the experience is a two way street. That an action provokes a reaction by the brand" Andrea, Consumer

"In basic terms interactivity is the different outputs based on users' input, exchanging value - the user gets something (experience or information) and the brand gets something (analytics, user information/data, or increased awareness)" Mark, Practitioner

The first example fits well with Johnson et al. (2006) facet of responsiveness; whereas the last example fits particularly well with Song and Zinkhan (2008) classification of interactive website communication into four categories: feedback mechanisms, message level, transaction facilitation, and information collection. These include features such as email links, FAQ's, chat rooms, online ordering and tracking, registration and cookies.

When asked what consumer engagement meant to respondents many stated interacting and communicating elements; for example ten out of eleven practitioners. However the theme of communication was discounted as a construct of CE and instead grouped with interactivity for a number of reasons.

Through the qualitative analysis it was established that interactivity leads to CE and so is its antecedent, meaning communication as part of this must occur prior to engagement. This corresponds with many of the conceptual models presented by scholars previously: Vivek (2009) stating interaction as a precursor; Sashi (2012) presenting connection and interaction as initial steps in the CE lifecycle before the engagement stage; and Gambetti et al. (2012) citing brand communication integration must occur prior to 'brand enacting' the central CE phase. Van Doorn et al. (2010) definition “Customer’s behavioural manifestation toward a brand or firm beyond purchase, resulting from motivational drivers, including word-of-mouth activity, recommendations, helping other customers, blogging & writing reviews” (p.254) also highlights its antecedent role too. Many respondents believed that at the point of customers making an interaction or request that this was the start of them becoming engaged. For example when asked, ‘At what point would you consider yourself to be engaged with a brand?’ answers were:

‘Possibly by their first interaction - positive or negative (a like, RT, a bookmark, sign up for email, etc.)’ Mark, Practitioner
‘We kind of class that conversation as the point where they’re engaged’ Tom, Practitioner

Its exclusion as a construct of CE also resulted from it only appearing in extant conceptual frameworks as an important phase in developing consumer engagement, not as an intrinsic feature of it. Communication has previously been linked with both relationship marketing and relationship quality through its benefits which may also explain the responses too. McMillan and Hwang (2002) argued it can positively affect consumer perceptions and facilitate business relationships such as customer service; Srinivasana et al. (2002) found contact interactivity, linked to communication had a positive influence on loyalty; Parsons et al. (1998) stated that interactive communications are important for engaging and retaining customers; and Liu and Shrum (2002) agreed that two-way communication can make surfing the internet a more satisfying experience for users, so the more evident on a website the better. Therefore:

**H1: Communication has a positive influence on emotional elements of CE**

**H2: Communication has a positive influence on cognitive elements of CE**

Further quantitative analysis is required both to test this hypothesis but also to examine the strength of this relationship too. It is anticipated by the researcher that communication may have one of the strongest influences on emotional and psychological CE due to its integration into CE interviewee responses, acknowledgement of it being advantageous to building relationships within the literature and also every respondent stating it.

**5.2.2 Speed of Response**

Speed of response is reviewed here since the majority of interviewees, twenty out of twenty-eight, expressed it as central to website interactivity. This is no surprise with many scholars citing speed (Coyle and Thorson, 2001, Johnson et al., 2006, Steuer, 1992), or in some cases time sensitivity (McMillan, 2000b), no delay (McMillan and Hwang, 2002), responsiveness (Miles, 1992, Rafaeli, 1988, Ha and James, 1998) or synchronicity (Liu and Shrum, 2002) as one of its key constructs. This reference to speed refers to how quickly messages can be exchanged between the sender and receiver, so whether these occur in real time; but also the response time of the computer medium reacting to the user’s
inputs (Ha and James, 1998). The following statements highlight the importance of speed of response to interactivity and also its association to both communication and medium. Respondents were asked ‘In your opinion what is interactivity?’ And ‘From your experience what makes a website interactive?’:

‘Getting the response or communication I am looking for, and most importantly when I NEED IT’, Jeff, Consumer

‘So needs to be easy to use and instantaneous' Jane, Academic

‘We’re all too busy so I think keeping it simple and quick for people to who want to use your [website]’ Ruth, Practitioner

The quotes reflect how speed of response is no longer optional but expected from the online channel nowadays. This is due to capabilities of the Web in providing instantaneous information, 24 hours a day, from any location; so anything but a quick response is often viewed as unacceptable or a fault on a website, reducing perceived interactivity. Findings by Kirsh (1997) concur with this showing “that as the delay between action and reaction decreases, interactivity” (Johnson et al., 2006:40) perceptions increase. Latchem et al. (1993) also note that the advantage of an interactive system is that users “can work in their own time and at their own pace, choose their preferred navigational pathways and delivery systems and develop their own mental models and schemata” (p.23). Website features reflecting this element to consumers include; amount of clicks required to reach the desired information, search bar speed, live chat facility, pages loading quickly, overall high operating speed regardless of multimedia, and the speed to customise layout and/or content (Song and Zinkhan, 2008, Liu and Shrum, 2002, McMillan and Hwang, 2002). These highlight links between speed of response and navigation and customisation, discussed in the subsequent sections.

The emergence of speed of response, and its association with both communication and medium elements reaffirms it as a leading component of interactivity, supporting the previous literature. This includes agreement with Steuer (1992) who focussed not just on information being transmitted from sender to receiver, but instead how the mediated environment is created and experienced in terms of its properties (such as speed and range) and users
relationships to that medium. Florenthal and Shoham (2010) agreed with this, referencing medium related speed though their proposed construct of accessibility; described as ease and speed of accessing the required information, real-time feedback and responsiveness. The findings also further support Rafaeli (1988) including responsiveness in the two proposed dimensions, and Ha and James (1998) in their five dimensions; along with speed or a similar term being presented in the conceptual models of McMillan and Downes (2000), McMillan and Hwang (2002), Coyle and Thorson (2001), Johnson et al. (2006), and Liu and Shrum (2002).

Through the finding that interactivity is an antecedent of CE and also previous studies highlighting the relational marketing benefits of speed of response it is hypothesised that:

**H3: Speed of response has a positive influence on emotional elements of CE**

**H4: Speed of response has a positive influence on cognitive elements of CE**

Van Duyne et al. (2007) highlighted how website speed can have an impact on users first perceptions of a site, stating that slow websites are “frustrating to use” and that a “slow homepage can have a major impact on customers’ first experience with a site” (p.759). People will also leave the site if “navigating the site is too difficult they don’t have the product or service they want; get surprises that they don’t like; feel that the site takes too long to load” (Van Duyne et al., 2007:8), obviously having a massive impact on the ability to build a relationship with the consumer.

5.2.3 Customisation

Customisation is “a customer driven process in which customers enter data and change the layout of a Web site to fit their tastes” (Van Duyne et al., 2007:874), It is just one of the ways to achieve personalisation. As with speed of response, in today’s world there is an expectation that customisation should be integrated into the online channel to create more sophisticated and flexible website designs; not only on retailers homepages but throughout the whole of their website architecture. These customisations can be informed by data such as pages viewed, purchase behaviour, profile demographic information, and ratings. Effective use of this enables retailers to target recommendations
(through cross-selling), advertisements, promotions, and content to suit individual’s preferences. The ability for consumers to tailor pages themselves and change fonts, colours, layouts and apply filters is also very important in perceptions of interactivity. The in-depth interviews corroborate this, with twenty out of twenty-eight respondents referring to customisation when asked what interactivity was and what made a website interactive. And interestingly every consumer stated it. Example quotes from this stakeholder group include:

‘Also them knowing who I am and so suggesting clothes they think I might like’…’Product recommendations based on previous buying patterns are excellent' Sarah, Consumer

‘The ability to filter and find what you are looking for easily…personal…NOHS (Not on the High Street] gift finder [is a] good app example’ Cath, Consumer

Academics and practitioners also agreed customisation was an important element of interactivity, highlighted in statements such as:

‘They remember what age my daughter should now be and tailor what they offer me to fit this both online, through recognition, and vouchers’…’making me feel more than just someone they want to buy from them but making me feel they know me and what I like and that they remember me’…’recognising you and providing you with shortcuts and recommendations to filter out anything that is not relevant’ Jane, Academic

‘So likewise with customised content and experience what you’re trying to do is to get the best possible experience for the person coming into your online store’…’The most overt example of…quite a few people do it now is Amazon. If you look at the difference between when you’re logged in and when you’re logged out; when you’re logged in that’s you’…’it is making it very, very personal’ Jon, Practitioner

The final statement highlights the desirability and ability for users settings to be saved, either via user generated profile or in cookies, so that the website remembers their personal preferences when they revisit it and automatically tailors to suit these.
The qualitative findings of this research therefore confirm and add to prior knowledge, providing evidence for the inclusion of customisation as a separate dimension of interactivity. Although, unlike communication and speed of response, there is not widespread consensus amongst scholars that customisation is an interactivity construct, there is however some support for its relevancy in the extant literature. For example, Lieb (1998) discussed the two primary definitions of interactivity, acknowledging personalisation as one of these, alongside community building; Florenthal and Shoham (2010) linked customisation to their message related mode of interactivity; and Steuer (1992) focussed on “the extent to which users can participate in modifying the form and content of a mediated environment in real time” (p.84). The study by Song and Zinkhan (2008) also found a linear relationship between increased levels of message personalisation and enhanced perceptions of interactivity and site effectiveness.

Customisation of information flow was also included and grouped within Liu and Shrum (2002) definition of the control construct of interactivity. However this research contradicts this viewpoint, with the qualitative findings identifying both control and customisation as separate emergent themes. As shown in the example quotes above customisation refers to the tailoring of content, advertisements, promotions and page layouts to match the customer’s needs and make them feel unique. Whereas control (discussed in further detail in section 5.2.5) is concerned with the user knowing where they are on the website and where they’d like to go, and being able to get there effectively. It is about them having a choice over which links to click through on, whether the website is manageable, and their own actions having an influence over the experience they encounter.

The personal element also emerged when asking interviewees about consumer engagement; what is was and also involved. Statements included:

‘[They] remain focussed on me as the consumer. I like to think that I am central to their thinking’ Steve, Consumer

‘I think if something affects you personally or you have to be personally involved in the product then you are more likely to be engaged’ Gillian, Academic
From prior understanding of the existing literature and in-depth analysis of the statements the personal theme was discounted as a separate CE construct, instead grouping it with customisation and communication. This is in terms of using data and tailored communications to personalise users’ experiences and through understanding the audience to ensure relevant content is being communication. Also when asking respondents ‘Are there specific website features that make you feel more engaged that others?’ customisation was frequently cited as having more impact. This may explain its cross-over into CE during thematic analysis.

Throughout the literature scholars have acknowledged the relational benefits of customising websites to ensure consumer’s needs are met. Systems used in managing the customer relationship enable e-retailers to monitor purchase patterns and subsequently use this information to enhance and improve their service (Yoon et al., 2008). Van Duyne et al. (2007) states that by using this data and tailoring website content to the browser, this can create added value and provide an extra motive to repeat visit. Srinivasana et al. (2002) concurs finding that customisation as well as contact interactivity, cultivation, care, community, choice, convenience and character significantly impact on customer e-loyalty. As does Mandják and Szántó (2010) who conclude that customisation enables relationship building between organisations and consumers, by better understanding needs and through being able to react quickly to changes in the marketplace. From a sales perspective, sales per transaction can also be increased too through up-selling based on data and shopper preferences (Van Duyne et al., 2007). It is therefore hypothesised:

*H5: Customisation has a positive influence on emotional elements of CE*

*H6: Customisation has a positive influence on cognitive elements of CE*

Further quantitative testing is required to test this and also measure the strength of the relationship; especially with not all interactivity scholars citing customisation as a separate construct.

5.2.4 Navigation

Navigation is the “consumers’ ability to find the desired product or information at a retail channel easily and quickly” (Florenthal and Shoham, 2010:33). It
concerns the user feeling like they have the ability to control when and where they go within the website, going where they expected to and also jumping between pages easily (Dholakia and Zhoa, 2009).

Attractive and effective navigation is one of three website aspects, alongside high quality information and good content, identified by Alba et al. (1997) and Geyskens et al. (1999) as being the most important advantages of the online channel. To enable efficient navigation marketers must fully understand their consumers’ behaviours and needs so that content, commerce and community features can be successfully and logically integrated. This customer knowledge should inform website architectures i.e. how product categories and web pages should be linked together, so that users can quickly and easily access all of a sites benefits (Van Duyne et al., 2007). Navigational features such as in-page links, action buttons, navigational bars, location bread crumbs and site maps all act as visual cues, indicating to users where they are and guiding them to where they would like to be on the website.

Easy location of information and smooth navigation are vital as they are likely to enhance consumer perceptions of interactivity levels, convenience and therefore satisfaction with the retail website (Dholakia and Zhoa, 2009). Flavian et al. (2009) study concurs that web design is a key factor in influencing users perceptions and online behaviours; stating that clear, simple navigation that offers freedom to explore, as well as precise and up-to-date information gains users attention. Ranganathan and Ganapathy (2002) also found an association between navigation and relational benefits. Their analysis revealed positive purchase intentions were enhanced by navigation as well as online security and privacy, high quality design and good information.

The interviews confirmed the importance of navigation within interactivity with twenty-two out of twenty-eight respondents citing it when asked what interactivity was and what made a website interactive. Example quotes include:

‘An easy and clear website makes the buyer more engaged’...’good search functionality....the different subjects being laid out clearly so that you can find your way around' Sarah, Consumer
'For me the main thing is predominantly ease of use and navigation' Roger, Academic

'Making sure that this (where they have landed) is what they want and they can get what they are after from your site...if it's too difficult people won't bother interacting or will try and then give up' Verity, Practitioner

With navigation emerging as a prominent theme in the interviews and also prior studies highlighting its association to relational benefits it is therefore hypothesised:

**H7: Navigation has a positive influence on emotional elements of CE**

**H8: Navigation has a positive influence on cognitive elements of CE**

Through navigation being found to be a construct of interactivity, this supports much of the extant literature. For example Wu (1999) contended that interactivity's two components were navigation and responsiveness; Palmer (2002) cited navigation; as did Florenthal and Shoham (2010) in their medium related interactivity mode; and Ha and James (1998) in human to medium interactivity, so how the user interacts via the computer and the internet in terms of navigation, insertion of hyperlinks and menu bars and also a search facility. Steuer (1992) and Coyle and Thorson (2001) also both cited mapping as a construct of interactivity- a term used in both online and offline environments. It links to navigation online and is found to be part of the process required to increase interactivity and vividness perceptions online; consequently influencing positive, longer lasting attitudes towards a website. Again further analysis is required to quantitatively assess the strength of influence that navigational features have on consumer engagement.

5.2.5 Control

Within the extant literature there is agreement that control is a construct of interactivity, with it often being cited alongside communication and response (Rafaeli, 1988, Wu, 1999, McMillan and Hwang, 2002, Song and Zinkhan, 2008). Indeed McMillan and Hwang (2002) believe that the ability for customers to control interactions is the hallmark of newer media channels. The in-depth interviews agree with this, with eighteen out of twenty-eight respondents
identifying control as a dimension of interactivity. Statements across the stakeholder groups include:

'It's not just one way- both parties are in control of it' Cath, Consumer

'Almost letting it run itself and you know not interfering'… 'Flexible enough…Jet people interact with you the way they want to and not set rules' Ruth, Practitioner

'The ability to have different experiences depending on conscious input of the participants' Mark, Practitioner

The finding that control is a construct provides support for scholars such as Guedj et al. (1980) who characterised interactivity as “a style of control” (p.69); McMillan and Downes (2000) who listed control as one of six dimensions; and Coyle and Thorson (2001) who listed it as one of three, alongside mapping and speed. Liu and Shrum (2002) also cited active control as a facet, referring to the user having autonomy over their actions and therefore their overall experience via the website medium.

The quotes above aid in highlighting the differences between navigation and control; with control linking to if a site is manageable so incorporating accessibility, how easy it is to use, and the user having control over their actions, what they see and their overall experience on a website. This could include parental or organisational controls which are set to limit what employees or children see during their online browsing experience. Overall it is more concerned with control over choices and not just being exposed to website; as opposed navigation, which is about the ease and speed of finding information through the website’s architecture.

Within some of the extant literature, control has also been shown to overlap with the constructs of navigation and personalisation. Song and Zinkhan (2008) discussed personalised message type and quick navigation increasing consumer perceptions of control; and Wu (1999) defined interactivity as a two component construct with internal based efficacy linking to users perceived control over where they are and where they are going, and external efficacy referring to the systems responsiveness to user inputs. However in this study
the qualitative analysis has found control to be a separate interactivity construct. Exploratory and confirmatory factor analysis will be used in the subsequent quantitative phase to explore the relationship between these variables and ensure that they are in fact separate dimensions.

Whilst it should be noted that Liu and Shrum (2002) found control to be the most cognitively taxing aspect of online interactivity, they also found that increasing it produced more positive consumer attitudes overall. Control can also offer reappraisal in stressful situations (Averill, 1973), which is a desired benefit with Crosby et al. (1990) stating common online context factors of uncertainty, intangibility, low familiarity and long-time horizon for delivery of goods. Steuer (1992) also agreed that the construct can deliver relational advantages, adding that a wide range of choice options and more control can engage customers in the interaction process and enhance their browsing experience. It is therefore hypothesised:

**H9: Control has a positive influence on emotional elements of CE**

**H10: Control has a positive influence on cognitive elements of CE**

### 5.2.6 Affordance

Norman (1988) defined affordance as “the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used” (p.9). For online retailers utilising affordance features is vital in bridging the gap between the physical world of shopping and online context, where the ability to touch, smell and taste products is excluded from the decision making process. Websites can therefore benefit from not only providing an enjoyable experience but also supplementing written content with interactive visual information. For example for fashion products utilising imagery and features that provide information about textures, colours, fabrics, how garments move and fit, and an indication of quality. By allowing the consumer to zoom-in on details, view clothes from 360 degree angles, play music, watch videos of catwalks, and use virtual dressing rooms this all enables the user to perform desirable actions and handle products in a natural way, whilst involving their senses (Florenthal and Shoham, 2010); adding the haptic element of shopping.
Affordance emerged as a construct of interactivity, with twenty-two out of the twenty-eight respondents referring to it when asked what interactivity involved and what made them perceive a website as interactive. Statements across the stakeholder groups included:

‘Visually pleasing in general with good product photos, especially multiple photos i.e. different angles, in use, focus on key parts of the product’ Lisa, Consumer

‘You can go on and try a dress on and it’s a virtual avatar…. they are now getting very sophisticated erm…and you can now get a sort of experience or virtual experience of the product before you know…through…at a distance’ Mike, Academic

‘It should be something where people get drawn into the site… [It] might be comparison buying guides, it might be about helping get the look…a whole host of functionality around a wardrobe so you can take a photo of yourself and dress yourself’ Ben, Practitioner

This finding provides confirmation for previous studies which also found affordance to be a construct of interactivity. For example McMillan and Downes (2000) who interviewed people who either worked or taught in the area of interactive communication and found a sense of place to be one of six interactivity dimensions. They explained this as creating a virtual place through user-to-user communication and the use of multimedia features to allow the consumer to physically participate in the experience of shopping- linking to affordance. Florenthal and Shoham (2010) also agreed with its inclusion, citing affordance as one of their five constructs; as did Johnson et al. (2006) who found nonverbal information, so the “use of graphics, animation, pictures, video, music, and sound” (p.41) to be a facet of interactivity.

It is hypothesised that:

\( H11: \text{Affordance has a positive influence on emotional elements of CE} \)

\( H12: \text{Affordance has a positive influence on cognitive elements of CE} \)
This relationship is anticipated due to the monetary and positive relational benefits of affordance cited by scholars; including Quang Tran et al. (2011) who linked affordance to a consumer’s personal desire to enjoy their online experience. Hultén (2011) whose interview findings highlighted that CEOs believe that “the eyes do 70 or 80 per cent of the buying”, and that sight is the most powerful sense in product perceptions. Hultén (2011) also found sound to aid interpretations of the brand experience because of its association with emotions and memories.

The qualitative findings in this research have found interactivity to be made up of six constructs: communication, speed of response, navigation, customisation control, and affordance. This mix of facets has not been identified in any of the conceptual models previously presented, and so is a unique conceptual contribution to this area of research. The subsequent quantitative phase will examine their individual impact on consumer engagement, offering real-world practical implications and recommendations for online marketing practitioners.

5.3 Consumer Engagement

Many scholars believe that consumer engagement is multidimensional in nature (Sedley, 2007, Hollebeek, 2011a, Brodie et al., 2011, Gallup, 2009, Sashi, 2012, Gambetti et al., 2012, Ilic, 2008, Bowden, 2009, Mollen and Wilson, 2010, Brodie et al., 2013). This research concurs finding CE to be comprised of six constructs; two affective (experience and emotion), two cognitive (conscious connection and learning & insight) and two behavioural (commitment & participation behaviour and co-creation). This provides a key conceptual contribution due to the extant literature having never presented this combination of dimensions in one theoretical framework before.

There is however agreement with specific individual facets, for example:

- Vivek (2009) highlighted conscious participation, a combination of the consumer becoming involved, enthusiastic and having an extraordinary experience as one of three constructs- linking with experience and conscious connection.

- Sashi (2012) discussed how consumers progressing through the CE cycle must have either an “enduring relationship” or “emotional bond” to
reach the retention phase; and also stated a commitment stage too-linking with emotion and commitment & participation.

- Van Doorn et al. (2010) listed consumer goals, so why consumers choose to engage with a retailer- indicating and linking with conscious connection.

- Schmitt (2012) identified the CE processes of experiencing and connecting- linking with emotion and experience.

- Brodie et al. (2013) found CE sub-processes included co-developing with the company to create new ideas and innovation; learning about the right product/brand choice; and sharing of personal experience and opinions-linked with co-creation, conscious connection and commitment & participation behaviour.

- Cetina et al. (2014) highlighted the importance of active participation, personalised experience and emotional aspects in developing consumer engagement- linking with commitment & participation behaviour, experience and emotion.

The findings also highlight the lack of consensus about when consumers actually become engaged with a brand or retailer. When asked ‘At what point would you consider yourself to be engaged with a brand?’ stakeholder answers varied. The statements below highlight the different perceptions and beliefs of when consumers become engaged:

**Quickly or instantaneously**

‘I see something, ‘oh that’s interesting’, I am engaged', 'I see engagement as a d…as an initial contact between a message and the receiver. Now the engagement may take seconds, it may…it might last for a longer period’ Chris, Academic

**After multiple purchases or visits**

‘So it’s probably though multiple visits made through multiple touch points, through multiple devices’ Will, Practitioner
Subsequent to an interaction or request

‘Cos we have these different interaction like sample request, appointments; so like I say as soon as somebody’s done that then they’ve engaged’, ‘they’ve gone on, they’ve kind of done their research and their actually going to do something - so that’s the engagement’ Verity, Practitioner

Over a longer period of time

‘I think that to properly engage with a brand this must happen over a longer period of time. Simply purchasing is not enough’ Gillian, Academic

The question also highlighted the perceived benefits of consumers engaging with the retailer; including advocating and loyalty/repeat purchase with sixteen out of twenty-eight respondents stating it; providing a free form of marketing through word-of-mouth with thirteen respondents listing it; and increased sales with ten people answering with this. Other less agreed upon benefits that were presented were improved experience, building trust and satisfaction, creating a competitive advantage and increasing brand reputation.

It is also worth noting that half of all of the academic respondents either described or inferred that consumer engagement is an umbrella term for other consumer behaviour/relationship marketing constructs. Example quotes showcasing this were:

‘My understanding is that it’s a new term packaging up consumer involvement and other related consumer behaviour topics. This would include things like involvement, empowerment (so consumers having a say in the brand), loyalty, switching behaviour, post-purchase regret’ Gillian, Academic

‘Different to other constructs but kind on an umbrella term incorporating/a compilation of other relationship marketing terms including passion, desire to be close, and being prepared to go the extra mile for a brand you feel connected to’ Roger, Academic

This highlights the difficulty in gaining consensus about what CE is and involves to date, and also why this research is required to add to and confirm knowledge about the topic area. With one of the overall research objectives being to bridge
the academic-practitioner divide and therefore create a theoretical model agreed upon by all stakeholders, this ‘umbrella term’ viewpoint is discounted with it only accounting for four out of twenty-eight responses in total.

**Emotional CE**

5.3.1 Emotion

Emotion is reviewed here since the majority of stakeholders expressed it as a central aspect of consumer engagement. Twenty out of twenty-eight interviewee’s provided answers that closely linked to the construct of emotional attachment. Emotional attachment’s critical role in consumer engagement should be no surprise with Park et al. (2010) finding that such connections to a brand can create higher, sustainable levels of consumer loyalty and increase an organisation’s profits; Thomson et al. (2005) stating that it provides a strong differentiation factor and predictor of brand need; and Drigotas and Rusbult (1992) citing that it can be a predictor of consumer commitment- highlighting the associated relational benefits. With Schouten and McAlexander (1995) observing that even though consumers come into contact with thousands of products and brands they only emotionally attach to a small quantity of these, this may provide some indication as to how hard it can be to develop consumer engagement- as emotional attachment is only one of six CE facets.

Emotional attachment “describes the strength of the bond customers have with the brand” (Theng So et al., 2013:407). Such attachment is a human need, which is emotional in nature, with the bond targeted at a specific object, or in this case a brand/retailer (Bowlby, 1979). From an affective perspective this is experienced through feelings characterised by affection, passion, connection, love, delight and captivation (Thomson et al., 2005, Malär et al., 2011).

Example statements from interviewees highlighting emotional attachment included:

‘For me it is an emotional experience and as long as I feel good about it I will continue with my relationship' Steve, Consumer

‘Different to other constructs but kind on an umbrella term incorporating/a compilation of other relationship marketing terms including passion, desire to be
close, and being prepared to go the extra mile for a brand you feel connected to’ Roger, Academic

‘because it is just the most beautifully thought out piece of literature I’ve ever seen…it makes me feel really warm every time I get it every year’…’warm feeling’… ‘And I love that’… ’and it makes everybody smile’ Ruth, Practitioner

There is some debate within the academic literature as to whether emotional attachment is a facet, antecedent or consequence of CE. For example Brodie et al. (2011), Brodie et al. (2013), and Van Doorn et al. (2010) all believe that emotion or emotional attachment occurs subsequent to the consumer engagement process; whereas Vivek (2009) believes it to be a pre-requisite for CE.

Most scholars however, adopt the perspective that emotion is an integral construct. This affective element is especially evident in Shevlin (2007)’s definition that CE is the “Repeated, satisfied interactions that strengthen the emotional connection a customer has with the brand”. Other definitions which also highlight this include PeopleMetrics (2010) who included ‘passion’ in their definition of what CE involves; Hollebeek (2011a) who discussed it’s multidimensionality including an emotional investment in brand interactions; Gambetti et al. (2012) who stated it is a combination of “attention, dialogue, interaction, emotions, sensorial pleasure and immediate activation”. Van Doorn et al. (2010) also listed positive and negative valence as a construct of consumer engagement behaviour; and Bowden spoke about emotional bonds being required for CE in returning customers as well as satisfaction and delight in both new and returning consumer groups.

There are also CE measurement scales which highlight the importance of emotional attachment as a construct. From a practitioner stance Gallup (2009)’s inclusion of eight emotional measures out of a total of eleven clearly shows emotion’s centricity; specifically the measurements worded “I feel proud to be a [brand] customer” and “I can’t imagine a world without [brand]” which show a distinct link to the expression of emotional attachment feelings. From the academic viewpoint measures from both Sprott et al. (2009) – “I have a special bond with the brands that I like” and “I often feel a personal connection between my brands and me”; and Hollebeek et al. (2014) – “I feel very positive when I
use [brand””, “Using [brand] makes me happy”, “I feel good when I use [brand]”, “I’m proud to use [brand]” showcase this too.

The research findings provide further agreement with this extant literature, confirming that emotional attachment is indeed a consumer engagement construct. Also with facet receiving very limited attention within the field of marketing, this provides a conceptual contribution through investigating emotional attachment’s links to other consumer behaviour topics, such as consumer engagement and interactivity. Further quantitative analysis is required to establish the strength of such relationships and if specific interactivity factors have more influence on emotional CE than others.

5.3.2 Experience

As well as emotional attachment the other affective consumer engagement construct to emerge was experience. The majority of respondents, twenty-one out of twenty-eight cited it as central to CE during the interview process, and interestingly all interviewees in the consumer stakeholder group spoke about an exciting, holistic experience being important for customers. This may be due to the online channel needing to reflect a whole brand replication of shopping in-store, for consumers to want to spend time with on a brand’s website.

Brand experience is conceptualised “as sensations, feelings, cognitions, and behavioural responses evoked by brand-related stimuli that are part of a brand’s design and identity, packaging, communications, and environments” (Brakus et al., 2009:52). The sensorial component refers to when a brand experience stimulates the senses “to arouse aesthetical pleasure, excitement, satisfaction, sense of beauty” (Gentile et al., 2007:398); the affective aspect involves feelings, the generation of moods and emotions through the offering; the cognitive element is connected to thinking and can include the need to problem solve or be creative during the brand experience; and the behavioural component concerns whether the experience is centred around the actions and physical behaviours of using the brand. Fornerino et al. (2008) agrees with this stating that in an extraordinary experience the senses are mobilised and the consumer becomes fully immersed “mentally, emotionally, physically, intellectually and even spiritually” (p.95).
In this research only the sensorial and affective elements of brand experience were used for the emotional CE construct. This was due the emotive language and inferred need for hapticity and reflection of the in-store experience and context shown in interviewees’ answers when asked what CE meant to them, and also what it involved. For example:

'Making the experience simple and enjoyable' Jeff, Consumer

'…and you can now get a sort of experience or virtual experience of the product before you know…through…at a distance' Mike, Academic

'For me it's about that whole brand experience….I enjoy using sites because of the experience’ Ruth, Practitioner

Brakus et al. (2009) proposed emotional and sensorial measurements of brand experience:

1. “This brand makes a strong impression on my visual sense or other senses
2. I find this brand interesting in a sensory way
3. This brand does not appeal to my senses
4. This brand induces feelings and sentiments
5. I do not have strong emotions for this brand
6. This brand is an emotional brand”

These experience evaluations can occur throughout various brand interaction stages including: searching, buying, delivery and actual consumption (Sheng and Teo, 2012). For marketers it is vital that they understand consumer experience preferences and integrate these into marketing strategies, to ensure that the channel is not only perceived as useful but also as visually pleasing and entertaining. This can increase consumer feelings and attitudes towards the brand, influence satisfaction levels (Brakus et al., 2009, Fornerino et al., 2008), and also create loyalty if the experiences are long-lasting (Oliver, 1999). Cetina et al. (2014) also found that providing consumers with personalised experiences can aid in overcoming difficulties in relationship building online.

The findings from this research provide confirmation that positive experience is fundamental in creating CE. Many scholars also concur, with Brodie et al.
(2013) stating that CE in online brand communities involves interactive experiences with and between consumers and brands, as well as between consumers. Vivek (2009) also highlighted that managers believe that experience and value are vital to CE, with his initial qualitative findings showing five proposed dimensions including extraordinary experience. Further agreement is provided by Vargo and Lusch (2008)’s foundational premises for SD logic which emphasise CE as a concept which reflects consumers interactive and co-creational experiences; Brodie et al. (2011)’s FP1 “CE reflects a psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific service relationships” (p.258); Schmitt (2012) proposing ‘experiencing’ as one of five CE processes; and Van Doorn et al. (2010) stating that consumer to brand experiences are central to the concept.

With Flavian et al. (2009) stating that online experiential outcomes include task-related usability and Bridges and Florsheim (2008) citing affective ones such as fun and enjoyment it is clear to see how experience links to interactivity. Mollen and Wilson (2010) also found that with online experiences being much more immediate than in traditional media and shopping environments, that there is a greater need to ensure that they are of a high quality. To ensure such desirable experience outcomes for consumers, online marketers must factor them into the decisions they make about how to design their retail website and which interactivity features to implement and include. Further quantitative analysis is therefore required to investigate which specific aspects of interactivity have the most influence on emotional CE, including experience to help inform practitioners’ website design decisions.

Cognitive CE

5.3.3 Conscious Connection

Conscious connection emerged as a one of two cognitive consumer engagement constructs. This is unsurprising with many scholars acknowledging the importance of cognition in the CE process for enabling consumers to make conscious searches and choices about which brand/s to connect to. From the general perspective, researchers simply acknowledging the presence of CE psychological elements include Gambetti et al. (2012) who stated “three levels;
the rational, emotional-sensorial and the dialogical level” (p.668); Bowden (2009) who found that new customers required rational bonds to develop engagement; and Sedley (2007) who included the need for a customer to psychologically invest in a brand through repeat interactions and contact. Hollebeek (2011a) and Brodie et al. (2013) also both define consumer engagement with the inclusion of a consumer's cognitive (alongside emotional and behavioural) investment in a brand.

In this research the first cognitive theme, conscious connection is linked to cognitive processing. Cognitive processing is “a consumers level of brand related thought processing and elaboration in a particular consumer/brand interaction” (Hollebeek et al., 2014:154). This thought processing is concerned with how people think, remember, decide and perceive the world/objects/brands and is therefore related to cognitive processes such as judgement, reasoning, problem-solving, attention, and memory. Blumenfeld and Meece (1988) and Guthrie (2001) also link it to concentration and the intensity of a consumer’s information search, to make informed and conscious evaluations of alternatives, purchase decisions and subsequent actions. In recent CE conceptualisation and scale research Hollebeek et al. (2014) presented cognitive processing as one construct, alongside affection and activation. Cognitive processing in their scale involved consumers thinking about the brand when using it and also stimulating an interest to want to learn more about the brand in general- so being able to make a conscious choice about whether to connect with the brand.

The majority of interviewees acknowledged the importance of cognitive processing and connection in consumer engagement, with twenty-two out of twenty-eight stating it. Statements across the stakeholder groups included:

‘The brand becomes the first point of reference when making a consumer buying decision’ [went on to described a very rational informed CE process of brand awareness, marketing, recommendations – so all part of information search; and then first tentative purchase, experience of purchase, repeat ordering if happy, trust and loyalty] Andrea, Consumer

‘It’s the way the consumer, erm mentally…and this is an interesting point whether they actively consciously or sub-consciously…erm wish to be involved
with what is being communicated... And of course we have all of the perceptual filters that enable us to screen out all of the stuff that we don't want' Chris, Academic

'Actively choosing to be involved and participate with the brand' Roger, Academic

The quotes highlight how consumers initially invest time, cognitive effort and attention into information searches to be able to evaluate who the brand is and what it represents, in order to make decisions on whether to carry on connecting and building a relationship with that brand.

The construct of conscious connection provides additional confirmation for previous studies which also specifically highlighted CE involving consumers choosing to connect with a brand due to cognitive processes. For example Sashi (2012) who proposed seven phases in the CE process, with the stages of connection and interaction being linked to cognitive processes due the requirement for extensive information search and a need for thought about how, where and who to interact with. Van Doorn et al. (2010) also identified customer goals as part of CE, which relate to why consumers choose to engage with a brand- this can be a conscious decision in order to get the best deal, or find a brand with the highest quality product/service. Other researchers who also agree include Schmitt (2012) who found CE to include identifying (acknowledging and info searching brand) and integrating (collating all existing knowledge to build an overall picture of the brand or the relationship with it) - processes which all require cognition to come to brand conclusions; and Keller (2013) who suggested a brand engagement scale with metrics that covered areas such as collecting information, so searching for and learning about the brand and noticing it’s advertising; and participating in brand activities, so paying attention to marketing activities.

From this it is easy to see why interactivity is important in aiding in the searching phase to ensure that this process is made as simple and informative as possible, so that consumers actively choose to connect based on cognitive conclusions. Quantitative research is needed to clarify which interactivity features are most influential during this process.
5.3.4 Learning & Insight

Alongside conscious connection the other cognitive CE construct to emerge was learning and insight. The qualitative findings highlighted the importance of businesses utilising metrics, data and research in order to better understand their consumer base; and customers consciously perceiving and evaluating this effort during the decision making process. For example insight gained about previous browsing patterns and purchase behaviour can be used to inform a retailer on consumer experience preferences, how they like to interact with and via a website and also service expectations. This can then be used to make improvements or tailor the retailer’s online channel, to ensure they fair favourably when consumers make cognitive evaluations.

This insight and learning theme links to the concept of customer orientation. Customer orientation is concerned with the brand knowing its customers, including having a clear idea about their needs and it being a company objective to fulfil these; implementing specific care objectives; spending time with and actively seeking their feedback; and understanding the importance of market research (Nwankwo, 1995). Nwankwo (1995) stated that “putting customers at the heart of an organisation’s product-market definition is the first rule of effective customer-orientation management” but that ‘many organizations get into difficulties through an inappropriate vision of customers and their needs” (p.7). Understanding these needs and factoring this insight into an organisations strategy is imperative with it being linked to profitability (Narver and Slater, 1990) and competitive advantage (Ganesan, 1994).

Statements from the in-depth interviews highlighting the construct of insight and learning include:

‘I understand the market intelligence that goes behind targeted mailing and offers based on previous buying patterns’ Andrea, Consumer

‘From a company point of view…from a management point of view it’s more the sort of mechanisms or systems that you set up the engagement… to achieve engagement or to engage with the customer’ Mike, Academic

‘I think consumer engagement is all about knowing your customers’… ‘So we are very insights led, so we’ll do a lot of market research around the industry
and the sector specific that a particular person…sits in and we try to bespoke it to how people shop and…how people behave' Anwar, Practitioner

Overall nearly half of all of the respondents, thirteen out of twenty-eight identified the importance of learning and insights in consumer engagement. In the extant literature there is some acknowledgement of insight as either a CE antecedent or a consumer cognition process within the decision making process. However, to date it has not been explicitly shown as an individual construct in a CE model, from this customer orientation, metrics and data perspective. This is surprising especially when considering that FP8 of SD logic (Vargo and Lusch, 2008) on which consumer engagement is based upon, states that “a service-centred view is inherently customer orientated and relational.” This research therefore makes a significant conceptual contribution by identifying it as a CE dimension.

Scholars recognising learning as an antecedent include Van Doorn et al. (2010) who stated firms’ information usage and processes, whereby firms can proactively manage customer information, affects subsequent CE behaviours. Both Cetina et al. (2014) and Vivek (2009) also identified the importance of brands fulfilling consumer needs and promises as an antecedent; however did not expand on how to do this e.g. through research, metrics or data. Keller (2013) and Brodie et al. (2013) also agreed that CE involves learning but from the customer perspective of information searching and evaluating alternatives, rather than from the retailer’s utilisation of insight to fulfil their needs during these processes. Gambetti and Graffigna (2010) highlighted the need for an academic focus on managerial questions linked to CE, such as resource and budget allocation, the need for market research and also what is required of employees internally to facilitate consumer engagement. Through further quantitative analysis this study should aid in answering some of these questions relating to the online retail channel and also identify which interactive features are most significant in generating positive cognitive CE.
Behavioural CE

5.3.5 Commitment & Participation Behaviour

Commitment and participation behaviour is reviewed here since over half of the stakeholders acknowledged it as a central aspect of consumer engagement. Seventeen out of twenty-eight interviewee’s provided answers that closely linked to the behaviours associated with the constructs of commitment and participation. Such behaviours can include advocacy, displaying a sense of pride and belonging in being a customer of the brand, event attendance and socialisation centred around the brand, and loyalty (Garbarino and Johnson, 1999). Participation is defined as “the degree to which customer’s produce and deliver service” (Bolton and Saxena-Iyer, 2009). Whereas commitment is a customer’s freewill and desire to maintain an ongoing relationship with a retailer or brand, whilst making an effect or taking actions to do so. It is these actions or behaviours that this emergent theme centres on.

The relational benefits of customer’s exhibiting such behaviours can be anticipated, with Morgan and Hunt (1994) finding that higher levels of commitment (and also trust) are key to attitude formation; Garbarino and Johnson (1999) stating that commitment, paired with the other relationship quality constructs influences future purchase intentions; and Dabholkar (1990) citing participation as aiding in creating increased perceptions of service quality. The agreed upon link between commitment and relationship quality (Garbarino and Johnson, 1999, Hennig-Thurau et al., 2002, Beatson et al., 2008, De Cannie're et al., 2009) may explain its emergence within this other relationship marketing construct, consumer engagement.

Example statements from across the stakeholder groups reflecting commitment and participation behaviour include:

[When asked what CE was] ‘A customer’s experience of active connection or participation with a marketing entity’ Catherine, Academic

'More important that brand and its products become important to that consumer’…loyalty, repeat purchase and WOM/advocating the brand which I
think is a very important part of marketing (in building credibility and trust)’

Gillian, Academic

‘I see it as being a phrase to do with are people interacting with us, are we interacting with our customers, are they talking about us, talking to us, promoting us, recommending us’ Paul, Practitioner

There is some debate within the extant literature as to whether commitment and participation are constructs, antecedents, consequences or even used as a synonym of consumer engagement (Gambetti and Graffigna, 2010). Agreement to the theme being a construct is provided in Hollebeek (2011a)’s definition which refers to the “behavioural investment in specific brand interactions”, whilst PeopleMetrics (2010) definition is more specific stating that CE includes advocacy (alongside retention, effort and passion) – one of the behaviours found to be linked to this theme. Cetina et al. (2014)’s findings also confirm the importance of active participation in CE, whilst linking to consumers also being able to input and make improvements to brands through co-creation of value (described in section 5.4.6 below).

Some existing conceptual models and measurement scales also acknowledge this theme; with Schmitt (2012) including the dimension of experiencing through brand participation, brand effect and multisensory participation; Gambetti et al. (2012) showing advocacy and participation during brand communication integration; Gallup (2009)’s measurement scale incorporating items such as “I feel proud to be a [brand] customer”, ‘Overall, how satisfied are you with [brand]?’, ‘How likely are you to continue to choose/repurchase [brand]?’, and ‘How likely are you to recommend [brand] to a friend/associate?’; and Sprott et al. (2009)’s eight scale items all linking to a sense of pride and belonging to the brand. The activation aspect in Hollebeek et al. (2014)’s recent study also highlights this behavioural aspect of spending a lot of time with the brand and actively choosing to use it over others in the same product category. Brodie et al. (2013) also agree that CE involves such behaviours through inclusion of the constructs of advocating and sharing of knowledge and experiences with the online community; however they list affective commitment and loyalty as a consequence of CE.
From the opposing antecedent viewpoint Vivek et al. (2012) believes that customer participation is central to developing CE; Sashi (2012)'s framework lists commitment and advocacy as steps in the process prior to consumers becoming engaged; Van Doorn et al. (2010) acknowledges that CE is the “customer’s behavioural manifestation toward a brand or firm beyond purchase, resulting from motivational drivers, including word-of-mouth activity, recommendations, helping other customers, blogging & writing reviews” (p.254); and Brodie et al. (2011) and Vivek (2009) state that connections through relevant and meaningful interactions and participation are a pre-requisite, whilst word-of-mouth and affective commitment are consequences.

It should however be noted that in the majority of cases where these constructs are listed as an antecedent or consequence, they are examined and described as an affective component of CE focussing on an emotional connection; whereas the findings of this study highlight the importance of the actions associated with them from a behavioural CE component perspective. This therefore adds further clarity to CE knowledge by identifying commitment and participation behaviours as one of its key constructs.

5.3.6 Co-Creation

Unsurprisingly previous scholars have also grouped participation and commitment together with co-creation (Yi and Gong, 2013, Cetina et al., 2014), providing support for the qualitative finding that these two are both behavioural constructs of consumer engagement. Researchers have been cognisant of the importance of active consumer participation in ensuring future enhancements and improvements to organisations’ products or services. However, unlike the construct of commitment and participation behaviour, which focuses on customer-to-customer sharing via advocacy, event attendance and socialisation around the brand; co-creation instead centres on customer-to-business sharing to create mutual value. Co-creation is defined as “An interactive process, involving at least two willing resource integrating actors, which are engaged in specific form(s) of mutually beneficial collaboration, resulting in value creation for those actors” (Frow et al., 2011:1). Payne et al. (2008) find that it includes active involvement between two or more actors; integration of resources that create a mutual value; willingness to interact; and a spectrum of form of collaboration.
In today’s challenging marketplace, increased product choice and customer dissatisfaction, coupled with the introduction of the internet making it easier to interact with consumers, it is clear to see why co-creation has become a vital consideration for managers in creating a point of differentiation (Prahalad and Ramaswamy, 2004, Skaržauskaitė, 2013). Other benefits also include increasing satisfaction (Sashi, 2012), gaining valuable insights into customers (Vega-Vazquez et al., 2013) and also providing a source of competitive advantage (Ngo and O’Cass, 2009). On the other hand it should also be noted that if there are issues in the service or product consumers can sometimes blame themselves (Bitner et al., 1997). This is due to them being able to influence different stages including creation of new products, enhancing existing ones and also improving the overall consumption experience. This links to interactivity, with organisations now moving further towards creating personalised experiences rather than product co-creation (Payne et al., 2008), as customers are more informed, empowered and active in creating value.

Nearly half of all respondents, thirteen out of twenty-eight, identified the importance of co-creation in consumer engagement. With example statements including:

‘Giving me some sort of value and allowing me to share or add to that through their online offering and functionality’ Jeff, Consumer

[When asked what consumer engagement was] ‘…It is a modern use of CB and communication tools to involve consumers also in the co-creation of the brand’ Gillian, Academic

‘Just chatting to your customers as well, they make suggestions and recommendations as well so just kind of listening to that and taking that on board too’ Tom, Practitioner

There is wide spread agreement within the extant literature that co-creation is a key component or process of CE; with a core foundational premise of SD logic (Vargo and Lusch, 2008) being that “the customer is always a co-creator of value” (p.213). Further agreement is also provided by Mitchell (2001) finding that consumers who have relationship with companies share ideas, opinions and add value; Sashi (2012) acknowledging that CE expands the role of
customers by involving them in value adding processes as co-creators of value; and Gambetti et al. (2012) whose CE element brand communication integration related to active consumers being involved in behaviours such as WOM, participation in co-creating value, spreading viral messages, etc. In Gambetti et al. (2012)’s conceptual model, co-creation of value and high levels of mutual commitment and trust must also occur at the final CE stage brand soul, for the brand to become embedded into consumer lives. Brodie et al. (2013) also agrees that co-developing is a consumer engagement sub-process in online communities, helping to assist a company in developing new ideas; with their earlier research to synthesis existing literature stating a fundamental proposition to be that “CE states occur within a dynamic, iterative process of service relationships that co-creates value” (Brodie et al., 2013:258).

Much of this previous research has cited co-creation as part of a wider dimension or process e.g. co-creation being acknowledged as part of the ‘connection’ construct in Sashi (2012)’s model. However the qualitative findings have clearly found co-creation to be a unique, separate and key CE construct, making a conceptual contribution and adding to knowledge within this area. With this research and academics acknowledging a link between co-creation and interactivity (Payne et al., 2008), further quantitative analysis is required to identify if specific interactivity characteristics have more influence on behavioural CE than others.

5.4 Nature of Consumer Engagement’s Dimensionality

Overall the qualitative findings concur with the majority of the extant literature that consumer engagement is multidimensional in nature (Sedley, 2007, Hollebeek, 2011a, Brodie et al., 2011, Gallup, 2009, Sashi, 2012, Gambetti et al., 2012, Ilic, 2008, Bowden, 2009, Mollen and Wilson, 2010, Brodie et al., 2013, Hollebeek et al., 2014). However, it is also important for the creation of the conceptual framework to determine how the affective, cognitive and behavioural CE elements interact with each other and their relational direction.

Whilst there is agreement to its multidimensionality, there is still debate over the direction in which consumers’ progress through dimensions to become engaged. Both Schmitt (2012) and Brodie et al. (2013) acknowledge all of the dimensions, however their conceptual models depict that the dimensions can be
entered and experienced in any order for engagement to occur. For example Schmitt (2012) highlights the cognitive elements of identifying, signifying and integrating; emotional aspects of connecting and experiencing; and behavioural phases of connecting linked to being involved in the brand community and also of experiencing linked to brand participation. However there is no set order that the consumer has to go through these in; the scholars simply explain that the deepest levels of engagement occur on the social engagement level rather than object- or self-centred engagement levels. Brodie et al. (2013) also identifies the engagement sub-processes of sharing, co-developing, socialising, advocating and learning, showing that CE is multidimensional. However their model clearly demonstrates the cyclical nature of CE and that there is no set way to progress through the processes.

On the other hand some researchers have predicted a directional relationship between the consumer engagement dimensions. Sashi (2012)'s CE stages include emotional elements of connection and interaction; cognitive aspects of evaluating satisfaction and deciding whether to become a retained customer; and behavioural phases of commitment and advocacy. Although this is portrayed as a cyclical process the stages are described to be emotional, cognitive and then behavioural. Gambetti et al. (2012) explain the development of brand enacting, which is at the centre of the engagement process. This involves brand appearance (seeing but not feeling the brand); brand body (physically encountering the brand allowing emotions to come into play); and brand soul (embedding the brand into consumer lives to interact and advocate it, whilst sharing its value with others). This reflects the order of cognitive, emotional and then behavioural dimensions.

The qualitative findings concur with the directional relationship viewpoint, with respondents consistently highlighting that the emotional and cognitive dimensions of CE occur before the behavioural ones when asked what they thought the CE process was. Statements from the interviews highlighting this include:

‘The pathway through the store needs to be engaging. I need to have been on the website or in store, have enjoyed the experience with that company to then
shop with them continuously and feel like I have a connection with them’ Linda, Consumer

‘somebody’s out searching for your products erm, firstly you want to be high in the search rankings so they find you and when they do come to your site you want the language, the products, the imagery to be engaging for them, for them to dig deeper to delve into the website and spend time on the site… then later give them reasons to return. Whether that’s signing up to newsletters, erm blogs, how-to guides… Erm, if we’ve sold them good products that they are happy and are confident with then this can build stronger relationship and then they could become ambassadors for the brand with their colleagues.’ Mick, Practitioner

Also throughout the interview questions relating to consumer engagement and what it involved, the majority of respondents tended to discuss emotional and cognitive elements prior to behavioural ones- further reiterating this direction. It is therefore hypothesised that:

H13: Emotional CE has a positive influence on behavioural elements of CE

H14: Cognitive CE has a positive influence on behavioural elements of CE

Interviewees also recognised that consumer engagement is an ongoing and iterative process, providing agreement for many of the previous studies (Sashi, 2012, Schmitt, 2012, Vivek et al., 2012, Brodie et al., 2011, Van Doorn et al., 2010, Brodie et al., 2013). Example statements identifying this include:

'Not sure but I am sure it’s an ongoing process where I can dip in and out', Shawn, Consumer

'I think it’s an ongoing cycle and I don’t think anything can be a flat process' Anwar, Practitioner

'I think yes you kind of…. You can't just do it once and then forget about it', 'it has to be like a cycle rather than just a start and finish’Will, Practitioner
Whilst this research acknowledges that CE is a cyclical process, the findings highlight that this ongoing process is initiated by emotional and cognitive process which lead to behavioural dimensions. Due to this and also time and resource limitations the quantitative analysis will investigate the strength of the preliminary hypothesised relationships only. However the researcher understands the inference that this process can be iterative, with behavioural CE having feedback loops to both emotional and cognitive CE once consumers have gone through initial development of engagement.

5.5 Moderating Effects

It is important to acknowledge that the hypothesised relationships in hypotheses one to twelve may not be equally pronounced in all of the respondents, and therefore may strengthened in people with certain predispositions. Thus, a further five variables will be investigated due to being thought to moderate the relationship between interactivity and consumer engagement. These are trust, satisfaction, self-brand connection, tolerance and gender which were all highlighted throughout the interview responses.

5.5.1 Trust

Trust is defined as a consumer’s willingness to open up to a retailer and “their confidence in a retailer’s reliability and integrity” (Morgan and Hunt, 1994:23). It is hypothesised as a moderator of the relationship between interactivity and emotional and cognitive consumer engagement as it can reassure consumers that their choice to interact and start to connect with a brand is the right decision, regardless of how they initially perceive a brand’s website interactivity. For example, if a consumer has already established trust for/with an organisation this may overcome a subsequent negative experience they have with that retailer’s website, so still enabling CE to be developed. Alternatively if they have trust and also a positive interactive experience this will help maintain and further enhance this existing relationship, potentially leading to higher levels of consumer engagement. Trust is very important especially in consumers overly concerned with privacy and security online (Ratnasingham, 1998).

Singh and Sirdeshmukh (2000) state that trust is a main element that acts as the glue, holding together the buyer and seller together in such relationships; whilst Hill and Alexander (2000) acknowledge that trust and satisfaction help to
build loyal relationships through need fulfilment. Some scholars also believe that trust and satisfaction are the main cognitive elements used in choosing and evaluating (Malär et al., 2011), so may moderate cognitive connection factors of CE. Thus it is hypothesised that:

\[ H15: \text{Trust has a moderator effect on the relationship between interactivity and emotional and cognitive CE} \]

The example quote from the interviews (below) highlights how even if consumers experience and perceive high levels of website interactivity, if they have low levels of trust for the brand or retailer than they are unlikely to have high levels of engagement.

[Talking about a brand experience where she's been disappointed after years of interacting with the retailer] ‘has really let me down’…‘Yes I mean that really upsets me and makes me cross… So yes you know the aspect of personalisation is so important, but also make sure that you treat your customers with respect. ‘Ruth, Practitioner

Nearly half of all respondents, thirteen out of twenty-eight acknowledged trust as being important in the CE process; with two-thirds of all consumers stating it and over half of practitioners believing it to be important for initiating and maintaining consumer engagement. Example statements across the various stakeholders reflecting this include:

‘Online would need to replace all of the face-to-face, making me feel sure about the brand through the functions of the websites’ Shawn, Consumer

[When asked what consumer engagement involves] ‘A company producing a website that consumers feel happy, safe and comfortable with…promotes a feeling of trust that what they say is what will be delivered etc’… [Feels more engaged] ‘Once I feel like I have found a trusted supplier that I feel comfortable buying from’ Lisa, Consumer

‘The brand must reassure the consumer that they have made the right decision too’ Gillian, Academic
The above quotes highlight that regardless of how interactive a website is perceived by a consumer, a predisposition to trusting the retailer reassures them and enables higher levels of consumer engagement to occur. Many respondents also acknowledged trust as being part of CE but did not include it when describing the consumer engagement process, providing further evidence that it is likely to be a moderating factor rather than an intrinsic feature.

Overall the identification of trust as a moderating factor is a new contribution to the CE literature, with previous studies simply highlighting it as a consequence (Vivek et al., 2012, Brodie et al., 2013); an antecedent (Van Doorn et al., 2010); or part of the process to develop engagement (Gambetti et al., 2012, Gallup, 2009). Further quantitative analysis is required to assess the strength of trust’s moderating effect on the overall interactivity-CE relationship.

5.5.2 Satisfaction

Satisfaction is concerned with whether consumers’ goals can “be attained from the consumption of products and the patronisation of services” (Oliver, 1997:10). It is hypothesised as a moderator between the relationship of interactivity and emotional and cognitive CE, because if a consumer is already satisfied with a retailer based on their past experiences then this may help in overcoming a negative perception of website interactivity. This is due to already knowing that the offering will fulfil their needs. These past experiences which have helped inform this satisfaction predisposition may have been developed through positive interactions in-store, through the delivery service or even via social media. In this case already being satisfied by an organisation prior to a negative interactivity experience reduces the risk of starting to form a relationship with the brand. This corresponds to Crosby et al. (1990)’s finding that higher quality relationships are required to overcome factors associated to the online context e.g. uncertainty, intangibility, and long-time horizons for delivery. In situations where positive interactivity is perceived this prior satisfaction is hypothesised to further influence and increase consumer engagement levels.

Anderson and Swaminathan (2011) state that if consumer’s expectations are not met during the retail experience then it is unlikely that they will become loyal. With loyalty being a relationship marketing construct and consumer
engagement being an extension of this it is clear to see the importance of satisfaction in maintaining positive and long-lasting relationships. Bolton (1998) concurred with this also finding links between satisfaction and relationship duration and purchase decision. It is therefore hypothesised:

**H16: Satisfaction has a moderator effect on the relationship between interactivity and emotional and cognitive CE**

During the qualitative interviews over a third, eleven out of twenty-eight respondents acknowledged the importance of satisfaction in developing consumer engagement. However whilst many of them spoke about it when describing what CE meant to them or involved, very few acknowledged it as a stage in the process; therefore suggesting it to be a moderator. The example statements below highlight interview responses which acknowledged this:

[Regardless of interactivity perceptions] ‘I will move away from any experience if I am dissatisfied with no form of quick resolution’ Steve, Consumer

‘I am happy with the quality and the delivery, this good experience with them makes me feel like I have then have a relationship with them where I know I can trust them to give me that service and good products every time’ Linda, Consumer

‘If we’ve sold them good products that they are happy and are confident with then this can build stronger relationship and then they could become ambassadors for the brand’ Mick, Practitioner

The above quote from Linda, also highlights how satisfaction and trust may be linked in their moderating effect, which wouldn’t be surprising given that they are both relationship quality constructs. This will be analysed through exploratory factor analysis; alongside the overall quantitative investigation into whether the conceptual model and accompanying hypothesis are supported.

Overall identifying satisfaction as a moderating factor in the interactivity-CE relationship is a new contribution to the literature. Previous studies have highlighted satisfaction as either an antecedent (Van Doorn et al., 2010); consequence (Brodie et al., 2013) or intrinsic feature of consumer engagement
Further investigation is required to assess the strength of satisfaction’s moderating effect.

5.5.3 Self-Brand Connection

Self-brand connection is reviewed here as over two-thirds of respondents, eleven out of twenty-eight, acknowledged its role in establishing high levels of consumer engagement. Statements highlighting this included self-brand reflections, identification and personal connection; construction and communication of self through the brand; and aspirational goals for self through brand symbolisation of cues (Escalas and Bettman, 2005). Self-brand connection is simply defined by Escalas (2004) as “the extent to which consumers have incorporated the brand into their self-concepts”. According to McCracken (1986) self-brand connections occur when the symbolic characteristics of a celebrity or group endorsing a brand first become associated with that brand, these properties are then transferred to consumers when they choose brands which match their self-concept, and then the symbolic meanings are used to construct or communicate this self-concept either publically or privately. Such brands intrinsic meanings become valuable, with consumers willing to pay more than for their utilitarian or instrumental uses and benefits.

Self-brand connection is hypothesised to have a moderating effect on the relationship between interactivity and emotional and cognitive CE, as having this as a predisposition means a consumer already has a personal connection to the brand and perceive it to be part of them and how they wish to be viewed. This means they are more likely to continue to build a strong engaging relationship with the organisation as the brand is embedded in their life, making them more likely to forgive negative website interactivity perceptions. In the case of positive interactivity perceptions it is hypothesised that this would enhance existing relationships to enable higher levels of consumer engagement to develop.

Cheng et al. (2012) found that “consumers with high self-brand connections maintained favourable brand evaluations despite negative brand information” (p.280) concurring with the hypothesised moderating relationship. Escalas (2004) also stated that narrative processing related to self-brand connections,
positively influenced both brand attitude and purchase intentions so enhancing consumer-brand relationships. It is therefore hypothesised:

*H17: Self-brand connection has a moderator effect on the relationship between interactivity and emotional and cognitive CE*

Whilst interview respondents spoke about self-brand connection when asked what consumer engagement meant to them, many only discussed it in conjunction with specific brand examples with which they felt highly and consciously engaged. Also no interviewees acknowledged it as a stage or part of the CE process; therefore suggesting it to be a moderator. Example statements below demonstrate this:

[Asked about a brand she felt engaged with] ‘Not on the High Street - beautiful presentation, interesting product range and brand – I always look on here for gifts, as they’re quirky like my personality’ Cath, Consumer

‘An example would be Apple through their website, their interaction with consumers and how the brand is perceived – making it more readily adoptable for young people, they can be more passionate about the brand, and having an iPhone or iPad is part of who they are with their friends.’ Jane, Academic

[Talking about engagement with customers] 'It's completely based on who or what the brand represents’ Rob, Practitioner

Similar to trust and satisfaction, the identification of self-brand connection as a moderator in the interactivity-CE relationship is a new conceptual contribution. Some CE scholars acknowledge its role in the consumer engagement process, however previously this has been purely as an intrinsic feature and an element within its measurement (Gallup, 2009, Sprott et al., 2009). Gambetti et al. (2012)’s conceptual model also advocates this viewpoint with the end stage for consumer engagement, brand enacting including brand soul, so the embedding of the brand into a consumer’s life; as does Schmitt (2012) during the signifying process where the brand begins to become a identity signal or cultural symbol for the consumer. Overall further quantitative analysis is required to establish the strength of self-brand connection’s moderating effect.
5.5.4 Tolerance

Tolerance is a consumers' willingness to be patient or adapt if the service they receive doesn't meet their prior expectations or if there is a mistake during service delivery (Yi and Gong, 2013, Lengnick-Hall et al., 2000). Mistakes can include delays in delivery, product shortages, and faulty or damaged items.

It is hypothesised to have a moderating effect on the relationship between interactivity and both emotional and cognitive CE, as having tolerance as a predisposition means that consumers are less likely to quickly switch to an alternative brand or disengage with the organisations. They will be more willing to persevere with the service i.e. a negatively perceived interactivity experience for longer until it is rectified; giving the relationship more chance to develop and therefore build consumer engagement (especially if the service is corrected). In the case of consumers without an adequate level of tolerance, negatively perceiving website interactivity will cause them to disengage very quickly, halting the CE process and development.

Keaveney (1995) concurred finding that tolerance reduces switching behaviour. Johnston (1995) also stated that if the service a consumer receives is below their ‘zone of tolerance’ this will result in frustration and decreased loyalty; however if the service is significantly above their tolerance levels this is a pleasant surprise for them and it acts to strengthen the relationship. With loyalty being a relationship marketing construct and consumer engagement being an extension of this, this therefore concurs with the hypothesised effect that:

H18: Tolerance has a moderator effect on the relationship between interactivity and emotional and cognitive CE

Nearly a third of all interview respondents, nine out of twenty-eight acknowledged tolerance when asked about what CE meant to them; however they did not list it as a phase in the consumer engagement process. This, combined with the researcher’s knowledge of the extant literature suggests that tolerance is likely to be a moderator rather than an intrinsic CE factor. Example statements demonstrating this include:

‘People hate change to ‘their’ site or a change to their experience, this quickly puts me off engaging’ Peter, Consumer
[Talking about building CE] ‘And I think as long as…as long as you’re not ignoring that kind of situation everything is usually fixable. As a consumer I wouldn’t automatically leave the brand, I would be willing to be patient waiting for a response to an extent’. Rob, Practitioner

‘It doesn’t matter how interactive a website is if the consumer has no predisposition or interest in it as they won’t engage…So it’s also having the tolerance to interact or put up with bad interaction or experience’ Chris, Academic

Identifying tolerance as a moderator in the interactivity-CE relationship is a completely unique, new conceptual contribution. No previous consumer engagement research has acknowledged it as part of the CE process, not even as an antecedent or consequence. Given that this is the case, further quantitative analysis is required to confirm this finding, assess its overall moderating effect strength and also investigate which interactivity-CE factor relationships it influences.

5.5.5 Gender

One of the main research objectives of this study is to investigate the gender differences in which interactivity features influence CE. Due to this gender must therefore be hypothesised as a moderator on the relationship between interactivity and both emotional and cognitive consumer engagement:

H19: Gender has a moderator effect on the relationship between interactivity and emotional and cognitive CE

Extant literature suggests that gender could play an important role within the online shopping context, with Bignell (2013) reporting that 83% of all purchase are made by women and that “women’s shopping preferences are often poles apart from those of men” (p.1). Chalabi (2013) also stated that in 2013 27% of men, compared to 22% of women shopped online – highlighting the importance of understanding the most effective process and most suitable website characteristics for building relationships, and ultimately CE with both of the target audiences. Women tend to predominately buy clothing on food online, whereas men often purchase films, music, games and software (Chalabi, 2013).
Males and females may also exhibit and experience different preferences for certain interactivity features. For example Hu and Jasper (2004) stated that men are more likely to shop out of necessity or for a specific need, whereas women perceive shopping as a leisure and social activity and so tend to exhibit hedonistic shopping traits. This would suggest customisation, affordance and communication may be more important for female shoppers, whereas speed of response, navigation and control may be more influential for males. Other scholars agree, with Bae and Lee (2010) finding that online consumer reviews, so linked to the interactivity aspect of communication, have a stronger influence on females’ purchase intention compared to males; and Mintel (2014a) also highlighting that a third of women shopping online would like better images of products, linked to affordance.

The interviews highlighted some significant differences in the responses to questions about what made a website interactive; how brands should engage with consumers through their retail websites; and whether specific interactivity features had more impact on consumer engagement than others. Examining the male to female answer ratios for each of the interactivity features highlighted that both communication and navigation were perceived as equally important for both genders. Interestingly, males acknowledged the importance of affordance (88% vs. 63%) and control (76% vs. 55%) more than females. Example statements when asked about specific interactivity features having more impact on CE include:

**Affordance**

‘I mean some of them are really getting quite sophisticated as I understand it and you...you can go on and try a dress on and it’s a virtual avatar’....’ we usually think there’s an offline and an online and actually in retailing the two are sort of merging. Erm, but it’s such a moving target and I’m not an expert in the technology but...but I think all of that is changing, in a way that enables more engagement.’ Mike, Academic

‘Visual with solid descriptions to ensure what you order is what you want and get – not good to have to be sending things back due to misrepresentation’ Steve, Consumer
Control

‘Keep the site simple and don’t change it once customers are familiar with the layout and arrangement, as people need to feel in control of their journey through the website’ Peter, Consumer

‘I think its understanding your customer; I think its understanding your product, your customer and your marketplace. Without that you’re not going to be able to…to reach a level of high, high levels of interactivity. Customers need to feel in control as different customers want different things’ Anwar, Practitioner

On the other hand females highlighted the important role of customisation (82% vs. 65%) and speed of response (81% vs. 64%) more than males. Example statements when asked about specific interactivity features having more impact on CE include:

Customisation

‘ASOS for example, engaging on their like…on that like has different functionalities like it has suggestions for you’ Verity, Practitioner

‘Suggesting other products that you might personally be interested in. Keeping a note of the types of items that you come to that website for and showing you the latest product available that matches your needs’ Linda, Consumer

Speed of Response

‘Spend hours at home online so needs to be easy to use, instantaneous and quick to respond (this is why you don’t realise how long you have been online shopping due to these things)’ Jane, Academic

‘It is important that the website and any multimedia like this [talking about virtual dressing rooms] responds quickly too to keep people engaged and your site’ Verity, Practitioner

These findings concur that gender may act as a moderator by predetermining which website features men and women consider as being interactive and therefore are important in relationship building and developing engagement. The identification of gender as a moderator in the interactivity-CE relationship is
a new conceptual contribution with important managerial implications. This is
due to most research to date being very high level and focussing mainly on
defining, conceptualising and measuring consumer engagement, rather than
investigating what impacts its levels and the relationships it has with other
marketing constructs. Further quantitative analysis is required to test and also
confirm the strength of its moderating effect on each of the interactivity factors
relationship with emotional and cognitive CE.

5.6 Summary
This chapter has provided an overview of the emergent themes from the
qualitative research phase. The findings highlighted six interactivity factors:
communication, speed of response, customisation, navigation, affordance and
control; and six consumer engagement factors: emotional and experience (both
emotional CE), conscious connection and learning & insight (both cognitive CE);
commitment & participation behaviour and co-creation (both behavioural CE).
As well as these main constructs five moderating factors were also identified:
trust, satisfaction, self-brand connection, tolerance and gender. Figure 5.1
below presents the conceptual framework incorporating these factors, and also
the hypothesised relationships between them. The next chapter provides an
overview of the quantitative analysis used to assess each of these factors for
inclusion, test the strength and significance of the hypothesised relationships
and moderating effects, and also highlight the main findings.
Each individual interactivity feature is hypothesised to have a relationship with emotional CE and cognitive CE; all arrows haven’t been shown on the figure above to ensure it doesn’t become too cluttered to view.

Each individual moderating factor is hypothesised to have a moderating effect on the relationship between each interactivity feature and emotional CE and cognitive CE; all arrows haven’t been shown on the figure above to ensure it doesn’t become too cluttered to view.

Figure 5.1 - Conceptual Framework and hypotheses
6.0 Quantitative Research Findings

6.1 Introduction

This chapter provides an overview of the quantitative techniques employed in analysing the survey data, and their accompanying findings. Initial tests were utilised to assess the quality and usability of the data including screening for missing values, identification of outliers, and diagnosing normality, linearity and multi-collinearity. The sample demographics are also presented and compared to the UK population to ensure that the sample frame is representative and thus the findings can be generalised. In order to test the hypothesised model exploratory factor analysis was conducted to determine the factors for in-depth testing and also the construction of their scales, through elimination of low- and cross-loading items. Confirmatory factor analysis then assessed the validity and goodness of fit of the measurement model, before structural equation modelling was applied to identify the significant causal pathways and their strength. A critical ratio difference test was also used to highlight any moderator variables which had a significant effect on the relationship between interactivity and consumer engagement. A summary of the overall process used to check for the suitability of rival models is also provided.

6.2 Preliminary Analysis

During the preliminary analysis phase it is important to both screen and then clean the data file, as “careful analysis of the data leads to a better prediction and more accurate assessment of dimensionality” (Hair et al., 1998:35) in terms of reliability and validity. Screening tests included detection of coding errors, identification and treatment of missing values and outliers; as well as multivariate assumption tests on normality, linearity and multicollinearity. Carrying out these initial tests is vital in ensuring that the sample size and data quality are suitable and adequate enough for the subsequent data analysis techniques, for example exploratory and confirmatory factor analysis, and structural equation modelling (SEM).

6.2.1 Screening and Cleaning the Data

The data set was first examined for coding errors, following Pallant (2013)’s procedures and then screened to deal with missing data, using a delete case
approach for any incomplete responses. From a total of 600 consumers surveyed, 499 usable responses were gained from these initial cleaning processes. Data cases were removed based on incomplete responses, not providing an answer to the initial question which ensured an understanding of CE, key stroke pattern answering of all questions with the same response and also answering reversely worded questions (both with positive and negative questions relating to the same variable) with the same response- reducing response bias.

Following this initial screening a further three data cases were removed; one due to the respondent passing the pre-screener question set by the market research company linked to being an online shopper but then choosing the ‘never’ category within the survey when asked ‘how often do you shop online?’; and another two as they were identified as outliers. An outlier is “an observation that is substantially different from the other observations (i.e., has an extreme value)” (Hair et al., 1998:38), which can have an effect on uni- and multi-variate normality. This left a final usable sample size of 496, yielding a usable response rate of 83% from the original 600 responses gained.

6.2.2 Assessing Normality

Normal distribution of a data set would typically be demonstrated by a bell-shaped curve (Pole and Bondy, 2010). It is vital to assess normality prior to conducting structural equation modelling as non-normality can affect the validity of subsequent statistical tests (Schumacker and Lomax, 2010). This can be done through examination of the shape of distribution, using histograms; skewness, so the symmetry of distribution; and kurtosis, the peakedness of distribution.

It should be noted however that Tabachnick and Fidell (2013) acknowledge that tests used to evaluate both skewness and kurtosis values are too sensitive for samples larger than 200 cases, and that in such cases skewness does not make “a substantive difference in the analysis” (p.80). With the data set in this research being close to 500, instead their recommendation to examine the shape of the histogram was used. The mean and 5% trimmed means scores were also inspected and were shown to be close together, therefore highlighting that any extreme scores were not having a significant influence on the mean.
To aid in increasing normality, the data was also checked for both univariate and multivariate outliers (Gao et al., 2008). Univariate outliers were examined using box plots in SPSS, with outliers being classed as extreme cases (more than three box-lengths from the edge of the box), and falling at the outer ranges of distribution (Pallant, 2013, Hair et al., 1998). Multivariate outliers were also analysed through the Mahalanobis d-squared measure, which calculates each cases distance from the centroid or mean of all other cases/variables (Pallant, 2013). Some high values were shown for Mahalanobis distance squared, however all other cases were retained as they were shown to have Cook’s distance scores below 1.0, suggesting that they were not influential. Through these two detection methods a total of two cases, 10 and 409, were removed to increase normality. This showed a significant improvement in model fit when the confirmatory factor analysis was later re-examined in AMOS.

6.2.3 Linearity

Linearity is the multivariate assumption which relates to the consistent measure of a correlation, i.e. a linear relationship between an independent and dependent variable. It is important to check that all of the relationships are linear within the hypothesised framework, as correlations in AMOS only represent such relationships. Non-linearity can therefore result in problems during subsequent factor analysis and SEM by underestimating relationship strength (Hair et al., 1998).

A curve estimation test was conducted on all of the relationships within the conceptual framework, and all were found to have strong linear f-values and be significant at .000. All of these relationships were therefore linear in nature and could be taken forward and tested using structural equation modelling.

6.2.4 Multicollinearity

Multicollinearity occurs when there are high, overlapping inter-correlations between independent variables, resulting in a lack of unique variance in explaining the dependent variable for each. For this reason multicollinearity within the data is undesirable and tests should be carried out to assess it prior to subsequent SEM analysis. Two separate calculations were conducted; variance inflation factor (VIF) and tolerance.
For both the tolerance and VIF calculations “each independent variable becomes a dependent variable and is regressed against the remaining independent variables”; with tolerance measuring the “amount of variability of a selected independent variable not explained by the other independent variables” and VIF “the impact that the standard error of a regression coefficient obtains from other independent variables” (Hair et al., 1998:193). To conduct these tests composite variables were created for each of the independent variables remaining after factor analysis, so that they could be tested in SPSS using a linear regression test. These variables were speed, communication, customisation and control. Table 6.1 below illustrates both the VIF and tolerance scores for these.

Table 6.1 - Multicollinearity statistics

<table>
<thead>
<tr>
<th>Construct</th>
<th>VIF</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>1.517</td>
<td>.659</td>
</tr>
<tr>
<td>Communication</td>
<td>1.344</td>
<td>.744</td>
</tr>
<tr>
<td>Customisation</td>
<td>1.636</td>
<td>.611</td>
</tr>
<tr>
<td>Control</td>
<td>1.428</td>
<td>.700</td>
</tr>
</tbody>
</table>

The table above shows that the data adhered to the threshold levels of both tests, with tolerance being above the recommended 0.10 and VIF below 10.0 (O'Brien, 2007), hence no multicollinearity issues were reported.

6.3 Descriptive Statistics

This section summarises the key demographic frequencies of the final sample profile in terms of gender, age, education, marital status, ethnicity, online shopping frequency and hours spent online daily. Table 6.2 below provides an overview of this data.

Table 6.2 – Sample demographics overview
<table>
<thead>
<tr>
<th>Demographic</th>
<th>Options</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>237</td>
<td>47.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>259</td>
<td>52.2</td>
</tr>
<tr>
<td>Age</td>
<td>18-25</td>
<td>84</td>
<td>16.9</td>
</tr>
<tr>
<td></td>
<td>26-35</td>
<td>136</td>
<td>27.4</td>
</tr>
<tr>
<td></td>
<td>36-45</td>
<td>109</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>46-55</td>
<td>99</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>56-65</td>
<td>68</td>
<td>13.7</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>180</td>
<td>36.3</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>214</td>
<td>43.1</td>
</tr>
<tr>
<td></td>
<td>Living Together</td>
<td>94</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>8</td>
<td>1.6</td>
</tr>
<tr>
<td>Education</td>
<td>Less than GSCE</td>
<td>17</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>GCES’s</td>
<td>108</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>A Levels</td>
<td>124</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Bachelors Degree</td>
<td>174</td>
<td>35.1</td>
</tr>
<tr>
<td></td>
<td>Postgraduate Degree</td>
<td>56</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>17</td>
<td>3.4</td>
</tr>
<tr>
<td>Occupation</td>
<td>Employed</td>
<td>308</td>
<td>62.1</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>39</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>65</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>67</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>17</td>
<td>3.4</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>449</td>
<td>90.5</td>
</tr>
<tr>
<td></td>
<td>Mixed/Multiple Ethnicity</td>
<td>10</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>24</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>8</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>Online Shopping</td>
<td>Daily</td>
<td>40</td>
<td>8.1</td>
</tr>
<tr>
<td>Frequency</td>
<td>Weekly</td>
<td>231</td>
<td>46.6</td>
</tr>
<tr>
<td></td>
<td>Fortnightly</td>
<td>121</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>Monthly</td>
<td>101</td>
<td>20.4</td>
</tr>
<tr>
<td></td>
<td>Yearly</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>Hours Spent Online</td>
<td>Less than one hour</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td>Everyday</td>
<td>1-2 hours</td>
<td>79</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>2-4 hours</td>
<td>167</td>
<td>33.7</td>
</tr>
<tr>
<td></td>
<td>4-6 hours</td>
<td>115</td>
<td>23.2</td>
</tr>
<tr>
<td></td>
<td>6-8 hours</td>
<td>61</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>More than 8 hours</td>
<td>68</td>
<td>13.7</td>
</tr>
</tbody>
</table>

The results show that the sample can be considered as representative of the UK online shopper characteristics and therefore more easily generalised. This is due to 47.8% of the respondents being male and 52.2% being female; corresponding closely to the UK population where 49.19% are male and 50.91% are female (ons.gov.uk, 2014b). The very slight deviation from the statistics however, may be explained by findings that on average women shop
The employment demographics also closely match the national statistics that identify that 73.3% of the UK population are employed or in higher education (ons.gov.uk, 2015). The demographics reflect this with employed and student respondents cumulatively making up 70% of the sample profile.

The ethnicity of the participants was predominantly white (90.5%), which was expected given that the survey was conducted in the UK. There were also 2.0% mixed, 4.8% Asian, 1.6% black and 0.6% Chinese respondents within the sample. These figures are also consistent with figures from the National Office of Statistics which reported a UK breakdown of ethnicities as 91% white, 1.4% mixed, 4.6% Asian, 2.2% black and 0.8% Chinese (ons.gov.uk, 2011).

Whilst the online shopping frequency and hours spent online every day statistics do not match the UK population, they do however represent online shopper characteristics, with (Sky News, 2013) stating that 73% of people shop online at least once a month. The high amount of hours spent online is also expected given that online shoppers are likely to be tech savvy and so their jobs and social time may have an increased amount of interaction with the internet.

The next stage is to conduct an exploratory factor analysis to condense the large amount of original variables and scale items into a smaller more manageable set, whilst minimising any loss of information contained within the data set (Hair et al., 2006).

### 6.4 Exploratory Factor Analysis

Exploratory factor analysis (EFA) is a data summarisation and reduction technique conducted using SPSS. It is different from many other statistical analysis techniques e.g. multiple regression and multivariate analysis that aim to predict variables influence on each other. Instead it examines the interdependence between all variables concurrently, to identify their structure. To do this EFA takes a large set of variables and identifies ways that they can be grouped together to create a smaller set of factors, through looking for patterns or inter-correlations amongst variables (Pallant, 2013). This ensures a minimal loss of information, ensuring the nature of the original variables is maintained in the new factors.
The two main types of factor analysis are exploratory and confirmatory (CFA); with EFA ‘exploring’ the structure of variables for summarisation and reduction purposes, and CFA ‘confirming’ hypotheses and assessing whether the data meets an expected structure. The latter type of factor analysis is a much more in-depth process. Whilst EFA assumes that the researcher has no prior knowledge that the items measure the intended factors, CFA is the opposite and is based on the researcher possessing prior knowledge as to the structure of the variables, either through examining theory or empirical testing (Byrne, 2001).

This research utilises the two step approach (Anderson and Gerbing, 1988), conducting both exploratory and confirmatory factor analysis on the same data set and using the EFA as “one step from classical measurement theory towards the measurement model of SEM” (Blunch, 2013:73). This is due to the researcher operationalising existing scales for each construct and having prior knowledge to how items and constructs interact, through the literature review and qualitative findings; however the specific collaboration of constructs and items has never been tested together in one conceptual before.

The five-step factor analysis process outlined by Williams et al. (2010) of assessing the suitability of the data, factor extraction method, criteria for factor extraction, selection of rotation method and interpretation is also followed in this study.

6.4.1 Suitability of Data for Exploratory Factor Analysis

To assess the suitability of the data set for EFA a number of steps were taken. The first was to ensure that the sample size was sufficiently large enough to warrant using the technique, which needs to be over 150 participants according to Tabachnick and Fidell (2013). With the research yielding 496 usable responses this condition for use was fulfilled. For the next phase, the correlation matrix was evaluated to ensure substantial coefficients, above 0.3 (Tabachnick and Fidell, 2013) were evident. This was the case for most of the factor items, so informing the data’s appropriateness for subsequent factor analysis.

Further measurements used to assess the data’s factorability were Bartlett’s test of sphericity (Bartlett, 1954) and the Kaiser-Meyer-Olkin (KMO) measure of
sampling adequacy (Kaiser, 1974). For the data set to be considered appropriate for factor analysis Bartlett’s test of sphericity should be significant (p<0.05) and have a KMO of 0.6 as a minimum score. The research sample recorded significance at .000 and .961, adhering to the requirements.

6.4.3 Factor Extraction and Interpretation

The most common procedure utilised for extracting factors from a data set is principle component analysis (PCA). During PCA “the original variables are transformed into a smaller set of linear combinations, with all of the variance in the variables being used” (Pallant, 2013:189). It has been chosen in this research due to it maximising variance, being mathematically simpler and helping to avoid factor interdependency problems (Steven, 1996). Also due to no prior model for the interactivity-consumer engagement link existing (Gorsuch, 1983).

When conducting principle component analysis the first procedural decision is to determine the number of factors to be extracted. Due to the complex nature of factor analysis Thompson and Daniel (1996) recommend concurrent use of multiple decision aiding methods. Both Kaiser’s criterion (Kaiser, 1958) and Catell’s scree test (Cattell, 1966) can assist in this assessment. Kaiser’s criterion states that only factors with an eigenvalue greater than 1.0 should be considered significant; whereas the scree test graphically plots these eigenvalues, showing factors above the elbow point as contributors to variance in the data set- these were therefore retained. It should be noted however that Kaiser’s criterion has often been criticised for extracting too many factors (Fabrigar et al., 1999). For this reason a second procedural decision, specifying maximum cross loadings and minimum item loadings was implemented. Cross loadings of 0.4 or below and factor loadings of 0.6 or above were considered to be acceptable (Hair et al., 2006).

The third and final decision relates to the rotation method selected; orthogonal (uncorrelated) versus oblique (correlated). Factor rotation compresses the data, clumping factors together which are highly correlated and therefore making it simpler to interpret. Tabachnick and Fidell (2013) state that orthogonal rotations are easier to examine as the factors are represented independently and uncorrelated. For this reason the most commonly used orthogonal method,
Varimax rotation was used. Table 6.3 below shows the initial rotated factor matrix.

**Table 6.3 – Initial rotated factor matrix**

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMOT4</td>
<td>.778</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMOT6</td>
<td>.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMOT1</td>
<td>.750</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMOT2</td>
<td>.748</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP1</td>
<td>.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMOT5</td>
<td>.724</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP2</td>
<td>.718</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMOT3</td>
<td>.670</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP4</td>
<td>.648</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSC3</td>
<td>.647</td>
<td>.445</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP6</td>
<td>.629</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSC1</td>
<td>.579</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSC2</td>
<td>.571</td>
<td>.322</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCREAT4</td>
<td>.730</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCREAT3</td>
<td>.726</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCREAT1</td>
<td>.692</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCREAT2</td>
<td>.301</td>
<td>.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCREAT5</td>
<td>.304</td>
<td>.628</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN3</td>
<td>.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COCREAT6</td>
<td>.304</td>
<td>.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN2</td>
<td>.602</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN7</td>
<td>.321</td>
<td>.573</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN4</td>
<td>.535</td>
<td></td>
<td>.350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN6</td>
<td>.528</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN1</td>
<td>.525</td>
<td>.329</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARN5</td>
<td>.339</td>
<td>.443</td>
<td></td>
<td>.366</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMIT1</td>
<td>.394</td>
<td>.411</td>
<td>.363</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMIT3</td>
<td>.383</td>
<td>.403</td>
<td>.385</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL9</td>
<td>.345</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL3</td>
<td>.847</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL2</td>
<td>.827</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL1</td>
<td>.783</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL4</td>
<td>.711</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL5</td>
<td>.639</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL7</td>
<td>.637</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAV3</td>
<td>.605</td>
<td>.415</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAV2</td>
<td>.593</td>
<td>.316</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAV1</td>
<td>.496</td>
<td></td>
<td>.338</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRUST4</td>
<td>.871</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT1</td>
<td>.835</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRUST2</td>
<td>.775</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT3</td>
<td>.739</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRUST3</td>
<td>.726</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT5</td>
<td>.701</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRUST1</td>
<td>.630</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF6</td>
<td>.469</td>
<td>.729</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF5</td>
<td>.422</td>
<td>.709</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF1</td>
<td>.425</td>
<td>.692</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF3</td>
<td>.391</td>
<td>.317</td>
<td>.655</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF4</td>
<td>.417</td>
<td>.653</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF2</td>
<td>.313</td>
<td>.325</td>
<td>.638</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMIT2</td>
<td>.445</td>
<td>.402</td>
<td>.499</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMIT4</td>
<td>.354</td>
<td></td>
<td>.478</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF7</td>
<td>.372</td>
<td>.329</td>
<td>.456</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM2</td>
<td></td>
<td></td>
<td>.850</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM4</td>
<td></td>
<td></td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM1</td>
<td></td>
<td></td>
<td>.784</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM3</td>
<td></td>
<td></td>
<td>.752</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM6</td>
<td></td>
<td></td>
<td>.570</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOM2</td>
<td></td>
<td></td>
<td>.675</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOM3</td>
<td></td>
<td></td>
<td>.644</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOM1</td>
<td>.369</td>
<td>.604</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOM4</td>
<td>.335</td>
<td></td>
<td>.537</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOM5</td>
<td></td>
<td>.472</td>
<td>.309</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPEED6</td>
<td></td>
<td>.438</td>
<td>.365</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The analysis revealed an initial eleven factors, based on retaining eigenvalues of 1.0 and above, however after more in-depth examination and ‘cleaning up’ a final eight values were maintained following EFA. This was through the application of maximum cross loading and minimum item loading rules, and also the researchers judgement based on prior knowledge of the constructs (Pallant, 2013). The items highlighted in blue in Table 6.3 above represent the removed factor items. The retained factors were therefore:

- Factor 1 – Emotional Consumer Engagement
- Factor 2 – Cognitive/Behavioural Consumer Engagement
- Factor 3 – Control
- Factor 4 – Satisfaction & Trust
- Factor 6 – Communication
- Factor 7 – Customisation
- Factor 8 – Speed of Response
- Factor 10 – Tolerance

The below discussion presents a justification for the reduced and retained factor list and also provides an overview and explanation of the three factors (5, 9 and 11) which were removed through EFA.

**Factor 1: Emotional Consumer Engagement**

The items initially loading on this factor were from the constructs of emotional, experience and conscious connection. A total of thirteen items loaded: EMOT
1,2,3,4,5,6; EXP 1,2,4,6 and CONSC 1,2,3 – combined these accounted for 13.24% of the variance, making it the largest factor.

Ten items loaded heavily on Factor 1 with values of: .778 (EMOT4), .766 (EMOT6), .750 (EMOT1), .748 (EMOT2), .742 (EXP1), .724 (EMOT5), .718 (EXP2), .670 (EMOT3), .648 (EXP4) and .629 (EXP6). These were retained for further analysis, with three items i.e. CONSC1, CONSC2 and CONSC3 being deleted due to low item loadings below 0.6 or cross-loading above 0.4. This meant that the final factor was purely constructed of emotional and experience construct items.

**Factor 2: Cognitive/Behavioural Consumer Engagement**

The items initially loading on this factor were from the constructs of co-creation, learning & insight, commitment and control. A total of sixteen items loaded: COCREAT 1,2,3,4,5,6; LEARN 1,2,3,4,5,6,7; COMMIT 1,3 and CONTROL 9 – combined these accounted for 10.40% variance.

Eight items loaded heavily on Factor 2 with values of: .730 (COCREAT4), .726 (COCREAT3), .692 (COCREAT1), .682 (COCREAT2), .628 (COCREAT5), .620 (LEARN3), .620 (COCREAT6) and .602 (LEARN2). These were maintained for further analysis, with all of the other eight items being deleted due to low item loadings below 0.6. This meant that the final factor was purely constructed of co-creation and learning & insight construct items.

**Factor 3: Control**

The items initially loading on this factor were from the constructs of control and navigation. A total of nine items loaded: CONTROL 1,2,3,4,5,7 and NAV 1,2,3 – combined these accounted for 9.10% variance.

Six items loaded heavily on Factor 3 with values of: .847 (CONTROL3), .827 (CONTROL2), .783 (CONTROL1), .711 (CONTROL4), .639 (CONTROL5) and .637 (CONTROL7). These were maintained for further analysis, with all of the other three navigation items being deleted due to low item loadings below 0.6 or high cross-loadings above .04. This meant the final factor was constructed purely of control construct items.
Factor 4: Satisfaction & Trust

The items initially loading on this factor were from the constructs of satisfaction and trust. A total of seven items loaded: SAT 1,3,5 and TRUST 1,2,3,4 - combined these accounted for 8.26% variance.

All seven items loaded heavily on Factor 4 with values of: .871 (TRUST4), .835 (SAT1), .775 (TRUST2), .739 (SAT3), .726 (TRUST3), .701 (SAT5) and .630 (TRUST1). For this reason all items were considered appropriate for subsequent analysis and no items were removed, instead the initial two separate constructs were parcelled together to create the one combined construct of Satisfaction & Trust.

Factor 5: Self-Commitment (removed)

The items initially loading on this factor were from the constructs of self-brand connection and commitment. A total of nine items loaded: SELF 1,2,3,4,5,6,7 and COMMIT 2,4 – combined these accounted for 6.74% variance.

All nine items either cross-loaded heavily above 0.4 or over multiple factors; or had low item loadings below 0.6 and so factor 5 and the accompanying items were eliminated from any further analysis.

Factor 6: Communication

The items initially loading on this factor were from the construct of communication. A total of five items loaded: COM 1,2,3,4,6 – combined these accounted for 5.66% variance.

Four items loaded heavily on Factor 6 with values of: .850 (COM2), .785 (COM4), .784 (COM1) and .752 (COM3). These were maintained for further analysis, with only COM6 being deleted due to low item loading below 0.6.

Factor 7: Customisation

The items initially loading on this factor were from the construct of customisation. A total of five items loaded: CUSTOM 1,2,3,4,5 – combined these accounted for 4.20% variance.
Three items loaded heavily on Factor 7 with values of: .675 (CUSTOM2), .644 (CUSTOM3) and .604 (CUSTOM1). These were maintained for further analysis, with CUSTOM4 and CUSTOM5 being deleted due to low item loadings below 0.6 or high cross-loadings above .04.

Factor 8: Speed of Response

The items initially loading on this factor were from the construct of speed of response. A total of five items loaded: SPEED 1,2,3,4,6 – combined these accounted for 4.00% variance.

Three items loaded heavily on Factor 8 with values of: .711 (SPEED2), .701 (SPEED3), .645 (SPEED4). These were maintained for further analysis, with the other two items for SPEED being deleted due to low item loadings below 0.6 or high cross-loadings above .04.

Factor 9: Affordance (removed)

The items initially loading on this factor were from the construct of affordance. A total of three items loaded: AFFORD 1,2,3 – combined these accounted for 3.20% variance.

All three items had low item loadings below 0.6 and so factor 9 and the accompanying items were eliminated from any further analysis.

Factor 10: Tolerance

The items initially loading on this factor were from the construct of tolerance. A total of three items loaded: TOLER 1,2,3,– combined these accounted for 3.07% variance.

Three items loaded heavily on Factor 10 with values of: .823 (TOLER2), .816 (TOLER3) and .666 (TOLER1). For this reason all items were considered appropriate for subsequent analysis and no items were removed.

Factor 11: Unknown (removed)
The items initially loading on this factor were from the constructs of commitment and navigation. A total of three items loaded: COMMIT 1,3 and NAV 1 – combined these accounted for 1.94% variance.

All three items had low item loadings below 0.6 and also multiple cross loadings, so factor 11 and the accompanying items were eliminated from any further analysis.

Through conducting EFA the initial list of items was reduced from 75 to 44 items. It should be noted that the constructs of navigation, affordance, commitment & participation behaviour and conscious connection presented in the theoretical framework in Chapter 5, were completely eliminated as a result of EFA. Also parcelling occurred to create one measurement for emotional CE (emotion and experience); cognitive/behavioural CE (co-creation and learning & insight); and satisfaction & trust. Due to high inter-correlations between the two contributing constructs i.e. over 0.5 this was considered to be feasible (Hair et al., 2006, Pallant, 2013). Table 6.4 below presents this final item list taken forward for further confirmatory structure testing, with structural equation modelling.

Table 6.4 – List of final scale items after EFA

<table>
<thead>
<tr>
<th>No</th>
<th>Item Code</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Emotional Consumer Engagement</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>EMOT1</td>
<td>My feelings toward the brand can be characterized by affection</td>
</tr>
<tr>
<td>2</td>
<td>EMOT2</td>
<td>My feelings toward the brand can be characterized by love</td>
</tr>
<tr>
<td>3</td>
<td>EMOT3</td>
<td>My feelings toward the brand can be characterized by connection</td>
</tr>
<tr>
<td>4</td>
<td>EMOT4</td>
<td>My feelings toward the brand can be characterized by passion</td>
</tr>
<tr>
<td>5</td>
<td>EMOT5</td>
<td>My feelings toward the brand can be characterized by delight</td>
</tr>
<tr>
<td>6</td>
<td>EMOT6</td>
<td>My feelings toward the brand can be characterized by captivation</td>
</tr>
<tr>
<td>7</td>
<td>EXP1</td>
<td>This brand makes a strong impression on my visual sense or other senses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I find this brand interesting in a sensory way</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9</td>
<td>EXP4</td>
<td>This brand induces feelings and sentiments</td>
</tr>
<tr>
<td>10</td>
<td>EXP6</td>
<td>This brand is an emotional brand</td>
</tr>
</tbody>
</table>

**Cognitive/Behavioural Consumer Engagement**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>I feel the brand interacts with customers to serve them better.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>COCREAT1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>COCREAT2</td>
<td>I feel the brand works together with customers to produce offerings that mobilize them</td>
</tr>
<tr>
<td>13</td>
<td>COCREAT3</td>
<td>I feel the brand interacts with customers to design offerings that meet their needs</td>
</tr>
<tr>
<td>14</td>
<td>COCREAT4</td>
<td>I feel the brand provides services for and in conjunction with customers</td>
</tr>
<tr>
<td>15</td>
<td>COCREAT5</td>
<td>I feel the brand co-opts involvement in providing services for them</td>
</tr>
<tr>
<td>16</td>
<td>COCREAT6</td>
<td>I feel the brand provides customers with supporting systems to help them get more value</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>I feel the brand defines its products/services from customers’ perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>LEARN2</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>LEARN3</td>
<td>I feel the brand has specific customer-care objectives</td>
</tr>
</tbody>
</table>

**Control**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>While on the site I always feel aware of where I am</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>CONTROL1</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>CONTROL2</td>
<td>While on the site I always know where I am going</td>
</tr>
<tr>
<td>21</td>
<td>CONTROL3</td>
<td>While on the site I am always able to go where I think I am going</td>
</tr>
<tr>
<td>22</td>
<td>CONTROL4</td>
<td>I am delighted to be able to choose which link and when to click it</td>
</tr>
<tr>
<td>23</td>
<td>CONTROL5</td>
<td>I feel that I have a great deal of control over my visiting experience on the site</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>While on the site I can choose freely what I want to see</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>CONTROL7</td>
<td></td>
</tr>
</tbody>
</table>

**Satisfaction & Trust**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>I am satisfied with my decision to purchase from this website</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>SAT1</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>SAT3</td>
<td>My choice to purchase from this website was a wise one</td>
</tr>
<tr>
<td>27</td>
<td>SAT5</td>
<td>I think I did the right thing by buying from this website</td>
</tr>
<tr>
<td>28</td>
<td>TRUST1</td>
<td>The performance of this website meets my expectations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>TRUST2</td>
<td>This website can be counted on to successfully complete the transaction</td>
</tr>
<tr>
<td></td>
<td>TRUST3</td>
<td>I can trust the performance of this website to be good</td>
</tr>
<tr>
<td></td>
<td>TRUST4</td>
<td>This website is reliable for online shopping</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td></td>
<td>COM1</td>
<td>This website facilitates two-way communication</td>
</tr>
<tr>
<td></td>
<td>COM2</td>
<td>The website gives me the opportunity to talk back</td>
</tr>
<tr>
<td></td>
<td>COM3</td>
<td>The website feeds back relevant communication</td>
</tr>
<tr>
<td></td>
<td>COM4</td>
<td>The website enables conversation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customisation</td>
</tr>
<tr>
<td></td>
<td>CUSTOM1</td>
<td>The website makes purchase recommendations that match my needs</td>
</tr>
<tr>
<td></td>
<td>CUSTOM2</td>
<td>The website enables me to order products that are tailor-made for me</td>
</tr>
<tr>
<td></td>
<td>CUSTOM3</td>
<td>The advertisements and promotions that this website sends to me are tailored to my situation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speed of Response</td>
</tr>
<tr>
<td></td>
<td>SPEED2</td>
<td>Getting information from the website site is very fast</td>
</tr>
<tr>
<td></td>
<td>SPEED3</td>
<td>I was able to obtain the information I want without any delay</td>
</tr>
<tr>
<td></td>
<td>SPEED4</td>
<td>When I clicked on the links, I felt I was getting instantaneous information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td></td>
<td>TOLER1</td>
<td>If service is not delivered as expected I would be willing to put up with it</td>
</tr>
<tr>
<td></td>
<td>TOLER2</td>
<td>If a mistake is made during service delivery I would be willing to be patient</td>
</tr>
<tr>
<td></td>
<td>TOLER3</td>
<td>If I have to wait longer than I normally expected to receive the service I would be willing to adapt</td>
</tr>
</tbody>
</table>

### 6.4.2 Construct Reliability

Reliability is the extent to which a set of scale items/variables are consistent with what they are meant to be measuring e.g. does two-way communication, opportunity to talk back, feedback of relevant information and conversation
enabling actually measure communication interactivity on a website. Hair et al. (2006) states that if “multiple measurements are taken, reliable measures will all be very consistent in their values” (p.90). For this reason three measurements were used to assess internal consistency: inter-item correlation, Cronbach’s alpha coefficient, and item-to-total correlation.

To ensure scale reliability inter-item correlation should be evaluated to ensure high correlation among items from the same construct. To adhere to this coefficients should be greater than 0.3 (Tabachnick and Fidell, 2013). All of the items within the eight factors were examined in the correlation matrix and the majority were found to be above this cut-off value for reliability.

Item-to-total correlation was also used to measure how each of the individual items correlated to the overall score for each scale. Analysing this helps in identifying if any items are measuring something completely different from the rest of the scale (Pallant, 2013). Hair et al. (2006) suggests that item-to-total correlations should be above 0.5 to ensure high levels of reliability. Tables 6.5 to 6.12 below present the mean, corrected item-total correlation, and cronbach’s alpha if item deleted for each of the eight factors, to be able to assess item-to-total correlation.

Table 6.5 – Reliability measures for emotional CE

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMOT1</td>
<td>4.63</td>
<td>.782</td>
<td>.930</td>
</tr>
<tr>
<td>EMOT2</td>
<td>4.10</td>
<td>.779</td>
<td>.930</td>
</tr>
<tr>
<td>EMOT3</td>
<td>4.87</td>
<td>.733</td>
<td>.932</td>
</tr>
<tr>
<td>EMOT4</td>
<td>4.28</td>
<td>.792</td>
<td>.929</td>
</tr>
<tr>
<td>EMOT5</td>
<td>4.72</td>
<td>.783</td>
<td>.930</td>
</tr>
<tr>
<td>EMOT6</td>
<td>4.60</td>
<td>.796</td>
<td>.929</td>
</tr>
<tr>
<td>EXP1</td>
<td>4.68</td>
<td>.779</td>
<td>.930</td>
</tr>
<tr>
<td>EXP2</td>
<td>4.45</td>
<td>.769</td>
<td>.931</td>
</tr>
<tr>
<td>EXP4</td>
<td>4.45</td>
<td>.656</td>
<td>.936</td>
</tr>
<tr>
<td>EXP6</td>
<td>4.02</td>
<td>.638</td>
<td>.937</td>
</tr>
</tbody>
</table>
Table 6.6 – Reliability measures for cognitive/behavioural CE

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>COCREAT1</td>
<td>5.15</td>
<td>.816</td>
<td>.933</td>
</tr>
<tr>
<td>COCREAT2</td>
<td>5.05</td>
<td>.812</td>
<td>.933</td>
</tr>
<tr>
<td>COCREAT3</td>
<td>5.11</td>
<td>.846</td>
<td>.931</td>
</tr>
<tr>
<td>COCREAT4</td>
<td>5.13</td>
<td>.842</td>
<td>.931</td>
</tr>
<tr>
<td>COCREAT5</td>
<td>4.96</td>
<td>.797</td>
<td>.934</td>
</tr>
<tr>
<td>COCREAT6</td>
<td>5.09</td>
<td>.803</td>
<td>.934</td>
</tr>
<tr>
<td>LEARN2</td>
<td>5.34</td>
<td>.718</td>
<td>.939</td>
</tr>
<tr>
<td>LEARN3</td>
<td>5.27</td>
<td>.702</td>
<td>.941</td>
</tr>
</tbody>
</table>

Table 6.7 – Reliability measures for control

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL1</td>
<td>5.66</td>
<td>.746</td>
<td>.901</td>
</tr>
<tr>
<td>CONTROL2</td>
<td>5.63</td>
<td>.796</td>
<td>.894</td>
</tr>
<tr>
<td>CONTROL3</td>
<td>5.63</td>
<td>.855</td>
<td>.887</td>
</tr>
<tr>
<td>CONTROL4</td>
<td>5.51</td>
<td>.797</td>
<td>.989</td>
</tr>
<tr>
<td>CONTROL5</td>
<td>5.56</td>
<td>.739</td>
<td>.902</td>
</tr>
<tr>
<td>CONTROL7</td>
<td>5.61</td>
<td>.666</td>
<td>.913</td>
</tr>
</tbody>
</table>

Table 6.8 – Reliability measures for satisfaction & trust

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUST1</td>
<td>5.56</td>
<td>.732</td>
<td>.933</td>
</tr>
<tr>
<td>TRUST2</td>
<td>5.71</td>
<td>.829</td>
<td>.925</td>
</tr>
<tr>
<td>TRUST3</td>
<td>5.70</td>
<td>.801</td>
<td>.927</td>
</tr>
<tr>
<td>TRUST4</td>
<td>5.76</td>
<td>.853</td>
<td>.922</td>
</tr>
<tr>
<td>SAT1</td>
<td>5.76</td>
<td>.845</td>
<td>.923</td>
</tr>
</tbody>
</table>
Table 6.9 – Reliability measures for communication

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT3</td>
<td>5.59</td>
<td>.790</td>
<td>.928</td>
</tr>
<tr>
<td>SAT5</td>
<td>5.59</td>
<td>.731</td>
<td>.934</td>
</tr>
</tbody>
</table>

Table 6.10 – Reliability measures for customisation

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOM1</td>
<td>5.18</td>
<td>.676</td>
<td>.771</td>
</tr>
<tr>
<td>CUSTOM2</td>
<td>4.85</td>
<td>.690</td>
<td>.762</td>
</tr>
<tr>
<td>CUSTOM3</td>
<td>4.94</td>
<td>.698</td>
<td>.753</td>
</tr>
</tbody>
</table>

Table 6.11 – Reliability measures for speed

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEED2</td>
<td>5.61</td>
<td>.771</td>
<td>.785</td>
</tr>
<tr>
<td>SPEED3</td>
<td>5.54</td>
<td>.787</td>
<td>.764</td>
</tr>
<tr>
<td>SPEED4</td>
<td>5.46</td>
<td>.674</td>
<td>.875</td>
</tr>
</tbody>
</table>

Table 6.12 – Reliability measures for tolerance

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
</table>
### Tables 6.5 to 6.12 above show that all of the scale items, except one (TOLER1) are above the 0.5 item-correlation threshold. With TOLER1 being 0.496, so very close to the required value all items were maintained for subsequent CFA testing. The tables also present the Crohbach’s alpha coefficient value for each scale. This is the most commonly used measure for checking the internal consistency of a whole scale. For a scale to be considered as having good internal consistency it should have a Cronbach alpha value of 0.7 or above (DeVellis, 2012). All eight of the factors in this research were shown to have values above this cut-off point, with all except tolerance being above 0.8 and therefore having ‘very good’ internal reliability (Pallant, 2013).

<table>
<thead>
<tr>
<th>TOLER1</th>
<th>3.94</th>
<th>.496</th>
<th>.855</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLER2</td>
<td>4.79</td>
<td>.678</td>
<td>.639</td>
</tr>
<tr>
<td>TOLER3</td>
<td>4.56</td>
<td>.700</td>
<td>.609</td>
</tr>
</tbody>
</table>

### 6.5 The Measurement Model in SEM: Confirmatory Factor Analysis

Structural equation modelling is a tool used for testing hypothesised structures and confirming theories (Blunch, 2013). It enables more complex, multidimensional relationships to be tested through a combination of multivariate analysis techniques, “to estimate a series of interrelated dependence relationships independently” (Hair et al., 2006:583). These are analysed through goodness-of-fit and standardised paths. SEM can be separated into two sub models: the measurement model and the structural model.

The initial measurement model or CFA “provides a link between scores on a measuring instrument (i.e. observed indicator variables) and the underlying constructs they are designed to measure (i.e. the unobserved latent variables)” (Byrne, 2001:12); testing the validity and dimensionality of the constructs. CFA also enables multi-group analysis of the structural equations, allowing moderating effects to be calculated within the same model. Unlike EFA, the researcher has control over specifying which variables characterise and belong to each construct factor (Hair et al., 2006). The structural model on the other hand is used to represent the inter-relationships between constructs and therefore test causal relationships with the hypotheses. Many researchers
advocate a two-step analysis in SEM, whereby the measurement model is first analysed and confirmed before being set for the subsequent structural model phase. This is because “accurate representation of the reliability of the indicators is best accomplished in two steps to avoid the interaction between the measurement and structural models” (Hair et al., 2006:600).

Before conducting CFA or SEM there are some important issues that the researcher must consider. The first relates to whether the sample size is large enough to provide sufficient statistical power and therefore enable it to be used in SEM analysis. Although there is much literary debate over ideal sample size, the useable sample of 496 in this research fulfils both Garver and Mentzer (1999)’s 200 response and Tabachnick and Fidell (2013)’s 300 response minimum thresholds. Next the researcher must decide which type of aggregation to use in modelling the constructs; total aggregation, partial aggregation or disaggregation. Disaggregation involves utilising each individual item within constructs as an indicator of the latent variables. Bagozzi and Foxall (1996) state that the main drawbacks of information loss and obscured component distinctiveness found in total aggregation can be overcome through disaggregation. For these reasons and the study also wanting to account for variances with both individual and latent variables, this aggregation type was selected.

Another highly debated consideration concerns the correct amount of items per construct. Groenland and Stalpers (2012) suggest a method of starting with 5-7 items per factor, and using CFA to remove any ‘bad’ indicators, which should result in at least 3-4 items remaining items to create the structural model. Decisions about which items need trimming during this process should be informed by the researcher’s prior knowledge of the constructs and also theory. In some cases two items per factor can also be accepted to show validity in SEM (Raubenheimer, 2005). These item requirements were met in this research, with the software chosen - AMOS 22 and SPSS 22 help in this. AMOS was selected for its user-friendliness and also due to it aiding in finding parsimony, so identifying the simplest, best-fitting model possible.
6.5.1 Confirmatory Factor Analysis Interpretation

This research used a multi-step approach to conducting the analysis, with EFA followed by subsequent CFA and then SEM structural modelling to ensure robustness. Confirmatory factor analysis was used to select the final items for inclusion in the measurement model. In total eight constructs were subject to this analysis; four independent, two dependent and two moderators (plus the addition of gender as a moderator).

The measurement model was initially evaluated for any offending estimates, to ensure all of the coefficients were within the acceptable thresholds. Then further assessment of various values including loadings, t-values, squared multiple correlations (SMC), modification indices, standardised residual covariance and goodness-of-fit were undertaken. To be taken forward for further analysis thresholds for each must be met. Factor loadings should be greater than 0.6 to be acceptable and 0.7 to be preferable, with significance of these loadings showing a t-value of greater than 1.96, and SMC above 0.3 (Hair et al., 2006). When looking at how to adapt the model further, modification indices which look for any unspecified paths in the model should be assessed alongside fixed parameters. These highlight how much the chi-squared value will reduce by acknowledging an unspecified path. Values above 4.0 should be considered for covarying error terms of items from the same factor (Blunch, 2013). Residual standardised covariances which highlight the significance in differences between estimated and proposed models can also be assessed; values should be less than 2.58 (Joreskog and Sorbom, 1988).

According to Hu and Bentler (1999) the following thresholds should be used for assessing goodness-of-fit: CMIN/df of 3.0 or below, AGFI .80 or greater, CFI .90 or above, RMSEA .05 to .10 for moderate fit or .05 and below for good fit. For GFI there are no agreed upon thresholds, but higher values as close to 1.0 indicate a better fit, and for NFI and RFI levels of .90 are also preferable (Hair et al., 2006).

Confirmatory factor analysis was conducted separately on each overall topic i.e. on the four interactivity constructs, then on the two consumer engagement constructs and finally on the two moderators, before assessing the overall model together to avoid identification problems through a stepwise approach.
During this initial CFA phase the model was run, estimated, modified, and then re-estimated to ensure cut-off limits were fulfilled and model fit achieved. Model trimming occurred, which was expected given the high number of items carried through from EFA and following Groenland and Stalpers (2012) method of removing ‘bad indicators’. From interactivity four items were removed due to not meeting the measurement thresholds discussed above and also reviewing relevant theory to ensure that the scales still measured the constructs fully. These were CONTROL4, CONTROL5, and COM3 which had high standardised residual covariance and CONTROL7 which had a low factor loading of .68. The same assessment also removed five items from CE; EMOT 1, EMOT3 and EMOT5 for high standardised residual covariance and EXP4 and EXP6 for low factor loadings of .67 and .65; and one item from moderators, TOLER1 for a low factor loading of .53. TOLER1’s elimination was expected due to it having a fairly low value in EFA and also in item-total correlation. This left 34 items for further full model CFA analysis.

When running subsequent CFA on the full model a further four items were removed taking the 34 items down to a final 30 items. These were EMOT2, COCREAT6, SAT3 and SAT5 due to presenting high standardised residual covariance all above 3.0. Removal of these items improved the goodness-of-fit measures from CMIN/DF 3.538, AGFI .777, CFI .907, GFI .831, NFI .875, RFI .860 and RMSEA .072 to the figures shown in Table 6.13 below.

Table 6.13 Summary of final measurement model presenting factor loadings, t-value, SMC, Cronbach’s alpha (after CFA), AVE, ASV, MSV and goodness-of-fit indices

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor Loading</th>
<th>t-value</th>
<th>SMC</th>
<th>AVE</th>
<th>ASV</th>
<th>MSV</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>CONTROL1</td>
<td>.83</td>
<td>24.98</td>
<td>.69</td>
<td>.78</td>
<td>.22</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONTROL2</td>
<td>.91</td>
<td>29.47</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONTROL3</td>
<td>.91</td>
<td>-</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>COM1</td>
<td>.86</td>
<td>20.34</td>
<td>.74</td>
<td>.72</td>
<td>.14</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM2</td>
<td>.90</td>
<td>21.01</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM4</td>
<td>.78</td>
<td>-</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customisation</td>
<td>CUSTOM1</td>
<td>.78</td>
<td>17.32</td>
<td>.61</td>
<td>.62</td>
<td>.24</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CUSTOM2</td>
<td>.77</td>
<td>17.11</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CUSTOM3</td>
<td>.81</td>
<td>-</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>-----</td>
<td>---</td>
<td>-----</td>
<td>--------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Speed of Response</td>
<td>SPEED2</td>
<td>.87</td>
<td>18.46</td>
<td>.75</td>
<td>.69</td>
<td>.22</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPEED3</td>
<td>.90</td>
<td>18.86</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPEED4</td>
<td>.73</td>
<td>-</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional CE</td>
<td>EMOT4</td>
<td>.72</td>
<td>17.91</td>
<td>.52</td>
<td>.67</td>
<td>.14</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMOT6</td>
<td>.81</td>
<td>21.15</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EXP1</td>
<td>.89</td>
<td>23.94</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EXP2</td>
<td>.85</td>
<td>-</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive/Behavioral CE</td>
<td>COCREAT1</td>
<td>.83</td>
<td>17.23</td>
<td>.69</td>
<td>.66</td>
<td>.28</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COCREAT2</td>
<td>.85</td>
<td>17.61</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COCREAT3</td>
<td>.90</td>
<td>18.50</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COCREAT4</td>
<td>.87</td>
<td>17.90</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COCREAT5</td>
<td>.80</td>
<td>16.54</td>
<td>.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEARN2</td>
<td>.71</td>
<td>20.61</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEARN3</td>
<td>.69</td>
<td>-</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction &amp; Trust</td>
<td>SAT1</td>
<td>.79</td>
<td>30.78</td>
<td>.63</td>
<td>.73</td>
<td>.24</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRUST1</td>
<td>.88</td>
<td>20.15</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRUST2</td>
<td>.89</td>
<td>24.69</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRUST3</td>
<td>.88</td>
<td>24.12</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRUST4</td>
<td>.83</td>
<td>-</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td>TOLER2</td>
<td>.89</td>
<td>13.11</td>
<td>.79</td>
<td>.75</td>
<td>.10</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOLER3</td>
<td>.84</td>
<td>-</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit indices:
Chi-squared- 796, df- 370, CMIN/DF- 2.153, AGFI- .881, CFI- .963, GFI- .906, NFI- .933, RFI-.922 and RMSEA-.048

Figure 6.1 – Final measurement model
The measurement model values above highlight good initial model fit, indicating that it can be taken forward for SEM analysis. Some of these values will be explored further in the subsequent sections to assess the overall validity and reliability of the model. Figure 6.1 above presents the final trimmed
measurement model. Figure 6.2 below shows the research framework after CFA, which will be taken forward for further testing.

Figure 6.2 – The research framework after CFA

* Each individual moderating factor is hypothesised to have a moderating effect on the relationship between each interactivity feature and emotional CE and cognitive/behavioural CE; all arrows haven’t been shown on the figure above to ensure it doesn’t become too cluttered to view.
6.5.2 Post CFA Reliability and Validity Measures

It is important to ensure that the measurement model is both reliable and valid after conducting CFA (Blunch, 2013). The first step in this examination is to assess unidimensionality, so “the existence of one construct underlying a set of items” (Hoe, 2008:80). This was initially tested using SPSS to carry out principal components analysis and only factors with eigenvalues above 1.0 were maintained. Factor loadings were also used to assess this, with high cross-loading items being removed during EFA and all of the items after CFA measuring above the ‘preferred’ threshold of 0.7. CFA also produced improved results for factor loadings when compared to EFA, and overall the values indicated that all of the items in the scales loaded as first order constructs. The results presented in Table 6.13 also highlight statistical significance, with the t-values all exceeding the 1.96 cut-off point.

After establishing unidimensionality the next step is to reassess the measurement instruments composite reliability through Cronbach’s alpha. The scale values ranged from .83 to .93 indicating very high internal consistency reliability according to this measure (Nunnally and Bernstein, 1994). Due to having a large number of final items, two further tests for reliability were also carried out to overcome the impact that this has on increasing the Cronbach alpha value (Hair et al., 1998). Squared multiple correlation shown by the R-squared values were used to examine the amount of variance each item accounted for. All of the values except LEARN3 were between the thresholds of 0.5 to 1.0, indicating shared variance and therefore item reliability. LEARN3 presented a value of 0.48 and so was thought to be fairly reliable and was kept in due to being so close to the cut-off point. The SMC values also further indicate that there were no multi-collinearity issues, with none of the items exceeding the .90 measure suggested by Kline (1998). Average variance extracted (AVE) was also used, with values of 0.5 or above highlighting good construct reliability (Hair et al., 2006). Construct reliability relates to whether a set of items are actually representing the theoretical constructs they are meant to be measuring. Table 6.13 shows that all of the constructs exceeded this value.

Once unidimensionality and reliability have been established the next step is to test for three different types of validity; convergent, discriminant and
nomological. Both convergent and discriminant are types of construct validity; with construct validity checking that the scale is correlated with other measures from the same concept e.g. speed of response and control which are both constructs of interactivity. As with unidimensionality, convergent validity relies on the factor loadings and statistical significance t-values being above the thresholds of 0.7 and exceeding 1.96. As well as this the AVE values should all be above 0.5 (Nunnally and Bernstein, 1994) and composite reliability (CR), which shows that relationships are statistically significant, should be above 0.7 (Fornell and Larcker, 1981). In this study all of the constructs fulfilled these requirements, therefore presenting high levels of validity.

Discriminant validity is used to ensure that the scale “is sufficiently different to other similar constructs to be distinct” (Hair et al., 2006:119). It is checked through the SMC and AVE measures and ensuring that the SMC value is smaller than the AVE (Fornell and Larcker, 1981). In this research only half of the constructs met this criterion, which is therefore a limitation of the study. However another method for ensuring discriminant validity is to assess whether the average shared variance (ASV) and maximum shared variance (MSV) are smaller than the AVE. Table 6.13 above presents these figures, highlighting that discriminant validity was met through these measures.

Nomological validity assesses whether scales correlate in the theoretically predicted ways between distinct constructs, and are therefore consistent with previous studies. This is calculated through examination of the correlation values between the constructs (Hair et al., 2006); with this research showing all of the expected relationship directions in the correlation matrix for the CFA.

6.5.3 Common Method Variance

Common method variance is “variance that is attributed to the measurement method rather than to the constructs the measures represent” (MacKenzie et al., 2003:879). It is important to take steps to prevent its bias and also assess it after CFA to further ensure validity of findings relating to relationships between constructs. This is because common method variance can lead to misleading empirical conclusions (Campbell and Fiske, 1959).
MacKenzie et al. (2003) recommend taking initial steps when creating and conducting the measurement method, in this case a questionnaire, to reduce the likelihood of common method bias - some of these were followed within this research. To reduce social desirability, the tendency to answer questions in a way that would be most culturally acceptable and position the respondent in a favourable manner, no questions were asked that were considered personal or sensitive in nature and anonymity was reassured. Instructions also asked that the questions were answered truthfully to further reduce leniency bias. Scale length was also kept varied between constructs to ensure that the answers to previous items did not affect subsequent ones, as shorter scales allow for storage in short-term memory and the possibility of cognitive short-cuts to occur (Harrison et al., 1996). Also any unclear or ambiguous items were identified through pilot testing and either simplified or reworded prior to launching the questionnaire.

To test for the presence of common method variance Harman’s single factor test was utilised. All items were loaded onto one construct in a single CFA test which produced very bad data fit: chi-squared- 6098.096, df- 405, CMIN/DF- 15.057, AGFI- .363, CFI- .509, GFI- .445, NFI- .494, RFI- .456 and RMSEA- .169. When the eight factors were then applied (before model trimming) the model fit increased dramatically to: 1157.748, df- 518, CMIN/DF- 2.235, AGFI- .855, CFI- .954, GFI- .880, NFI- .919, RFI- .907 and RMSEA- .50. This test indicates that there are no common method variance issues within this study.

6.6 SEM: The Structural Model

The second stage of conducting SEM is to create and assess the structural model, to explore the inter-relationships between constructs and test for causal relationships. This is often constructed using a computer software programme, in this case AMOS 22, with the researcher utilising theory, prior knowledge/qualitative analysis findings, and the research objectives to decide on the model structure (Hair et al., 2006). In this study the qualitative findings indicated that interactivity was an antecedent to consumer engagement, therefore distinguishing that the interactivity constructs of control, communication, customisation and speed of response were independent variables predicting the dependent variables of emotional CE and cognitive &
behavioural CE. The qualitative findings also highlighted the need for and positioning of the three moderating factors of tolerance, satisfaction & trust, and gender; further informing the model’s structure. Each hypothesised relationship within the model was then transformed into a series of equations for each dependent variable, allowing multiple and inter-related equations to be calculated all at once. This is unique to SEM when comparing it to other multivariate techniques, alongside its ability to include latent variables (Hair et al., 2006).

A key consideration when initiating SEM analysis is also which strategy to employ, either a confirmatory, competing or model development strategy. With confirmatory model strategy the researcher hypothesises a single model and uses structural equation modelling simply to assess its statistical fit i.e. does the model work or not. This method is criticised for not being rigorous enough as it does not test all possible models, therefore an alternative model with the highest statistical significance may be missed (Blunch, 2013). Competing model strategy overcomes this limitation by utilising existing theory to create and then assess rival models. The models path coefficients, P values and goodness-of-fit indices are then compared to ‘prove’ the proposed model or find the alternative model with the best model fit. The final strategy, model development, proposes an initial model however the main purpose is to improve this through modifications at both stages of SEM – measurement and structural modelling. The researchers’ prior knowledge, theory and previous findings are a starting point for model creation; however empirical findings inform adaptations to this.

This study adopts a combination of modelling strategies utilising the literature review and qualitative findings to create an initial proposed model and then empirically supporting modifications to it through model development. This was required due to the conceptualisation of interactivity and consumer engagement both being highly debated, and CE being in very early stages of investigation with most proposed models yet to be tested at all through qualitative or quantitative methods. A high number of construct items were carried through from the initial EFA, with the intention of using SEM alongside theory to reduce this to a more manageable amount, following Groenland and Stalpers (2012) recommendations. Competing model strategy was also adopted after this to
ensure that the proposed model had superior fit diagnostics and was the most robust.

Hair et al. (2006)’s seven step process for structural equation modelling was followed in this research: “(1) developing a theoretically based model, (2) constructing a path diagram of causal relationships, (3) converting the path diagram into a set of structural and measurement models, (4) choosing the input matrix type and estimating the proposed model, (5) assessing the identification of the structural model, (6) evaluating goodness-of-fit criteria, and (7) interpreting and modifying the model” (p.592).

For step one the theoretical model should be created based on causal relationships which have been established through existing literature and agreed upon theory, evidence of association (e.g. through observation, interviews, etc.), or through no alternative variables accounting for a relationship. Constructing the path diagram then presents these identified, hypothesised or correlated linear relationships visually. The next phase is to transform the path diagram into structural and measurement models through structural equations, checking that variable items measure their associated items using CFA (discussed in the sections above), and then converting the measurement model into the structural model. There are two approaches for this conversion, either by building a true structural model which includes all of the variables and their latent factors or through creating composited variables from the latent factors. Both methods were conducted during this research to check for significant differences in the findings for goodness-of-fit and structural paths between the two processes. Due to no significant differences being found the imputed composite approach was used for further analysis, as it was considered easier to interpret and also manipulate for competing model testing.

Two types of input matrices are used in SEM analysis; correlation and covariance. In this study the covariance matrix was used to allow for comparison between un-standardised coefficients and to test the proposed theoretical model. A further consideration regarding which estimation technique should be used to convert the covariance matrix into parameter estimates also had to be made. The maximum likelihood estimation (MLE) is preferred by researchers over other estimation methods such as generalised least square,
un-weighted least square, and asymptotically distribution-free (Hair et al., 2006), therefore being selected in this study. This is due to it providing "reliable, unbiased estimates as the size of the sample increases" (Groenland and Stalpers, 2012:13).

The next step is to then assess the identification of the structural model. This is conducted through evaluating the degrees of freedom; with the aim being to have the largest, positive number of degrees of freedom (Hair et al., 1998). Goodness-of-fit is also interpreted at this point utilising the same measures as used in the CFA phase i.e. chi-squared, CMIN/DF, AGFI, CFI, GFI, NFI, RFI, RMSEA, and PCLOSE. If these measures do not fit the ideal values then the final phase of interpreting and modifying the model occurs through evaluating the standardised and unstandardised solutions, normalised residuals and modification indices.

The structural model for this research is presented below in figure 6.3, which highlights the standardised path coefficients, the P values highly significant at 0.001 (indicated by ***) and significant 0.05 (indicated by *) and the goodness of fit indices prior to assessing the moderating variables. Also shown are the controls and moderators which are explained below.

The figure shows that all of the paths have t-values greater than 1.96 (all between 2.14 and 9.84), and that they are either highly significant at 0.001 or significant at 0.05. The same measures used for measurement model evaluation were also applied to assess goodness-of-fit of the structural model. The model above has good model fit shown through the chi-squared, df, CMIN/DF, AGFI, CFI, GFI, NFI, RFI, RMSEA, and PCLOSE values.

Figure 6.3 – The structural model
6.6.1 Controls

Controls are variables that need to be accounted for during quantitative analysis, but they aren’t central to the research theory (Schmitt and Klimoski, 1991). Various scholars advocate the use of controls in SEM analysis, as long as sufficient justification can be given for their inclusion (Becker, 2005, Neter et al., 1996). In this study control variables of age and education were applied to the consumer engagement constructs. Whilst previous consumer engagement
research has not highlighted this link to date, the topic is in very early stages of examination and currently focuses on high level conceptualisation and definition. Therefore demographic causal links with CE are yet to be investigated and were thus included as controls on this basis and the researcher’s assumptions that they may affect how easily or deeply a person becomes engaged with a retailer. For example a person who is more educated or older may require more cognitive CE elements to be fulfilled, rather than behavioural or emotional. Interestingly age was shown to have a negative significant effect on emotional CE (at the 0.001 level), therefore having implications for segmentation based on this demographic for retailers trying to engage with varying aged audiences.

6.6.2 Multi-Group Moderation

Moderators are variables that moderate the effect or relationship between an independent and dependent variable. During the qualitative analysis phase five moderating variables were identified; these were later reduced to three through subsequent EFA and CFA testing. Multi-groups were created for each of the moderators; satisfaction & trust, tolerance and gender, by carrying out a median split in SPSS. For example, for tolerance SPSS identified that the median score was 10, thus all scores of 10 or above became tolerance high (52% of respondents) and all scores below 10 became tolerance high (48% of respondents).

To assess each moderator a critical ratio difference test was run, to identify z-scores in order to report whether each had a significant impact on the independent and dependant variable relationship. This test divides the regression weight by its standard error (Afthanorhan et al., 2014). Tables 6.14 to 6.16 below present the estimates, p-values and z-scores for the moderators; with a p-value of <0.01 indicated by ***, <0.05 by ** and <0.10 by *.

Table 6.14 – Moderation diagnostics for satisfaction & trust

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Satisfaction &amp; trust low</th>
<th>Satisfaction &amp; trust high</th>
<th>z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Est</td>
<td>P</td>
<td>Est</td>
</tr>
<tr>
<td>Emotional CE</td>
<td>← Control</td>
<td>0.077</td>
<td>0.367</td>
</tr>
</tbody>
</table>
The z-scores above highlight that satisfaction & trust has a significant positive effect on the relationship between customisation and emotional CE, and a significant positive influence on the relationship between speed and cognitive & behavioural CE.

Table 6.15 – Moderation diagnostics for tolerance
The findings show that tolerance has a significant positive effect on the relationship between customisation and emotional CE, and a significant positive influence on the relationship between communication and cognitive & behavioural CE.

Table 6.16 – Moderation diagnostics for gender

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Female</th>
<th>Male</th>
<th>z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Est</td>
<td>P</td>
<td>Est</td>
</tr>
<tr>
<td>Emotional CE ← Control</td>
<td>-0.003</td>
<td>0.971</td>
<td>0.237</td>
</tr>
<tr>
<td>Emotional CE ← Communication</td>
<td>0.205</td>
<td>0.000</td>
<td>0.264</td>
</tr>
<tr>
<td>Emotional CE ← Customisation</td>
<td>0.476</td>
<td>0.000</td>
<td>0.338</td>
</tr>
<tr>
<td>Emotional CE ← Speed</td>
<td>-0.135</td>
<td>0.217</td>
<td>-0.054</td>
</tr>
<tr>
<td>Cognitive &amp; Behavioural CE ← Speed</td>
<td>0.031</td>
<td>0.551</td>
<td>0.112</td>
</tr>
<tr>
<td>Cognitive &amp; Behavioural CE ← Customisation</td>
<td>0.291</td>
<td>0.000</td>
<td>0.187</td>
</tr>
<tr>
<td>Cognitive &amp; Behavioural CE ← Communication</td>
<td>0.084</td>
<td>0.003</td>
<td>0.123</td>
</tr>
<tr>
<td>Cognitive &amp; Behavioural CE ← Control</td>
<td>0.162</td>
<td>0.000</td>
<td>0.189</td>
</tr>
</tbody>
</table>

Gender is shown to have a moderating effect on the relationship between interactivity and consumer engagement, with the z-scores above showing that two pathways are influenced by it. It is shown to have a significant positive effect on the relationship between control and emotional CE as well as on the relationship between customisation and cognitive CE. The implications of these moderator findings for retail marketers will be discussed in Chapter 7.

The goodness-of-fit indices were reassessed following the addition of the moderating variables to ensure that good model fit was still achieved. These were: chi-squared- 61.961, df- 48, CMIN/DF- 1.291, AGFI- .954, CFI- .996, GFI- .990, NFI- .983, RFI- .940, RMSEA- .014 and PCLOSE- 1.000; therefore warranting their inclusion.
6.6.3 Hypotheses Overview

Table 6.17 below presents the hypotheses generated following the qualitative analysis.

Table 6.17 – Original hypotheses list prior to quantitative analysis

<table>
<thead>
<tr>
<th>H1</th>
<th>Communication has a positive influence on emotional elements of CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>Communication has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H3</td>
<td>Speed of response has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H4</td>
<td>Speed of response has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H5</td>
<td>Customisation has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H6</td>
<td>Customisation has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H7</td>
<td>Navigation has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H8</td>
<td>Navigation has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H9</td>
<td>Control has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H10</td>
<td>Control has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H11</td>
<td>Affordance has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H12</td>
<td>Affordance has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H13</td>
<td>Emotional CE has a positive influence on behavioural elements of CE</td>
</tr>
<tr>
<td>H14</td>
<td>Cognitive CE has a positive influence on behavioural elements of CE</td>
</tr>
<tr>
<td>H15</td>
<td>Trust has a moderator effect on the relationship between interactivity and emotional and cognitive CE</td>
</tr>
<tr>
<td>H16</td>
<td>Satisfaction has a moderator effect on the relationship between interactivity and emotional and cognitive CE</td>
</tr>
<tr>
<td>H17</td>
<td>Self-brand connection has a moderator effect on the relationship between interactivity and emotional and cognitive CE</td>
</tr>
<tr>
<td>H18</td>
<td>Tolerance has a moderator effect on the relationship between interactivity and emotional and cognitive CE</td>
</tr>
<tr>
<td>H19</td>
<td>Gender has a moderator effect on the relationship between interactivity and emotional and cognitive CE</td>
</tr>
</tbody>
</table>

During the exploratory factor analysis some of the variables had to be removed due to low factor loadings or high cross loadings, or merged due to loading together. The constructs removed were navigation, affordance and self-brand connection therefore hypotheses H7, H8, H11, H12, and H17 were omitted from
further testing. Cognitive and behavioural CE constructs loaded together and became one construct ‘cognitive & behavioural CE’ therefore not allowing for the testing of hypothesis H14; however H13 could still be tested amending this to ‘Emotional CE has a positive influence on cognitive & behavioural elements of CE’. This change meant that all the moderator hypotheses also had to be amended to state ‘has a moderator effect on the relationship between interactivity and emotional and cognitive & behavioural CE’. Satisfaction and trust also merged to create one construct ‘satisfaction & trust’ therefore amending H15 to ‘Satisfaction & trust has a moderator effect on the relationship between interactivity and emotional and cognitive & behavioural CE’ and removing H16 from further analysis.

Figure 6.3 above of the structural model, highlights that all of the pathways with direct effects, except speed to emotional CE are significant above the 0.05 or 0.001 level and were in the hypothesised causal direction; therefore hypotheses H1, H2, H4, H5, H6, H9, H10 and H13 are all supported. The multi-group moderator tests in section 6.6.2 also found that satisfaction & trust, tolerance and gender did in fact have a moderator effect on the relationship between interactivity and emotional and cognitive & behavioural CE, thus accepting hypotheses H15, H18 and H19. The modified hypotheses list following factor analysis, also showing if the hypotheses were supported or not is presented in table 6.18 below.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Communication has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H2</td>
<td>Communication has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H3</td>
<td>Speed of response has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H4</td>
<td>Speed of response has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H5</td>
<td>Customisation has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>H6</td>
<td>Customisation has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H9</td>
<td>Control has a positive influence on emotional elements of CE</td>
</tr>
<tr>
<td>H10</td>
<td>Control has a positive influence on cognitive elements of CE</td>
</tr>
<tr>
<td>H13</td>
<td>Emotional CE has a positive influence on cognitive and behavioural elements of CE</td>
</tr>
<tr>
<td>H15</td>
<td>Satisfaction &amp; trust has a moderator effect on the relationship between interactivity and emotional and cognitive &amp; behavioural CE</td>
</tr>
<tr>
<td>H18</td>
<td>Tolerance has a moderator effect on the relationship between interactivity and emotional and cognitive &amp; behavioural CE</td>
</tr>
<tr>
<td>H19</td>
<td>Gender has a moderator effect on the relationship between interactivity and emotional and cognitive &amp; behavioural CE</td>
</tr>
</tbody>
</table>

6.6.4 Evaluation of rival models

Simply utilising structural equation modelling to confirm a proposed model is not considered to be its most rigorous application, and has been criticised for its potential to introduce confirmation bias into research (Hair et al., 2006). Instead competing models strength should also be assessed to assure the robustness of a final model. In this research 5 different structural model variations were tested based on changing where the controls were place and also changing the direct of the consumer engagement relationship. For example an alternative model was created where cognitive & behavioural CE was a mediator leading to emotional CE. This required testing due to cognitive CE and behavioural CE constructs loading together during the exploratory factor analysis, and so the structure from the original hypothesised model had to alter, as there were no longer three separate consumer engagement constructs (emotional, behavioural and cognitive).

Goodness-of-fit indices and path coefficients were evaluated for each competing model. Based on these measures the proposed model was found to be the most robust compared to the others, having superior diagnostics and therefore establishing higher validity.
6.8 Summary

This chapter has used various quantitative tests and diagnostics to assess the robustness of the hypothesised model. These include exploratory factor analysis; confirmatory factor analysis; checks for reliability, validity and common method bias; and structural equation modelling. The EFA took the original eleven factors from the qualitative findings and extracted eight final factors. These were emotional CE, cognitive & behavioural CE (merged together), control, satisfaction & trust (merged together), communication, customisation, speed of response and tolerance. CFA then reduced these 44 items down to a final 30 items based on the data and theoretical underpinning. Structural equation modelling rigorously tested goodness-of-fit, path coefficients and also reliability and validity measures for both the hypothesised model and rival models. As well as good model fit being achieved for the proposed model, all of the hypotheses except one - ‘Speed of response has a positive influence on emotional elements of CE’ were accepted; with satisfaction & trust, tolerance and gender all being found to have a moderating effect on the relationship between interactivity constructs and emotional and cognitive & behavioural CE. The implications of these findings and their accompanying recommendations for online retail marketers are discussed in the following Chapter 7.

7.0 Discussion and Implications

7.1 Introduction

This chapter provides an overview of the key insights gained from both the qualitative and quantitative findings into online consumer engagement, whilst also addressing and answering the original research objectives set out in chapter 1. These were:

1. To understand the nature of the relationship between CE and interactivity.
2. To examine how and whether interactivity dimensions have an impact on CE in an online website context.

3. To investigate gender differences in which interactivity features influence CE.

4. To provide extensive managerial implications and recommendations based on the findings to aid in bridging the academic-practitioner divide.

Clearly the most pertinent contribution of this research is for the first time establishing the consumer engagement-interactivity link, and therefore providing an online retail perspective of CE.

The contributions and their implications will be detailed in the subsequent sections, however the next section 7.2 first focuses on the overall structural nature of CE, as this informs the discussions in 7.3, 7.4 and 7.5. Section 7.3 then explores the nature of the relationship between CE and interactivity; 7.4 examines each interactivity feature in turn and assesses their impact on CE; and 7.5 looks at the moderating role of gender, satisfaction & trust and tolerance on the interactivity-CE relationship. To aid in further bridging the academic-practitioner divide (Gambetti and Graffigna, 2010), during the synopsis both academic contributions and managerial implications and recommendations will be provided- therefore fulfilling research objective four.

7.2 Structural Nature of Consumer Engagement

With the construct of consumer engagement being still highly debated within both the academic and practitioner literature, the findings provide a clear theoretical contribution. This is through empirically examining its dimensionality, structure, and nature in one of the only CE studies to analyse this utilising mixed methods in the post positive/critical realist paradigm. The results support the notion that consumer engagement is a multidimensional construct, which comprises of emotional, cognitive and behavioural elements- providing further verification for the move towards this multi- rather then uni- dimensional viewpoint over the past decade (Sedley, 2007, Hollebeek, 2011a, Brodie et al., 2011, Gallup, 2009, Sashi, 2012, Gambetti et al., 2012, Ilic, 2008, Bowden, 2009, Mollen and Wilson, 2010, Brodie et al., 2013, Hollebeek et al., 2014).
Consumer engagement is found to be constructed of four facets: emotion and experience which are emotional dimensions; learning & insight which is a cognitive; and co-creation which is behavioural. Whilst lots of previous studies have acknowledged these dimensions individually as being integral elements of CE, none have conceptualised these four facets in the same model before. It is important for practitioners to know and understand these four facets, as without fulfilling all of them customer engagement cannot occur.

Emotion here closely links to the construct of emotional attachment. It refers to the bond that customers have with specific brands, which is found to involve feelings such as passion and captivation (Theng So et al., 2013, Thomson et al., 2005). Bowlby (1979) proposed that the stronger a person’s emotional attachment the more likely they are to try to keep the object in their close proximity, which is obviously a desirable aim for any brand trying to establish relationships with consumers. When a consumer becomes emotionally attached this can also increase the amount of affective, cognitive and behavioural resource they direct towards that brand, product or retailer; which may explain why consumer engagement involves all of these dimensions, and also its structure. For example, the qualitative findings and final conceptual model show that once consumers have developed these emotions and experienced the brand in a positive sensory, they are then likely to start to evaluate if products or services have been defined from their perspective, if the retailer has specific customer-care objectives, and also start to become involved in co-creation with the brand. This progression from emotional elements of CE onto cognitive & behavioural elements will be discussed in more detail later in this section. The finding that emotion is integral in consumer engagement provides further evidence to support its inclusion as in integral CE construct (Shevlin, 2007, PeopleMetrics, 2010, Gambetti et al., 2012, Bowden, 2009, Van Doorn et al., 2010, Gallup, 2009, Sprott et al., 2009, Hollebeek et al., 2014), rather than as an antecedent or consequence.

Also parcelled into the construct of emotional CE is the facet of experience, which loaded strongly with emotion in the exploratory factor analysis. This is unsurprising with Orth et al. (2009) stating that “positive affective experience evoked during a store visit may facilitate attachment to a focal brand” (p.1202).
Experience here refers to the subjective, internal affective and sensorial responses that consumers have in reaction to a brands website environment (Brakus et al., 2009); which can occur during and after website interaction. From the visual and sensory experience perspective stimulation is provided to be aesthetically pleasing, satisfy the senses and create excitement (Gentile et al., 2007) and this can be evoked through the a website’s design, integrated communications and multi-media tools. The qualitative findings reflect the importance of retailers effectively designing websites to ensure that consumers’ experience expectations are fulfilled, and that the in-store environment is reflected and synergised online. Understanding how to achieve an emotional and sensory experience can reduce the perceived risks caused by the removal of haptics online, increasing shopper’s confidence not only in the website context but also the brand. This will be discussed in more detail in section 7.4 which will explore how and which specific interactivity features have an effect on emotional CE, and therefore experience. Overall the finding that experience is an integral element of consumer engagement provides further support for its inclusion in CE conceptualisation within much of the previous literature (Brodie et al., 2013, Brodie et al., 2011, Vivek, 2009, Vargo and Lusch, 2008, Van Doorn et al., 2010, Schmitt, 2012).

Although interactivity is found to be an antecedent, and so has a direct influence on both emotional CE and cognitive & behavioural CE, the qualitative and quantitative findings also highlight that consumers who initially become emotionally engaged, are likely to then become engaged cognitively and behaviourally too. This is with the emotional CE being found to have a positive effect on cognitive & behavioural CE (r=0.31). This is easy to comprehend when considering emotional attachment is found to engender further affective, cognitive and behavioural resource to be directed towards a brand (Bowlby, 1979) and also the acknowledgement that co-creation is fostered through innovative and personalised experience environments (Prahalad and Ramaswamy, 2004). The parcelled facets of cognitive & behavioural CE are learning & insight and co-creation. The likely explanation of why these two constructs load heavily together during the exploratory factor analysis is due to them both being linked to knowledge.
Learning & insight here is about the knowledge that the brand obtains and utilises to ensure that it is adopting a customer-centric approach and fulfilling customer care objectives; and the consumer’s cognitive perceptions and evaluations of this in choosing whether to engage with the brand or not. Such knowledge can be gained utilising data, metrics and also market research. With learning & insight being identified as closely linking to customer orientation during the qualitative analysis, Nwankwo (1995)’s guidelines for how organisations can achieve this apply. These include having “clear ideas about customers and their needs; customer characteristics underpinning the design of the product; specific customer care objectives; feedback systems (between customers and the company); and concern for market pluralism (diversity of customer segments and their needs)” (p.8). Fulfilling these guidelines helps to ensure that customer requirements are understood and that offerings, including the website can be tailored to meet these; ensuring that the brand fairs favourably during cognitive evaluations. The finding that learning & insight is an integral element of CE provides a significant conceptual contribution, as to date it is yet to be acknowledged as a construct from this customer orientation informed by data perspective. Instead it has only been shown as an antecedent or a consumer cognition process within the decision making process (Van Doorn et al., 2010, Vivek, 2009, Cetina et al., 2014).

Co-creation on the other hand, concerns the consumer’s willingness to share their own knowledge and opinions, and also become involved and work with the brand to further improve and develop their products or services. Co-creation in this sense centres on customer-to-business sharing with the aim of creating mutual added value. It goes against the traditional value roles of ‘value-in-exchange’, whereby the product or service was the source of value, with the brand being the seller and sender of communications, and the consumer being buyer and the receiver of communications. Instead it has evolved and now involves companies interacting, working with and supporting consumers to create offerings that fulfil their needs; with the customer being instrumental in the design process and the company actively seeking their involvement (Ngo and O'Cass, 2009). This new type of value is referred to as ‘value-in-use’ (Skaržauskaitė, 2013), with the process usually being fostered and facilitated through innovative and personalised experience environments (Prahalad and
Similarly to learning & insight, co-creation moves away from the traditional company-centric approach to a more customer-centric one, which may further explain their parcelling together into the construct of cognitive & behavioural CE. The finding that co-creation is a key component of consumer engagement provides further support its vast acknowledgement within the extant literature (Vargo and Lusch, 2008, Mitchell, 2001, Sashi, 2012, Gambetti et al., 2012, Brodie et al., 2013). Whilst much of the previous research has cited co-creation as part of a wider dimension e.g. co-creation being acknowledged as part of the ‘connection’ construct in Sashi (2012)’s model, this study identifies it as a unique and separate construct in its own right.

In terms of its nature, consumer engagement is also found to be cyclical. Although all of the rival models were rejected and superseded by the superior conceptual model presented at the end of Chapter 6, one examined the relationship from cognitive & behavioural CE to emotional CE. This was shown to have satisfactory model fit and presented a strong positive relationship, with a path coefficient of .60 at the 0.001 significance level. Whilst this was discounted on both theoretical grounds and due to contradicting the qualitative findings, it does highlight that once a consumer has become initially engaged emotionally and then cognitively & behaviourally, the journey through the CE constructs is then an iterative process. This corroborates much of the previous literature which adopts this cyclical viewpoint (Sashi, 2012, Schmitt, 2012, Vivek et al., 2012, Brodie et al., 2011, Van Doorn et al., 2010). From a practitioners’ perspective the recurring nature of CE provides some practical implications to ensure that all of the elements of experience, emotion, co-creation and learning & insight are constantly fulfilled and managed on an on-going basis. For example the experience must be perceived positively, there must always be methods and interaction tools for customers to be able to co-create through, and customer-centricity must be at the heart of the brands strategic development. All of these aspects require time, effort, resource, employee buy-in and constant evolution to ensure consumer engagement is achieved. The specific interactivity features required to influence this engagement positively will be discussed in more detail in section 7.4 below.
From the definitions originally outlined at the beginning of this study, only three now fit with the findings. These are:

- “Repeated interactions that strengthen the emotional, psychological or physical investment a customer has in a brand” (Sedley, 2007);

- “The level of a customer’s cognitive, emotional and behavioural investment in specific brand interactions” (Hollebeek, 2011a);

- “Consumer engagement in a virtual brand community involves specific interactive experiences between consumers and the brand, and/or other members of the community. Consumer engagement is a context-dependent, psychological state characterised by fluctuating intensity levels that occur within dynamic, iterative engagement processes. Consumer engagement is a multidimensional concept comprising cognitive, emotional, and/or behavioural dimensions, and plays a central role in the process of relational exchange where other relational concepts are engagement antecedents and/or consequences in iterative engagement processes within the brand community” (Brodie et al., 2013).

For this reason an amended version of Brodie et al. (2013)’s definition has been created to reflect the findings of this study into the online website CE perspective:

“Consumer engagement in the online website environment is a multi-dimensional, iterative process which comprises of emotional dimensions (emotion and experience) and cognitive & behavioural dimensions (learning & insight and co-creation). It is influenced by interactivity features such as speed, control, communication and customisation, which are experienced between the brand, consumer and other consumers within the retail website setting”.
7.3 Nature of Relationship between Consumer Engagement and Interactivity

Through an increased understanding of consumer engagement’s structure and nature, it is clear to see the complexities involved in developing and maintaining it with customers compared to other relationship marketing constructs e.g. satisfaction, loyalty, involvement etc. With Econsultancy (2008) finding that 90% of organisations think that CE is either essential or important, and Forrester Consulting (2008) that companies believe that the internet and an investment online is imperative for developing CE; it is therefore evident that the most significant finding of this research is that interactivity is an antecedent of consumer engagement. This is a key contribution as it is one of the first studies to provide a practical solution of how to build consumer engagement online; with key positive determinants of this being the interactivity features of communication, customisation, control and speed of response. Each of these constructs of interactivity and their impact on CE will be explored in more detail in the next section.

From an academic perspective, to date there has been no explicit exploratory or explanatory research to investigate the connection between interactivity and consumer engagement, only highly conceptual literature review studies into CE or interactivity separately. The finding that interactivity is a CE antecedent therefore provides verification for previous implicit inferences within this existing literature. For example, to Power (2007:10) who stated that interactivity “engages shoppers, creates social communities and ultimately builds loyalty”; Brodie et al. (2011:258)’s FP1 that “CE reflects a psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific service relationships”; Ha & James (1998:456) who believe that “the outcomes of interactivity are engagement in communication and relationship building between a company and its target consumers” and also Hollebeek (2011b:792) who found that “involvement and interactivity are viewed as antecedents required prior to the emergence of customer brand-engagement levels”. Through in-depth analysis of scholars’ conceptualisations of CE, during the literature review, the consumer engagement-interactivity antecedent link can be deduced from three further studies. These are: Gambetti et al. (2012) with links being found to customisation, control, communication and response within
the unconventional online communication phase, prior to brand enacting and CE; Sashi (2012) in the ‘interaction’ stage of the CE process, and Mollen and Wilson (2010) where interactivity and telepresence are shown to be phases within a tiered perceptual spectrum of responses towards a website, prior to engagement.

Another key academic contribution is the validity and reliability of the consumer engagement and interactivity scales used for investigation. With both constructs being heavily debated in terms of definition, dimensionality and conceptualisation, this study has provided, tested and validated a unique conceptualisation and measurement scale to be used for the consumer engagement-interactivity link in an online context. Through the use of mixed methods to empirically analyse a multi-stakeholder perspective (academic, practitioner and consumer) this also provides further justification for the reliability, validity and application of the conceptual model across these groups; whilst overcoming these previously identified CE research gaps (see chapter 2) and helping to bridge the academic-practitioner divide (Gambetti and Graffigna, 2010).

Consumer engagement is described as an extension of relationship marketing (RM), which moves away from the traditional focus on customer retention and adds to it by highlighting the importance of consumers who add value through interaction and participation, even without purchase intention. With this being the case, the finding that interactivity is an antecedent to CE further corroborates existing relationship marketing research into interactivity and also strengthens the link between the RM paradigm and CE. For example, Crosby et al. (1990) who highlight that increased interactivity can be a solution to the need for higher quality relationships online; and Mandják and Szántó (2010) who concluded that interactivity can aid in customer retention and also enhance relationship quality. Interactive features are also shown to influence shopper perceptions about the amount of effort and input required to have an enjoyable experience on a website, and therefore whether to return or not (Scheraga, 2000); as well as the website design impacting trust, satisfaction and loyalty (Cyr, 2008)— all constructs linked to relationship marketing. These are desirable effects for any retail website, and with these being extended to include and be applicable in creating consumer engagement it is clear to see why the
knowledge that interactivity is an antecedent is important for both academics and practitioners alike.

Savvy online consumers now expect their website interactions to be both fluid and seamless, especially due to the ease of accessing competitor websites at the click of a button and current consumer cynicism increasing switching behaviour. From a practitioner perspective it is therefore vital to understand that interactivity is an antecedent for CE and to use it to inform online web marketing strategies, in terms of website design, consumer retention planning, and the online team’s structure, dedication and responsibilities. Zhang and Liu (2011) highlight the importance of retail marketers understanding how to induce relationship quality and loyalty through the best use of interactivity features; with the knowledge that this now extends to consumer engagement too, this heightens the need for practitioners to ensure that interactivity is high on their agenda when developing websites. Also with people often shopping to cheer themselves up and to achieve a sense of escapism, utilising the right website features can ensure that the experience delivered fulfils this objective and therefore taps into emotional CE elements. It is imperative that websites are informed by research, data and best practice not simply what looks best. This is especially important given that affordance features were not found to be instrumental in the process of consumers becoming engaged. The design should include features which foster co-creation, evoke emotions and provide an enjoyable experience, whilst the use of metrics and therefore knowing customers also ensures a focus on customer centred design and the learning & insight elements of CE.

Customer centric design is focussed on providing an enjoyable experience for all customers regardless of the purpose for their visit, whether this be to find information during the decision making process, to make a purchase or to become part of a brand community. Here it can be seen how it closely links to consumer engagement in terms of seeing the value that can be added by all consumers, not only those with purchase intentions. Designing a website in this way requires planning to ensure that there is an understanding of consumers’ needs, wants and the tools that they require and then including these features in a way that make sense to them. Doing so can save time and money as retailers are more likely to get the design right, or close to right first time. This
reduces support costs and the likelihood of product returns (Van Duyne et al., 2007). The advantage of adopting a customer-centred design over one which is company-, designer- or technology-centred is that it puts consumers at the heart of the design process “and sees technology as a tool that can empower people” (Van Duyne et al., 2007:11). Retailers must remember that no matter how skilful their web designers are, good website design is not just common sense and that designers are too involved in the process to view the website from a consumer perspective. Instead this should be informed by metrics and market research. Whilst this research needs to include obtaining information about the target audience’s demographics, to inform for example vocabulary, it should also focus on their needs overall for wanting to engage with the website. This study finds the determinants of consumer engagement online to include communication, customisation, speed of response and control. By obtaining this knowledge through mixed methods research, and through retailers and their web development teams possessing an understanding of how to ensure these interactivity needs can be achieved, this will inform the customer centric design required.

It is important for practitioners to also note that this customer centric approach and engagement process must span the entire end-to-end journey for the customer, including both online and offline interactions with the retailer. For example many shoppers who use e-commerce also still go into traditional bricks and mortar stores. This may be for click and collect purposes, to ask questions or try products for the first time. During these visits the consumer associates a human face and real-life experience of the store to the brand, and therefore there must be synergy between all of the touch-points (contact centres, online and offline) to ensure the brand is consistent, engaging and fulfilling their needs at all times. This is essential with the qualitative findings highlighting CE benefits of consumer advocacy, loyalty and repeat purchase, word-of-mouth and increased sales; and academic literature adding to this with it being a source of competitive advantage (Brodie et al., 2011, Van Doorn et al., 2010) and a major factor in building brand equity (Bowden, 2009).

Van Duyne et al. (2007) proposes seven phases for website development: 1) discovery, understanding customer needs and aligning them with organisational goals; 2) exploration, creating rough website designs and selecting one or more
to further develop; 3) refinement, perfecting the navigation, layout etc. of the chosen design; and 4) production, generating the blue print and design specification for the site. These first four phases are all part of the design process, and have cyclical processes within each. For example the exploration phase may occur four or five times, with senior management reviewing stages in between, before the team is happy that the initial designs fit customers’ needs and business objectives, and moving onto refinement. Typically the more time spent on perfecting these initial four processes, the more likely the website is to fulfil both consumer needs and business objectives. The next stages are: 5) implementation, developing the code, content, look and feel of the site; 6) launch, making the site live for real-life use; and 7) maintenance, providing support to the site, tracking and using metrics to inform performance and changes needed, and preparing for any redesign required.

Although maintenance is usually the most overlooked and expensive phase within the website development process, it is vital for online retailers to understand the importance of it. With consumer engagement being found to be an iterative process and also having communication and speed of response as antecedents, this has implications for practitioners in terms of how their websites should be ran and maintained. Retaining CE should therefore also be viewed by brands as an on-going process, requiring time, effort, resource and monetary investment. Teams must be in place to respond to consumer conversations, requests, queries and complaints in a timely and relevant manner (both online and offline e.g. via telephone); to fix any problems, broken links, anything slowing down navigation or page loading times, back up the website and maintain server logs; and also to schedule for and adapt the website to meet consumers’ ever-evolving needs. This ensures that the customer centred approach is not only applicable during the design stages of the website, but also after its launch in its day-to-day running- therefore aiding in maintaining a consumers engagement throughout the on-going CE cycle.

7.4 Interactivity Features and Their Impact on CE

The key interactivity determinants of consumer engagement are shown to be communication, customisation, control and speed of response. Whilst interactivity conceptualisation is still highly debated there is some agreement amongst scholars that it does involve communication, control and speed of
response (Rafaeli, 1988, McMillan, 2000b, Liu and Shrum, 2002, McMillan and Hwang, 2002, Song and Zinkhan, 2008), although not always labelled this way. For example, Liu and Shrum (2002) describe it as “the degree to which two or more communication parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronised” (p.54), acknowledging these three features. This study therefore supports the agreement of this consolidated knowledge, whilst providing further justification for the inclusion of customisation as an interactivity dimension too (Steuer, 1992, Song and Zinkhan, 2008, Florenthal and Shoham, 2010).

Whilst the interactivity constructs of affordance and navigation were removed during exploratory factor analysis, this does not mean that they are not important aspects of website design, only that they are not fundamental in the process of developing engagement with consumers. If an organisation’s key objective is to build CE then the findings of this study should be used to inform which interactivity features should be present and most prominently displayed on their website, and which are less preferential in the process and can therefore be embedded deeper into a website’s architecture. These vital CE influencing interactivity constructs of communication, customisation, control and speed of response will be discussed in order; explaining what they are, academic contributions, and the associated practitioner implications and recommendations.

7.4.1 Communication

This study finds that communication positively affects both emotional CE (r=0.24) and cognitive/behavioural CE (r=0.17). Communication here refers to the two-way “process by which individuals share meaning” (Fill, 2009:924), which can include exchanging information, ideas, opinions and feelings. Two-way communications allow for reciprocal communication between the consumer and the organisation, as well as between consumers. Communication can be used by marketers to achieve four main tasks: to inform potential consumers of offerings; to persuade them that entering into an exchange with the organisation is beneficial; to reinforce experiences and reassure customers that they are making the right decision; and also to differentiate the brand from competitors (Bowersox and Morash, 1989). For consumer engagement purposes it is
important for retail websites to facilitate two-way communication, offer consumers the chance to talk-back, provide relevant communication and also enable conversation. Overall the finding that communication is a central element of interactivity provides support for its inclusion in the majority of the extant literature to date (Ha and James, 1998, Liu and Shrum, 2002, Florenthal and Shoham, 2010, Hoffman and Novak, 1996, Johnson et al., 2006, Song and Zinkhan, 2008). This is clearly recognisable in Ha & James (1998:456) definition of interactivity being “the extent to which the communicator and the audience respond to each other's communication need”.

Also from an academic perspective, to date there has been no research which has explicitly linked the interactivity facet of communication to consumer engagement. Again this new contribution correlates with CE being an extension of the relationship marketing paradigm, with previous RM literature highlighting the relational benefits of communication. For example Hoffman and Novak (1996) state that the more consumers and organisations communicate, the stronger their relationship will be, whilst also being likely to increase sales and profitability at the same time. Srinivasana et al. (2002) found that contact interactivity significantly influenced e-loyalty. Contact interactivity here is compatible with communication as it is the consumer’s and retailer’s ability to interact with each other via the website offering. This also concurs with the likelihood that Zhang and Liu (2011) and Yoon et al. (2008) findings that communication elements are often desired as they reduce the discomfort of purchasing online are correct.

Through in-depth knowledge of the consumer engagement facets, communications role in developing these may also have been implicitly inferred, and so expected to extend and become an interactivity antecedent to CE. This is with co-creation requiring both dialog and transparency to facilitate the process. Dialog in this sense links to communication as it concerned with interaction, willingness and the ability from both consumers and retailers to act. Both partners must be equal in the communications and the subject must be of mutual interest for co-creation to occur (Prahalad and Ramaswamy, 2004). The transparency and access of information is also instrumental in ensuring meaningful dialogue, as consumers must be able to find in-depth information to create a level playing field, where both parties are privy to the same knowledge.
For the learning & insight facet of CE, there is also the inference that the customer orientation of the brand must also be clearly communicated to consumers. This is so that they can start to make cognitive evaluations on how informed the website is by their requirements (gained through data, insight and market research), and then choose whether to engage or not based on this. The findings of this study transform these implicit inferences of communication being important in developing CE into explicit knowledge. This therefore has implications for the design and content creation process in developing a website, as it must communicate the right level of information to evoke transparency perceptions and show it meets consumer requirements, provide feedback channels, allow user-to-user conversations and recommendations, and highlight the use of cookies.

User reviews and recommendations, chat forums and the integration of social networking sites into websites are effective ways for retailers to fulfil consumers’ communication needs. Whilst it can be very time-consuming ensuring that these systems are not abused, the recommendations and opinions of other consumers can be very valuable in the consumer engagement process as they facilitate conversation and give users the ability to talk back. “Customers like recommendations so much that even strangers, especially those who seem knowledgeable, influence them… and 73 percent of people research a product or service before buying it” (Van Duyne et al., 2007:519-520). Consumers will research reviews, even if they are not made available on a retailer’s website. Integrating these tools into the retailer’s own website is therefore beneficial, as it means that users do not need to leave the site to conduct research, which often encourages switching behaviour. Retailers should make these communication channels both easy to find and to use. Such features can also be used to rectify any dissatisfaction highlighted in complaints and negative reviews; this is shown to be useful in building relationship quality, loyalty (Cho, 1999) and now consumer engagement, even when used to rectify complaints. To help control these suggested tools websites should have inbuilt features or teams to control the removal of any profanities, promotion of competitors, copy written material or abuse.

Within the organisation’s structure, dedicated teams or individuals should also be in place to respond to comments and conversations that take place via these
communication tools. Guidelines should be in place for the teams which overview and match the tone and content of conversations to the brands personality, to ensure synergy across all channels (Rogers, 2015). These should also be used to make sure that the platform is not being used as broadcasting tool, rather than socially interacting with consumers. Responsiveness is also especially important on social media where these are expected to take hours, not days and where many companies are still not being responsive or frequent enough in their communications (Daykin, 2015). Both positive and negative interactions should be acknowledged, with it being vital that the negative ones are not deleted, and are dealt with quickly and on the public domain. Even if the complaint is dealt with further away from the channel, a message acknowledging it, apologising and then directing them to send more information privately on the original medium shows other consumers that the brand is responsive, trustworthy and values customer satisfaction. Further individuals or teams should also be responsible for content creation, with content now being described as ‘king’ (Barr and Weiss, 2012). The content communicated via the website must be relevant, interesting and gain consumers’ attention, especially with easy access to competitors online, to ensure that readers remain on the website.

Through implementing features such as FAQ’s, blogs, social media integration, chat forums, customer recommendations, and direct communication links to contact the organisation; and understanding that these communications must be responsive and also tailored to consumers conversations/queries (as they would be in human-to-human interactions), practitioners are more likely to start developing consumer engagement with their website users. Having these features prominently displayed also brings the additional benefits of reducing the risks associated to online shopping and transforming the social shopping phenomena. Risks here include unfamiliarity, longer time horizons, and the removal of the consumer’s ability to assess products using all of their senses (Yoon et al., 2008). Gaining feedback from the company and FAQ’s, as well as being able to review and have conversations with previous customers can overcome these by reassuring consumers that they are making the right decision to engage and/or transact with the retailer. It can also provide further information about the quality, suitability and functionality of products and
services during their decision making process. From the social shopping perspective, having these communications tools on a website allows consumers to virtually carry out the processes they usually go through in store. This includes information searching, evaluating alternatives, gauging risks, and acquiring feedback to reduce these risks. It is therefore imperative that practitioners include these features on their websites, understand that through doing so they will be fulfilling communication needs, and that with communication being an antecedent for CE this will be helping to build engagement with consumers.

7.4.2 Customisation

The findings show that the most influential interactivity antecedent on consumer engagement is customisation; with it positively affecting both emotional CE (r=0.33) and cognitive/behavioural CE (r=0.30). Customisation in this context is concerned with “the extent to which a site is capable of being adapted to the individual needs of visitors” (Fill, 2009:755). There are three broad methods of customising a website; implicitly, explicitly and through a hybrid of the two. Implicit customisation refers to the tailoring of the web page being performed automatically by the websites information system. This can be informed by the user’s profile, past behaviour on the site, or interactions directly with the user. Explicit customisation on the other hand, is performed directly by the user amending content, layout or page look and feel through the system’s features. Hybrid customisation combines the two approaches together within one website. For consumer engagement purposes the findings highlight mainly implicit customisation, with websites needing to make purchase recommendations to match consumer’s needs, enable tailoring of products and services and present advertisements and promotions that are relevant to the users’ situation and demographics. Overall the finding that customisation is a central element of interactivity provides support for its conceptual inclusion. To date only a few scholars have acknowledged this construct (Steuer, 1992, Ha and James, 1998, Song and Zinkhan, 2008, Florenthal and Shoham, 2010), labelling it in their research as customisation, choice, or personalisation.

There has been no research to date which has explicitly and empirically linked the antecedent to CE; therefore making an important conceptual contribution.
Again, as with communication this correlates with consumer engagement being an extension of the relationship marketing paradigm; with previous RM research finding relational benefits of website customisation. For example Srinivasana et al. (2002) found that all of the 8C’s: customisation, contact interactivity, cultivation, care, community, choice, convenience, and character; except convenience significantly influenced loyalty online. Song and Zinkhan (2008) also found that high levels of customisation have an impact on consumers’ perceptions of how effective a website is.

Through in-depth scrutiny of the confirmed consumer engagement constructs, customisation’s role in developing these facets may be implicitly inferred. This therefore adds further support for customisation’s extension in becoming an interactivity antecedent for CE. This is with value co-creation being a shift “from a product- and firm-centric view to personalised consumer experiences” (Prahalad and Ramaswamy, 2004:5) and Ngo and O’Cass (2009) stating that customisation is part of a firm’s value offering; therefore highlighting the centricity of being able to customise interactions with consumers in the co-creation process. Prahalad and Ramaswamy (2004) also acknowledge the importance of enabling users to personalise their own experience, in this case online, so that even if the product, service or channel is the same for everyone, the way that individual consumers experience it can be altered to suit their needs. They found that opportunities for value co-creation are increased when organisations adopt this approach, thus confirming customisation’s role as a CE antecedent. With customisation there is also an inferred link with learning & insight facet, as a website must utilise cookies and data about a consumer and their visits, to enable the website to customise and meet their user preferences. This shows customer orientation in action through metric gained insight, which helps consumers make evaluations about the whether the brand is customer centric and meets their needs. As with communication, the findings of this study therefore transform these implicit inferences into the explicit knowledge that customisation has a positive influence on consumer engagement.

This obviously has implications for practitioners when considering which features they should include on their websites. Tailoring the channel to individual customers and also allowing them to shape this themselves, rather than providing a generic shopping experience is key in developing this CE.
ensure appropriate customisation retailers must understand the importance of using data to track a user’s journey through their website, as well as provide information about their shopping patterns and preferences. Cookies are an effective way to manage this data collection process, as they store unique information about the customer which helps in automatically identifying them when they return to a website. This information can include their user name, account details, purchase history and even how often they visit different sections of the site. Therefore if practitioners implement cookies, this can help in ensuring that personalised recommendations, content, cross- and up-selling, advertisements and offers are matched to consumers’ preferences and needs, through identifying them every time they enter the website. Organisations must ensure that their use of cookies complies with the legal regulations that the website: “provides clear and conspicuous notice of their use, has a compelling need to gather data, has appropriately and publically disclosed privacy safeguards for handling information derived from cookies, and has the personal approval of the head of the organisation” (Van Duyne et al., 2007:574). The recommendation is that cookies are used for identification purposes only and not authentication; so consumers see a personalised version of the website and are able to add items to their shopping basket by just going onto it, but to proceed through the quick flow checkout and view account information they must have securely signed into their account first. Overall this data collected via cookies is not only important for satisfying customisation needs and developing consumer engagement, but also for the retailer to gain insight about how needs and purchasing patterns are evolving to inform further website developments and future marketing strategies.

Informed by this data, features such as recommended products, personalised content and cross- and up-selling should be made prominent on websites too. This is with the findings of this study highlighting that customisation is the most influential interactivity antecedent in creating consumer engagement. Extended relational and transactional benefits are also presented by Van Duyne et al. (2007) finding that content customised to each user adds value and a motive to repeat visit. Up- and cross-selling and featured products help consumers to quickly identify items that may be of interest to them, based on their past shopping behaviours and preferences. With retail websites often displaying
thousands of products this is an effective way of allowing customers to almost ‘window-shop’ items that fit information stored in cookies, or relate to products that they are currently viewing. For example, a fashion website may up-sell by featuring accessories or other clothing elements that create an outfit based on a top that the consumer is viewing. If website developers can make these recommendations automatic, relevant and editorial in appearance, this reduces time and effort for the organisation but also adds a human feel, helps shoppers feel confident in their selections and makes the experience seem personal for the user. This can aid in replacing the social shopping opinions element found in bricks and mortar stores. Although suggesting complimentary products online can require a lot of planning, as the product database connecting products to each other must be complete and kept up-to-date so that automatic relationships between items are presented, the benefits of doing so usually outweigh this. This is with customisation helping to induce engagement and also with the average sales per transaction tending to increase through up- and cross-selling (Van Duyne et al., 2007). Related products should be shown throughout the customer’s journey, so on product pages and at checkout; and they should be easy to find information about and purchase without leaving the original product page. It is recommended that websites also allow the option for the consumer to decide which featured products they’d like to view once they enter the website, for example sale items, new products or a specific brand, so that they feel in control of their interactivity experience. Control will be discussed in more detail in section 7.4.3.

For all of these features the marketing and web development teams within the organisation must have a good knowledge and understanding of how their customers shop, to inform how to structure and connect products and recommendations, and also which content to map to each consumer. This information can be gathered through: deduction, e.g. cookies which observe, record, and offer customisation based on consumers preferences; editing, through visitor’s clicking buttons to edit and change content themselves; interviewing, asking users multiple choice questions and storing their answers so that content can be gradually tailored to meet their answers; and filtering, through building lists of preferences or past purchases and recommending items based on this (Van Duyne et al., 2007). It is also vital that when
customising the content of a website, that the basic rules of web design and structure are followed to ensure that personalisation isn’t prioritised over usability. As with communication, customisation must be consistent across channels to ensure synergy and enable the on-going CE process to continue. Tools such as sign-in, accompanied by quick flow checkout and order tracking all utilise customisation to aid a smooth transaction process for the consumer, no matter which device they use to access the website.

7.4.3 Control

This study finds that control positively affects cognitive & behavioural CE only ($r=0.20$). Control here refers to the consumer having autonomy over their actions and where they go on the website, and not simply being exposed to the website. The user is able to make choices about the flow of information they see, and also jump to other areas and sections of the site based on their preferences, not the retailers. For consumer engagement purposes the findings highlight the importance of the user always being aware and knowing where they are going, actually being able to get to where they want to be on the site, being able to choose if and when to click on links, and freely choosing what they want to view on the website. Overall the finding that control is a facet of interactivity provides support for its inclusion in most of the extant research (Steuer, 1992, Liu and Shrum, 2002, Ha and James, 1998, McMillan, 2000a, McMillan, 2000b, McMillan and Hwang, 2002, Coyle and Thorson, 2001, Song and Zinkhan, 2008, Wu, 1999). For example control is clearly acknowledged in Steuer (1992)’s definition of interactivity being “the extent to which users can participate in modifying the form and content of a mediated environment in real time”.

To date there has been no research which has identified control as an antecedent to consumer engagement. The findings of this study therefore make an important conceptual contribution. From a relationship marketing perspective however, scholars have previously acknowledged a connection between control and relational benefits. For example, Ariely (2000) linked active control to the satisfaction heterogeneity in information needs and helping users better fulfil their intended purpose for interacting with a brand; and Dholakia and Zhoa (2009) highlighted that consumers’ ease in finding the information or products
they required had an impact on satisfaction. Fortin and Dholakia (2005) also found that by increasing a user’s control over a website, they became more involved in it and made more positive evaluations of the site overall. Consequently this supports the notion that consumer engagement is an extension of the relationship marketing paradigm, with the antecedent of control being shown to be applicable to CE too.

Unlike communication and customisation, control only has a significant positive impact on cognitive & behavioural CE and not on emotional CE. This may be explained by the fact that consumers have to visit and act on a website, so carry out behavioural actions, before they are able to cognitively assess whether they feel in control of their journey through the site and how they wish to view it. Here behaviour and cognition are prior to any emotional elements or responses. It should also be noted that whilst the qualitative results highlighted the separation of the two identified constructs of navigation and control, the quantitative findings shown in the exploratory factor analysis identified that they are closely linked. This is with the navigational items all loading with control, however being removed as they had low-loadings and cross-loadings. This therefore emphasises that control can incorporate some of these navigational features, if they support in making the consumer feel autonomous over their browsing experience e.g. location breadcrumbs. This correlates with Song and Zinkhan (2008) finding that quick navigation, alongside personalisation increases consumer perceptions of control.

Unsurprisingly in an age where there is more power to the consumer through social media, greater control over their channel viewing experience is also desired. This obviously has implications for practitioners who must ensure that their website features allow this control, and therefore enables cognitive & behavioural aspects of engagement to develop. One way, identified above, is through utilising navigational features which make users feel in control of their experience; either in creating an effective navigational framework or through implementing navigational techniques to make sections and products easy to find. Marketers and website developers must remember that consumers may enter the website at different access points, browse differently, and have different goals they wish to achieve through visiting the site. Therefore integrating content, commerce and community aspects around the same
subject and product is vital and logical in allowing users to quickly access and find their way around a website. A navigational framework which is flexible and enables multiple ways for users to get to where they want to go is also advantageous, as without this consumers may not feel in control. Intention and impulse are shown to be the two main drivers of website actions. If a website’s navigation can accommodate both of these then it is more likely to that users will leave feeling satisfied; this is due to a site ignoring intention based navigation feeling “shallow and quirky” and one that ignores impulse based appearing “boring” (Van Duyne et al., 2007:217). With intention based navigation search (search bar and predictive text), browse (browsable content, navigational bar and tabs) and next step (action buttons and process funnel) tools should be implemented. Alternatively for impulse based navigation relate (up- and cross-selling, related content) and promote (featured products) tools should be used. As not every user will have impulse actions, the navigational tools associated to this can be positioned lower down the page. Overall navigational tools should be consistently placed throughout the website structure and close to where they begin reading, so that they are easy to find and also so that continuation through links makes sense and is the consumer’s choice.

Implementing navigational techniques to aid consumers in getting to where they want to go, and also finding their way back to original pages can also help with control interactivity. Location bread crumbs, site maps, navigational tabs and hyperlinked logos are all effective ways of allowing users to browse the website freely, safe in the knowledge that they will be able to return back to their original location easily if they don’t navigate to where they intended to go. Shortcut tools such as action buttons and embedded links are also features which can be implemented to allow consumers to make choices. As long as these shortcuts and any integrated media or advertisements are only activated once a browser clicks on them, this should support cognitive evaluations of control over their website experience and ultimately influence CE development.

Retailers must accommodate all visitors feeling in control of their visit, this includes people with disabilities or elderly people who often experience difficulties in viewing sites. Accessibility is therefore a vital consideration for organisations, and websites should be designed with this in mind to ensure that
any barriers to interaction and free movement around the site are removed. The difficulties people experience can depend on their disability. For example, people who have visual impairments may find the contrast between colours hard to distinguish, certain font choices and sizes hard to read, and may need audio descriptions for videos and images. Someone who can’t hear well may need audio content to be graphically presented; people who find a keyboard and mouse hard to use may need more navigational shortcuts; and people who find words hard to read may require shorter sentences, easy vocabulary, text aloud options, etc. (BBC, 2015). Website developers should ensure that all of these features are considered and built into their web design, following the World Wide Web Consortium’s accessibility guidelines, so that anyone visiting feels in control and is therefore more likely to start to engage with the retailer.

Control interactivity can also occur post-purchase through implementing order and tracking history functionality. This allows customers to view their order history, make changes to current orders and track fulfilment and delivery. If the website is linked directly to the courier service the retailer uses this allows real-time information about where the package is; again this can help in making the consumer feel in control. This can reduce the perceived risks of longer time horizons and uncertainty, which are associated with online shopping.

7.4.4 Speed of Response

The findings show that speed of response has a positive influence on cognitive & behavioural CE ($r=0.8$). Speed of response in this context is concerned with how quickly the website responds to a consumer’s input, with McMillan and Hwang (2002) stating that “The ideal is to have the computer moving at a speed that doesn’t inhibit the user” (p.33). For consumer engagement purposes this study highlights the importance of the user being able to gain information from the website quickly, obtain any information without delay, and also be directed quickly once they click on links. Overall the finding that speed of response is a central element of interactivity provides support for its inclusion in the majority of the extant literature to date (Coyle and Thorson, 2001, Florenthal and Shoham, 2010, Johnson et al., 2006, Steuer, 1992, McMillan, 2000b, McMillan and Hwang, 2002, Miles, 1992, Rafaeli, 1988, Ha and James, 1998, Liu and Shrum, 2002, Wu, 1999, McMillan and Downes, 2000). Speed of response has been
recognised in these studies either from a human-to-human (communication) or a human-to-computer (inputs and outputs) perspective; being labelled as speed, time sensitivity, no delay, responsiveness, and synchronicity. From the inputs and outputs viewpoint, a good example of this is in Florenthal and Shoham (2010) facet of accessibility, which is the speed and ease of accessing the retail setting and its information.

There has been no research to date which has identified speed of response as an antecedent to consumer engagement. This study consequently makes an important conceptual contribution. As with the previously identified interactivity antecedents, the findings further support CE being an extension of the relationship marketing paradigm. This is with relational benefits being recognised by Wu (1999) citing that responsiveness is positively correlated to attitude formation towards websites; and Liu and Shrum (2002) finding that if documents with both text and graphics (which websites are) take longer to load, this results in less favourable attitudes from users. Also similarly to the facet of control, speed of response only has a significant positive impact on cognitive & behavioural CE and not on emotional CE. This may be explained by the fact that consumers have to visit and act on a website, so carry out behavioural actions, before they are able to cognitively evaluate whether the site is quick at responding to their requests and actions. Here behaviour and cognition are important in developing engagement prior to any emotional aspects.

Practitioners must be cognisant of the implications that speed of response being a CE antecedent has on website development. Organisations must be aware of consumers’ expectations that information is accessible instantaneously and that the channel is quick to respond to their needs. Website features which reflect this include; the number of clicks it takes to reach desired information or pages, search facility speed, real-time online chat, loading speed, and how quickly customisation of pages, searches and content occurs. A high operating speed is imperative, regardless of integrated multimedia. This can be a challenge for online retailers as images, videos and music can often make pages slower to load, however they are an important source of competitive advantage. They convey brand personality, provide an experience for shoppers, and communicate non-verbal cues about the organisation, offering and also layout of the website (Van Duyne et al., 2007). Lohr (2012) however did find that there
is some tolerance to this, with consumers being more likely to wait for a video clip to load than a search result or page.

Animated progress bars can help reduce the frustration associated with slow loading times, as can page prioritisation. Page prioritisation can be used to decide which pages of a site are the most important and frequently viewed, and therefore make decisions about which design elements to implement on these to ensure quick running times. Priority pages, such as the homepage can be downloaded quicker if images are reduced in size or reused; html and text are used as much as possible, so that these will load whilst images take longer; interesting font sizes and colours are used to make this text exciting; and java dependent content such as sounds and videos are avoided on these pages. Metrics and data, as well as the marketer’s knowledge about the target audience should be used to identify these pages. This is a vital consideration with Lohr (2012) stating that “people will visit a Web site less often if it is slower than a close competitor by more than 250 milliseconds (a millisecond is a thousandth of a second)” (p.1).

With internet access spreading, not only in terms of demographics and consumption patterns, but also over mediums it is pertinent that websites run quickly over all of these channels. Each has differing network speeds and so marketers must understand the technologies their customers use to access their site, and the accompanying limitations and advantages. For example not all mobile phones have Flash installed, so if developers integrate a lot of multimedia and images into their site, these users will not be able to view it quickly or as expected. This can lead to frustration and as the findings of this study suggest unfavourable cognitive & behavioural CE evaluations, as it shows a lack of customer centricity during the design phase. It is also suggested that website faults or time delays in loading pages should be acknowledged and communicated to the user; if they are warned about such delays their impact can be less salient (Liu and Shrum, 2002). Delays can be due to a high volume of visitors at a specific time, acquiring search results from multiple sources, or even payment authorisations. Whilst these still cause frustration for consumers, providing visible feedback e.g. through a progress bar or countdown timer, reduces this and lets the user know that the site hasn’t broken and that they will eventually reach their desired location or outcome. Messages such as ‘page
loading’ or loading parts of the content as they become available can also help in this process.

**7.5 Moderators on the Consumer Engagement-Interactivity Relationship**

It is important to acknowledge that the consumer engagement-interactivity relationship is not always equally pronounced in all consumers, and that it can be weakened or strengthened by individual predispositions. The findings show that this relationship can be moderated by three factors; gender, combined satisfaction & trust and tolerance towards a brand.

**7.5.1 Gender**

Gender is shown to have a moderating effect on the relationship between control and emotional CE, with being male having a stronger effect on this ($r=0.28$) versus females ($r=0.00$), and being significant at the $<0.10$ level. Customisation’s relationship with cognitive & behavioural CE is also shown to be moderated by gender, with being female shown to have an effect nearly double the strength ($r=0.29$) versus being male ($r=0.19$). This is also significant at the same $<0.10$ level.

This finding provides a significant conceptual contribution, as no CE research to date has examined the role of gender in developing engagement. Previous research into gender and interactivity can be drawn upon to compare the findings to extant literature. For example they corroborate Korgaonkar and Wolin (1999) view that consumers interact with media channels differently depending on their individual differences and characteristics, including gender. Siddiqui et al. (2003) also stressed the pertinence of fulfilling differing interactivity needs as it was highlighted as a main area for concern for online fashion retailers, with ignoring these needs being linked to dissatisfaction among consumers. With satisfaction being a relationship marketing construct and CE being an extension of this, it can therefore be assumed that understanding gender differences is key to building consumer engagement.

For practitioners it important to acknowledge the moderating effect of gender on both control and customisation’s antecedent relationship with CE, especially as Weiser (2000) states that men utilise more complex website features than
women. Customisation could be classed as one such feature, especially explicit customisation which requires user input to personalise and tailor the website to meet their individual’s needs. However Muthaly and Ha (2009)’s finding that females tend to participate in interactivity more than males contradicts this. Regardless of which assumption is correct, marketers and website developers must ensure that customisation tools are easy to use and prominent throughout the website so that women are more likely to use them, which will aid in building emotional CE. The same principle also applies to control features such as location bread crumbs, site maps, navigational tabs, hyperlinked logos, order history and tracking, and addressing accessibility needs for men, as this can further support in the development of cognitive & behavioural CE.

7.5.2 Satisfaction & Trust

Satisfaction & trust is also shown to have a moderating effect on customisation’s relationship with consumer engagement, however this time from an emotional CE perspective. This is with consumers with high satisfaction & trust, being shown to have an effect three times the strength (r= 0.70) of those with low satisfaction & trust (r= 0.22), significant at the <0.01 level. Speed of response’s relationship with cognitive & behavioural CE is also shown to be moderated too; with high satisfaction & trust having a positive effect on this (r= 0.14) versus low satisfaction & trust (r= -0.02). This effect is significant at the <0.05 level.

The finding that satisfaction & trust is a moderator in the CE-interactivity relationship provides a new conceptual contribution. This is due to the extant literature having only ever highlighted trust as an antecedent (Van Doorn et al., 2010), consequence (Vivek et al., 2012, Brodie et al., 2013) or as part of the process to develop CE (Gambetti et al., 2012, Gallup, 2009). Similarly for satisfaction as an antecedent (Van Doorn et al., 2010); consequence (Brodie et al., 2013) or intrinsic feature of consumer engagement (Shevlin, 2007, Sashi, 2012, Gallup, 2009). Although there is no CE research to date exploring satisfaction & trust’s moderating effect, previous relationship marketing literature discusses its role in relational benefit creation. For example Bolton (1998) links it to relationship length; Hill and Alexander (2000) to development of loyalty; and Salmen and Muir (2003) to increased customer retention. This
therefore further supports CE being an extension of the relationship marketing paradigm.

Another conceptual contribution is presented with the factor analysis showing the parcelling of satisfaction and trust as one construct. This is an anomaly when compared to the traditional relationship quality literature, which presents the three separate facets of commitment, trust and satisfaction (Garbarino and Johnson, 1999, De Wulf et al., 2003, Hennig-Thurau et al., 2002, De Cannie’re et al., 2009, Beatson et al., 2008). The finding however confirms Anderson and Swaminathan (2011) discovery that satisfaction is moderated by trust in e-markets, and Morgan and Hunt (1994) perspective that satisfaction alone cannot predict relational benefits. The anomaly may therefore concern the parcelling of the two constructs occurring from an online website perspective only. This is with satisfaction on websites being based predominantly on service, and this being informed by a level of trust as consuming in this way requires trust to even consider interaction with a brand. This is due to online websites being a human-to-computer interaction, removing the reassurance normally provided by face-to-face, close geographic proximity and haptics.

Practitioners must acknowledge the combining of these two constructs, as for online retail consumers they are viewed as the same thing; so without satisfaction there will be very little trust and vice versa. Online this satisfaction may be developed through the delivered offering confirming that the consumer made a correct and wise decision to purchase from a website (Anderson and Swaminathan, 2011), which will also evoke trust. Or trust can be built through the website meeting expectations, being counted on to successfully complete transactions, and being reliable at performing (Doney and Cannon, 1997), which will also induce satisfaction. Knowing that the two aspects are inherently linked and that they also have a moderating effect on the CE-interactivity relationship means that features known to relate to these constructs should be present and prominent throughout a retail website. These include privacy and returns policies, security logos, ethical policies, customer recommendations and reviews, and FAQ’s which help to build shoppers’ confidence in the brand. The use of cookies should also always be communicated, and the data collected via this method should be kept anonymous to maintain transparency and trust. This is especially important with transparency of information being found to play a
key role in the co-creation process (Prahalad and Ramaswamy, 2004), which is part of cognitive & effective CE. With satisfaction and inherent to that trust, also being associated with the enjoyment of browsing and a website’s ability to perform reliably it can be understood why it can play a significant role between speed of response and consumer engagement. Fulfilling consumers’ wants and needs, which can be identified through a customer-centric approach to website development, will also help ensure satisfaction. In turn once this predisposition has been established, through a consumer’s high levels of satisfaction & trust towards a brand, this will have a positive, significant effect on speed of response and customisation’s relationship with consumer engagement.

7.5.3 Tolerance

Tolerance is the final construct shown to have a moderating effect on the consumer engagement-interactivity link; this is between customisation and emotional CE. High tolerance towards the brand is shown to have an effect nearly double the strength (r= 0.46) of those with low tolerance (r= 0.25), significant at the <0.10 level. Communication’s relationship with cognitive & behavioural CE is also shown to be moderated; with low tolerance having a positive effect on this (r= 0.14) versus high tolerance (r= 0.07). This is also significant at the <0.10 level.

The finding that tolerance is a moderator in the CE-interactivity relationship is a completely unique and new conceptual contribution, due to none of the extant consumer engagement literature acknowledging its presence in the development process, either as an intrinsic dimension, antecedent or consequence. Although there is no CE research to date exploring tolerance’s moderating effect, previous relationship marketing literature has focussed on its role in evoking relational benefits. For example Keaveney (1995) found that it reduces consumers’ switching behaviour; Wu (2011) acknowledged that a wider zone of tolerance, so an increased tolerance level has a positive impact on loyalty; and Berry and Parasuraman (1991) stated that if a service performs highly in a person’s zone of tolerance that this is likely to increase customer delight and loyalty. This therefore provides further support that CE is an extension of the relationship marketing paradigm, with tolerance being shown to have a moderating effect on engagement too.
With practitioners not knowing consumers’ individual tolerance zones prior to them entering their website, they must accommodate for people with both high and low tolerance levels to ensure engagement is effectively built. With the findings highlighting that high tolerance has a positive effect on customisation and CE’s relationship, marketers must ensure that features such as up- and cross-selling, recommendations, sign-in and quick checkout are all prominently displayed throughout the websites architecture. Tolerances effect on this relationship may be explainable as customisation is a more complex website feature, with back office systems required to inform the automated tailoring process and user input often needed. If a consumer has a higher tolerance level they may be more likely to persevere with customisation features and become more involved in personalising their experience, even if the website doesn’t get recommendations, etc. right the first time.

From the low tolerance perspective the findings highlight that this has a positive effect on communication’s relationship with cognitive & behavioural CE. Again website developers should ensure that a wide variety of communication tools are utilised and are easy to find on the site, so that consumers with low tolerance are more likely to develop engagement. Such features include FAQ’s, blogs, social media integration, chat forums, customer recommendations, and direct communication links to contact the organisation. Communication is likely to be instrumental for low tolerance users as it can provide a platform to gain answers and reassurance from both the organisation and other consumers that service quality will be delivered. Another recommendation for practitioners relates to if there has been a recent problem with the website, as here communication features are key in ensuring low tolerance consumers aren’t put off and can still develop CE.

7.6 Summary

This chapter has provided an overview of the key insights gained from both the qualitative and quantitative stages of the research. It has also addressed the research objectives of understanding the nature of the consumer engagement and interactivity relationship; how and whether interactivity has an influence on CE in a website context; the gender differences in the CE and interactivity relationship (through examining moderators); and recommendations and implications of the findings from a multi-stakeholder perspective.
The main findings highlighted are the consumer engagement and interactivity link, with control, communication, speed of response and customisation all being interactivity antecedents to CE. Moderators of gender, satisfaction & trust and tolerance are all shown to influence this relationship. The results also confirm that consumer engagement is multidimensional in nature, including emotional CE dimensions of emotion and experience, and cognitive & behavioural dimensions of learning & insight and co-creation.

8.0 Conclusion, Limitations and Recommendations

8.1 Introduction

This final chapter provides a concluding evaluation of the key findings and their value (section 8.2), an overview of the limitations of this study (section 8.3) and recommendations for future research based on the context of this investigation (section 8.4).

8.2 Conclusion

This research has addressed the following objectives. Firstly, it has established the nature and dimensionality of the consumer engagement-interactivity link for the first time, and has therefore provided an online retail perspective of CE. The finding that interactivity is an antecedent to CE answers calls for further examination of CE in the online context (Brodie et al., 2011, Gambetti and Graffigna, 2010); and an understanding of the need and how to engage through innovation and design (MSI, 2006). These interactivity antecedents are found to
be communication, customisation, speed of response, and control; with customisation being the most influential facet.

Secondly, the proposed and tested conceptualisation and scale for the CE-interactivity link, provides further insights into the dimensionality of these two highly debated concepts. With good model fit and also high scale reliability and validity, this study has developed a measurement tool for online engagement; confirmed consumer engagement’s multidimensionality; and highlighted the online CE facets to be emotion, experience, co-creation, and learning & insight. Third, based on the identification of the moderating factors of gender, satisfaction & trust and tolerance, this provides a further contribution, as well as implications for practitioners and academics alike. This, alongside interactivity’s role in developing CE, starts to address the need to understand consumer engagement’s relationship within a nomological network of already established relationship marketing constructs (Brodie et al., 2011, van Doorn, 2011, Bolton, 2011, Hollebeek et al., 2014).

Additionally, the research makes a methodological contribution through the adoption of a pluralistic mixed methods approach. This is very rare in the extant interactivity and CE literature, with the majority of studies to date utilising a literary review or pure qualitative methods, so an interpretive approach to developing a high level conceptualisation of the concepts. Many scholars have acknowledged the need for large scale, quantitative validation of these proposed theoretical CE models (Gambetti et al., 2012, Brodie et al., 2011, Mollen and Wilson, 2010, Gambetti and Graffigna, 2010, Hollebeek, 2011a, Hollebeek, 2011b). The study is also one of only a few investigations that considers CE’s context and application, i.e. online retail websites, rather than simply high level conceptualisation of the concept. This alongside the multi-stakeholder approach to data collection has helped to bridge the academic-practitioner divide (Gambetti et al., 2012), providing in-depth recommendations for marketers and web developers, as well as contributing to academic knowledge about interactivity and consumer engagement.

8.3 Limitations

It is important to acknowledge that no study is without limitations; however steps can be taken throughout the research process to reduce their impact and also
ensure the validity and reliability of findings. An obvious limitation of this study is its cross-sectional nature, which therefore only examines the development of consumer engagement through interactivity at a single point in time. Problems in inferring causality are associated with this type of research design, as it is difficult to identify the sequence of events e.g. whether emotional CE comes before or after cognitive & behavioural CE; or whether participants inflated their ratings in the survey because they were already engaged with a brand. This research design was selected due to the time and resource restrictions of a PhD; with in-depth semi-structured interviews being utilised prior to the survey to gather information relating to relational direction. A longitudinal research design would have further overcome this limitation, as it would increase validity through assessing the cumulative and temporal effects of interactivity and consumer engagement, thus inferring cause and effect more accurately. This is important with Brodie et al. (2011) synthesis of the extant literature stating that “CE relational consequences may extend to act as CE antecedents in subsequent CE processes and/or cycles…varying in intensity and complexity over time” (p.258).

It is also important to acknowledge quantitative research tends to neglect softer influences on inter-relationships and processes. For example, it doesn’t uncover the in-depth unconscious processes that may influence the consumer engagement-interactivity relationship for online consumers. Inductive, rather than deductive methods could have potentially uncovered new variables and constructs, which are yet to be examined in the extant literature.

Another limitation of this study is its generalisability, as the research and fieldwork were only carried out in the UK. Therefore the findings cannot be assumed to be generalisable globally. For example one might expect that in high uncertainty avoidance cultures more communication interactivity elements may be required to build engagement. This is due to consumers in these countries being more averse to risks, including those associated with online retailers and therefore requiring more reassurance, before being likely to develop engagement. However the researcher took numerous methodological steps to ensure that the results were able to be generalised to the UK population. This is through conducting the semi-structured interviews with multiple stakeholder groups, who were from numerous locations, organisations,
and academic institutions across the UK; and through utilising a professional market research company to select a survey sample frame with geographic spread and demographics similar to that of the UK population. Indeed the descriptive statistics within the quantitative analysis confirmed that the sample was representative of this target population.

Further limitations come from both interviewer and interviewee bias. With interviewer bias it is imperative that the researcher understands that precautions that can be taken to ensure that their preconceptions don’t influence methodological and interpretive judgements. For example pilot tests were carried out prior to launching the survey, to make sure that the questionnaire was easily to understand and complete, and that it did not include leading questions. Interviewer bias could also have influenced the qualitative interpretation phase, due to the researcher having prior knowledge of the subject areas and some of their proposed dimensions from the extensive literature review. Here the precaution of participant validation was taken, presenting the proposed conceptual framework back to a sub-sample of the original stakeholders, to confirm their agreement of the interpretations, prior to empirical testing (Lincoln and Guba, 1985).

From an interviewee perspective potential limitations include both halo effect and social desirability bias. It is possible that respondents during both the interviews and survey could have given stronger responses than they would normally have, after deciding that they had engagement with a specific brand. This was partially offset by stating that ‘there are no right or wrong answers’ at the beginning of both collection methods; however it cannot be completely eliminated (Hair et al., 1998). Further social desirability bias may have also come into play, especially when interviewing practitioners and academics about interactivity and CE. This is due to the questions being centred on their area of expertise, so they may have felt the need to respond with specific answers linked to the company or institution’s perspective or strategy around these topics, or related to extant literature to show their knowledge of the area. To try to overcome this interview questions were worded to centre on their opinion, or what a construct meant to them personally; open ended questions were utilised; and the interviewer tried to build rapport at the beginning of the interview to
make the respondent feel more relaxed. Confidentiality and anonymity were also assured in both the interview and survey stages.

8.4 Recommendations for Future Research

The implications and recommendations for practitioners have already been overviewed in chapter 7.0; however the recommendations for academics conducting future research into the context of this study also need to be discussed.

One useful avenue of research, which would also address the limitation highlighted in the section above, would be to rerun this study utilising a longitudinal research design. With the findings of the qualitative research identifying that consumer engagement is an iterative process with feedback loops, a study spanning a longer period of time e.g. over the course of a couple of years would be able to establish the nature of this cyclical process. This would enable examination of whether CE levels change over time; if there are any further concepts or influences that effect whether consumers stay engaged or disengage; whether the CE process or relationship strength differs based on long-term, repeat versus recent, infrequent website visits/interactions; and how feedback loops can be maintained or disrupted. This would also enable evaluation of whether interactivity remains an antecedent or becomes a consequence, once a consumer is engaged with a brand’s website. Indeed other scholars including Brodie et al. (2011) and Hollebeek et al. (2014) also highlight longitudinal research as an area for future focus.

To address a further limitation, another recommendation is to expand the study further on a global scale to potentially make the findings more generalisable to the world’s population. To date most of the extant literature has been conducted in the UK, USA, Australia and New Zealand; countries which are fairly similar in terms of Hofstede (1993) cultural dimensions. It would be interesting to assess whether cultural dimensions have an impact on the CE-interactivity link, i.e. based on power distance, uncertainty avoidance, individualism vs. collectivism, masculinity vs. femininity and time orientation. Examination would also uncover whether interactivity antecedents differ based on geographical location, and if their strength or the associated feedback loops change too.
With consumer-brand experiences now becoming more multi-channel in nature, another avenue for future research would be to investigate how this affects the overall consumer engagement process. A comparative study into physical world stores, websites, and social media communities assessing the impact of the different channels on the interactivity-CE link may provide useful insights into how engagement can be built effectively dependent on channel. For example non-verbal communication may become an antecedent to CE when examining physical world stores. Future research may also want to assess how and if interactivity through different media interfaces e.g. tablets, smart phones, computers, etc. has an impact on the two constructs’ relationship, as many consumers now access websites through more than one medium. Additionally, further studies into how the CE-interactivity link alters and is influenced by retail sector and/or brand type, e.g. hedonic or luxury vs. utilitarian, would also provide more brand- or category- specific insight and knowledge.

Further investigation into the consequences of the CE-interactivity link is also still needed. Whilst the qualitative research phase in this study uncovered some inferred consequences, further quantitative testing is needed to validate constructs such as advocating, loyalty/repeat purchase, word-of-mouth marketing, increased sales, improved experience, trust and satisfaction, competitive advantage and increased brand reputation. Previous literature corroborates some of these benefits of CE; however again many of these studies are at a highly conceptual level and are yet to be validated. Future quantitative research utilising a survey or an experimental design could fill this research gap; identifying the consequences and also the strength of the CE-interactivity link on them.

Finally, from a theoretical background consumer engagement has been investigated primarily from a relationship marketing and service-dominant logic perspective to date. Future research should examine if there are further links between other theoretical stances such as consumer culture theory or consumer behaviour theory. With consumer engagement being a new and emerging concept it is important for future research to thoroughly analyse its theoretical underpinnings and for any relationship with additional stances to be acknowledged to develop an integrated understanding of CE.
Appendix A – Example of an academic email invitation for interview participation

Professor/Dr XXX,

I am a second year Marketing PhD student at The Hull University Business School and would like to ask you to participate in the field research I am undertaking as part of my thesis- ‘Conceptualising Consumer Engagement (CE): An Online Perspective’.

My research project aims to further explore the highly debated concept of consumer engagement (CE) and its conceptualisation in the online website context, through factoring in the experience and views of practitioners and academics. This is where I request your help! You have been selected as one of 25 top academics within UK universities with expertise in this area; due to your research interests in XXX and also through your PhD supervision on XXX.

The first stage of my research involves semi-structured interviews to explore
opinions on:

* consumer engagement
* interactivity
* whether you think they are linked
* how you think brands should utilise their websites to engage with customers

This will require a face-to-face interview, which will take no longer than 45-60 minutes to complete. If you wish to support me in my research please let me know dates/times that are convenient for you, and we can organise a time for me to travel to you to conduct the interview.

If you choose to participate I appreciate you giving your time to this study and if you have any questions please do not hesitate to contact me via this email address. You can also contact my PhD supervisor, Dr. Haseeb Shabbir at h.shabbir@hull.ac.uk or +44 (0)1482 463197.

Kind Regards
Naomi Hedges
Appendix B – Informed consent letter

Informed consent for PhD research

Title: Conceptualising Consumer Engagement: An Online Perspective

I am a PhD student at The Hull University Business School. I would like to invite you to participate in the research I am undertaking as part of my thesis. This research has been approved by the University’s Research Ethics Committee prior to me contacting you. My research project aims to further explore the highly debated concept of consumer engagement (CE) and its conceptualisation in the online website context.

If you agree to participate, this will involve taking part in a semi-structured interview once and it is expected that this will take no longer than one hour. I can undertake the interview at a time and place that is convenient for you and I would want to record and later transcribe the interview. All interview data will be treated with the utmost respect and will be stored securely in a locked filing cabinet at the University. However, information about the project, including the interview data, will be shared with my dissertation supervisor and other appropriate staff at the University.
The data will be confidential and any identifying information removed, for example changing your name and the organisation you work for. You are free to withdraw at any time, without adverse consequences and any information gathered until such time will not be used. Once the research project is complete the final thesis will be available publicly through the University Library.

I appreciate you giving your time to this study and if you have any questions please do not hesitate to contact me at N.Hedges@2012.hull.ac.uk. You can also contact my PhD supervisor, Dr. Haseeb Shabbir at h.shabbir@hull.ac.uk, +44 (0)1482 463197.

Thank you,

Naomi Hedges

Should you have any concerns about the conduct of this research project, please contact the Secretary, HUBS Research Ethics Committee, University of Hull, Cottingham Rd, Hull, HU6 7RX; Tel No (+44) (0)1482 463410; fax (+44) (0)1482 463689.
Appendix C – Interview guide

Academics and practitioners

Facesheet information for practitioners and academics:

Name, job title and occupation, length of time you have worked/research in marketing

All questions relate to the online retail website context through the medium of a computer

What does consumer engagement (CE) mean to you? Prompt- what do think it involves/characteristics?

What do you think the CE process looks like? Are there stages?

Do you think this applies online too?

At what point would you consider a consumer to be engaged with a brand? Probe- what do you believe to be the benefits?

In your opinion what is interactivity? Prompt- what do think it involves/characteristics?

From your experience what makes a website interactive?
In your opinion do you think there is a link/connection between interactivity and consumer engagement? Probe- If so, please explain how you think they are connected/related

How should a brand attempt to engage with a consumer through their retail website? Probe- do specific features have more impact on consumer engagement than others?

Consumers

Facesheet information:

Name, age, gender, occupation, how often do you shop online?

All questions relate to the online retail website context through the medium of a computer

Think of a brand that you feel that you are engaged with. Why do you feel engaged? What activities/history do you have with the brand?

What does consumer engagement (CE) mean to you? Prompt- what do think it involves/characteristics?

What do you think the CE process is like? Do you think there are stages that you go through to become engaged?

Do you think this applies online too?

At what point would you consider yourself to be engaged with a brand? Probe- what do you believe to be the benefits (for you and the brand)?

In your opinion what is interactivity? Prompt- what do think it involves/characteristics?

From your experience what makes a website interactive? Probe- think of an example, why did you think it was interactive?
In your opinion do you think there is a link/connection between whether a website is interactive and if you would become engaged with that brand? **Probe-** If so, please explain how you think they are connected/related?

How should a brand attempt to engage with you through their retail website? **Probe-** Are there specific website features that make you feel more engaged that others?

---

**Appendix D – Final Questionnaire**

---

Dear Participant,

My name is Naomi Hedges and I am a student at the University of Hull, currently doing a PhD in marketing. I would really appreciate your help in my research by filling in this questionnaire, which will take a maximum of 15 minutes to complete. There are no right or wrong answers; and all answers will be treated both anonymously and confidentially.

The aim of the research is to investigate which elements of retail websites you prefer and how you feel about these.

Your contribution is greatly appreciated, thank you.

If you have any queries or you wish to find out further information, feel free to contact me:

Naomi Hedges  
PhD Marketing, The University of Hull  
Email: N.Hedges@2012.hull.ac.uk
Please think about a retail brand that you feel like you have long-term emotional, deep connection with and whose website provides an experience that you want to actively participate in and help improve. Once you have a clear image of what their website looks and works like, please answer the following questions.

**Section A - deals with the website and how it works**

Please list which sector the website you have in mind belongs to? (e.g technology, health and beauty, food)

Please CIRCLE one number for each statement based on your agreement with them. 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither disagree nor agree, 5 = slightly agree, 6 = agree, 7 = strongly agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>This website facilitates two-way communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The website gives me the opportunity to talk back</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The website feeds back relevant communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The website enables conversation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The website does not encourage visitors to talk back</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The site is effective in gathering visitors’ feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The website processed my input very quickly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting information from the site is very fast</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### Section A – deals with your experience on the website

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was able to obtain the information I want without any delay</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>When I clicked on the links, I felt I was getting instantaneous information</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The website was very slow in responding to my request</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The website answers my question immediately</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The website makes purchase recommendations that match my needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The website enables me to order products that are tailor-made for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The advertisements and promotions that this website sends to me are tailored to my situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The website makes me feel that I am a unique customer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I believe that this website is customised to my needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel that I have a lot of control over when and where to go in the website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My ability to go where I thought I was going within the website was exactly as I expected</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel that I can quickly jump from one page to another</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>While on the site I always feel aware of where I am</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>While on the site I always know where I am going</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>While on the site I am always able to go where I think I am going</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am delighted to be able to choose which link and when to click it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel that I have a great deal of control over my visiting experience on the site</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>It is difficult to find my way around the website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>While on the site I can choose freely what I want to see</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>While surfing the site I have absolutely no control over what I can do on the site</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>While surfing the site my actions decide the kind of experience I get</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can handle the products in a natural way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can perform desirable actions on a product (e.g close-ups, 360 degree views, etc)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can involve my senses while being in contact with a product (e.g. playing music, videos, catwalks, etc)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Section B – deals with your thoughts and feelings about the brand

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>My feelings toward the brand can be characterized by affection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My feelings toward the brand can be characterized by love</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My feelings toward the brand can be characterized by connection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My feelings toward the brand can be characterized by passion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My feelings toward the brand can be characterized by delight</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My feelings toward the brand can be characterized by captivating</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This brand makes a strong impression on my visual sense or other senses</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find this brand interesting in a sensory way</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This brand does not appeal to my senses</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This brand induces feelings and sentiments</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not have strong emotions for this brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This brand is an emotional brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using the brand gets me to think about the brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think about the brand a lot when I’m using it</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using the brand stimulates my interest to learn more about the brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand has clear ideas about its customers and their needs</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand defines its products/services from customers’ perspectives</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand has specific customer-care objectives</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand actively solicits customers’ comments</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brands senior executives spend time with customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that for the brand serving customers’ needs takes precedence over serving internal needs</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel for the brand that market research is a very important</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am proud to be a customer of this brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel a sense of belonging to this brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I care about the long-term success of this brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am loyal to this brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand interacts with customers to serve them better</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand works together with customers to produce offerings that mobilize them</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand interacts with customers to design offerings that meet their needs</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand provides services for and in conjunction with customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand co-opts involvement in providing services for them</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the brand provides customers with supporting systems to help them get more value</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This brand reflects who I am</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can identify with this brand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I feel a personal connection to this brand
I use this brand to communicate who I am to other people
I think this brand helps me become the type of person I want to be
I consider this brand to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others)
This brand suits me well

Section C – deals with your thoughts and feelings about the website

The performance of this website meets my expectations
This website can be counted on to successfully complete the transaction
I can trust the performance of this website to be good
This website is reliable for online shopping
I am satisfied with my decision to purchase from this website
If I had to purchase again, I would feel differently about buying from this website
My choice to purchase from this website was a wise one
I regret my decision to buy from this website
I think I did the right thing by buying from this website
I am unhappy that I purchased from this website
If service is not delivered as expected I would be willing to put up with it
If a mistake is made during service delivery I would be willing to be patient
If I have to wait longer than I normally expected to receive the service I would be willing to adapt

Section D Finally, please provide some information about yourself. Please tick the most appropriate choice from each question.

1. Gender:  □ Female  □ Male
3. Education:  □ Less than GCSE  □ GCSE’s  □ A Level’s  □ Bachelor’s Degree  □ Postgraduate Degree  □ Other
4. Marital Status:  □ Single  □ Married  □ Living Together  □ Widowed

253
5. **Occupation:**
- Professional/Technical
- Manager/Official
- Clerical
- Sales
- Crafts/Trade
- Operator
- Labourer
- Service Worker
- Retired
- Homemaker
- Student
- Unemployed
- Other – please specify

6. **Ethnic Group:**
- White
- Mixed/Multiple Ethnic Group
- Asian
- Black
- Chinese
- Other – please specify

7. **How often do you shop online?**
- Daily
- Weekly
- Fortnightly
- Monthly
- Yearly
- Never

8. **On average, how many hours do you spend online every day?**
- Less than one hour
- 1-2 hrs
- 2-4 hrs
- 4-6hrs
- 6-8 hrs
- More than 8 hours

Thank you for your help!
# Appendix E – Final questionnaire items

<table>
<thead>
<tr>
<th>Construct/Variable</th>
<th>Source</th>
<th>Survey items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactivity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Communication      | Song and Zinkhan (2008) | COM1. This website facilitates two-way communication.  
COM2. The website gives me the opportunity to talk back.  
COM3. The website feeds back relevant communication.  
COM4. The website enables conversation.  
COM5. The website does not encourage visitors to talk back.  
COM6. The site is effective in gathering visitors’ feedback. |
| Speed of Response  | Song and Zinkhan (2008) | SPEED1. The website processed my input very quickly.  
SPEED2. Getting information from the website site is very fast.  
SPEED3. I was able to obtain the information I want without any delay.  
SPEED4. When I clicked on the links, I felt I was getting instantaneous information.  
SPEED5. The website was very slow in responding to my request.  
SPEED6. The website answers my question immediately. |
| Customisation      | Srinivasana et al. (2002) | CUSTOM1. The website makes purchase recommendations that match my needs.  
CUSTOM2. The website enables me to order |
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Author</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CUSTOM</strong></td>
<td></td>
<td>Products that are tailor-made for me.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CUSTOM3. The advertisements and promotions that this website sends to me are tailored to my situation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CUSTOM4. The website makes me feel that I am a unique customer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CUSTOM5. I believe that this website is customised to my needs.</td>
</tr>
<tr>
<td><strong>Navigation</strong></td>
<td>Dholakia and Zhoa (2009)</td>
<td>NAV1. I feel that I have a lot of control over when and where to go in the website.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NAV2. My ability to go where I thought I was going within the website was exactly as I expected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NAV3. I feel that I can quickly jump from one page to another.</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>Song and Zinkhan (2008)</td>
<td>CONTROL1. While on the site I always feel aware of where I am.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL2. While on the site I always know where I am going.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL3. While on the site I am always able to go where I think I am going.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL4. I am delighted to be able to choose which link and when to click it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL5. I feel that I have a great deal of control over my visiting experience on the site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL6. The website is not manageable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL7. While on the site I can choose freely what I want to see.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL8. While surfing the site I have absolutely no control over what I can do on the site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONTROL9. While surfing the site my actions decide the kind of experience I get.</td>
</tr>
<tr>
<td><strong>Affordance</strong></td>
<td>Florenthal and Shoham (2010)</td>
<td>AFFORD1. I can handle the products in a natural way.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AFFORD2. I can perform desirable actions on a product (e.g close-ups, 360 degree views, etc).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AFFORD3. I can involve my senses while being in contact with a product (e.g. playing music, videos, catwalks, etc)</td>
</tr>
<tr>
<td><strong>Consumer Engagement</strong></td>
<td>Thomson et al. (2005)</td>
<td>EMOT1. My feelings toward the brand can be characterized by affection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMOT2. My feelings toward the brand can be characterized by love.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMOT3. My feelings toward the brand can be characterized by connection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMOT4. My feelings toward the brand can be characterized by passion.</td>
</tr>
</tbody>
</table>
| Experience | Brakus et al. (2009) | **Only affective elements used as this and emotion are the affective parts of the CE scale.**  
EXP1. This brand makes a strong impression on my visual sense or other senses.  
EXP2. I find this brand interesting in a sensory way.  
EXP3. This brand does not appeal to my senses.  
EXP4. This brand induces feelings and sentiments.  
EXP5. I do not have strong emotions for this brand.  
EXP6. This brand is an emotional brand |
| Conscious Connection | Hollebeek et al. (2014) based on Calder et al. (2009) | **CONSC1.** Using the brand gets me to think about the brand.  
CONSC2. I think about the brand a lot when I’m using it.  
CONSC3. Using the brand stimulates my interest to learn more about the brand. |
| Learning & Insight | Nwankwo (1995) | **LEARN1.** I feel the brand has clear ideas about its customers and their needs.  
LEARN2. I feel the brand defines its products/services from customers’ perspectives.  
LEARN3. I feel the brand has specific customer-care objectives.  
LEARN4. I feel the brand actively solicits customers’ comments.  
LEARN5. I feel the brands senior executives spend time with customers.  
LEARN6. I feel that for the brand serving customers’ needs takes precedence over serving internal needs.  
LEARN7. I feel for the brand that market research is a very important. |
| Commitment/Participation | Garbarino and Johnson (1999) | **COMMIT1.** I am proud to be a customer of this brand.  
COMMIT2. I feel a sense of belonging to this brand.  
COMMIT3. I care about the long-term success of this brand.  
COMMIT4. I am loyal to this brand. |
| Co-creation | Ngo and O’Cass (2009) | **COCREAT1.** I feel the brand interacts with customers to serve them better.  
COCREAT2. I feel the brand works together with customers to produce offerings that mobilize them.  
COCREAT3. I feel the brand interacts with customers to design offerings that meet their needs.  
COCREAT4. I feel the brand provides services for and in conjunction with customers. |
| COCREAT5. I feel the brand co-opts involvement in providing services for them. |
| COCREAT6. I feel the brand provides customers with supporting systems to help them get more value |

### Moderating Factors

| TRUST1. The performance of this website meets my expectations. |
| TRUST2. This website can be counted on to successfully complete the transaction. |
| TRUST3. I can trust the performance of this website to be good. |
| TRUST4. This website is reliable for online shopping. |

| SAT1. I am satisfied with my decision to purchase from this website. |
| SAT2. If I had to purchase again, I would feel differently about buying from this website. |
| SAT3. My choice to purchase from this website was a wise one. |
| SAT4. I regret my decision to buy from this website. |
| SAT5. I think I did the right thing by buying from this website. |
| SAT6. I am unhappy that I purchased from this website. |

| SELF1. This brand reflects who I am. |
| SELF2. I can identify with this brand. |
| SELF3. I feel a personal connection to this brand. |
| SELF4. I use this brand to communicate who I am to other people. |
| SELF5. I think this brand helps me become the type of person I want to be. |
| SELF6. I consider this brand to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others). |
| SELF7. This brand suits me well. |

| Tolerance | (Yi and Gong (2013)) |
| TOLER1. If service is not delivered as expected I would be willing to put up with it. |
| TOLER2. If a mistake is made during service delivery I would be willing to be patient. |
| TOLER3. If I have to wait longer than I normally expected to receive the service I would be willing to adapt. |
9.0 References


CHALABI, M. 2013. 36m Brits use the internet every day - but what are they all doing? The Guardian.


LIU, Y. & SHRUM, L. 2002. What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness. *Journal of advertising*, 31, 53-64.


MINTEL. 2012a. Researching and Buying Technology Products - UK - January 2012’. Available: [http://academic.mintel.com/display/609187/?highlight=true#hit1](http://academic.mintel.com/display/609187/?highlight=true#hit1) [Accessed 02/03/13].


VIVEK, S. D. 2009. A Scale of Consumer Engagement. The University of Alabama TUSCALOOSA.


