MOTIVATIONAL DRIVERS OF BEHAVIORAL ONLINE BRAND ENGAGEMENT IN CONTENT CONSUMPTION CONTEXT: EXAMINING BRAND COMMITMENT AND TRUST IN ONLINE CONTENT AS MODERATORS

Master’s Thesis, Marketing
Author: Janne Hepola
2.9.2015
Supervisor: Heikki Karjaluoto
**ABSTRACT**

<table>
<thead>
<tr>
<th>Author</th>
<th>Janne Hepola</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Motivational drivers of behavioral online brand engagement in content consumption context: Examining brand commitment and trust in online content as moderators</td>
</tr>
<tr>
<td><strong>Subject</strong></td>
<td>Marketing</td>
</tr>
<tr>
<td><strong>Type of degree</strong></td>
<td>Master’s Thesis</td>
</tr>
<tr>
<td><strong>Time of publication</strong></td>
<td>2015</td>
</tr>
<tr>
<td><strong>Number of pages</strong></td>
<td>80 + appendices</td>
</tr>
<tr>
<td><strong>Abstract</strong></td>
<td>The Internet has become increasingly important for companies in recent years. However, online environment possesses many challenges for both managers and researchers. Moreover, it is not until recently engagement concept has begun to emerge in the marketing literature. However, it is known that engagement has a strong influence on many favorable customer outcomes. Thus, engagement is a fruitful research topic in online environment. The purpose of this explanatory study is to examine behavioral dimension of online brand engagement in context of content consumption. This study examines the effects of five motivational drivers (community, information, entertainment, identity, and remuneration) on behavioral online brand engagement. This relationship is further investigated through moderating effects of brand commitment and trust in online content. In addition, the impact of behavioral online brand engagement on brand purchase intention is examined. The study is conducted in tractor context. Quantitative approach is selected for this study. The data (N=819) is gathered through an online survey which is administrated in five languages (English, German, French, Polish, and Finnish). Based on the results of this study, the best predictors of behavioral online brand engagement are community, entertainment, and information which, however, are only weak predictors. Identity has no significant impact, whereas remuneration has a weak negative impact on behavioral online brand engagement. There is partial support only to two moderation hypotheses: when the relationship between identity and behavioral online brand engagement is concerned, there is a statistically significant difference between the low and high group regarding both moderators. However, both moderators act also as antecedents of behavioral online brand engagement. Consuming brand-related content online rather than offline also has a significant positive impact on brand purchase intention. In addition, frequency of consumption has a significant positive impact on behavioral online brand engagement thus supporting the participation-engagement dichotomy that is adopted in this research.</td>
</tr>
<tr>
<td><strong>Keywords</strong></td>
<td>Behavioral online brand engagement, online content consumption, motivational driver, brand commitment, trust, brand purchase intention</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Jyväskylä School of Business and Economics</td>
</tr>
</tbody>
</table>
FIGURES

FIGURE 1 Structure of the study ................................................................. 13
FIGURE 2 Customer engagement process ................................................. 20
FIGURE 3 Consumer engagement in a virtual community ....................... 21
FIGURE 4 Research model........................................................................... 43
FIGURE 5 Structural model........................................................................ 57

TABLES

TABLE 1 Summary of engagement concepts in the marketing literature . 16
TABLE 2 Examples of different activity types on the Internet................. 23
TABLE 3 Overview of motivations driving online content consumption 25
TABLE 4 Key supporting literature for the hypotheses ......................... 44
TABLE 5 Demographic and background factors of the respondents........ 51
TABLE 6 Factor loadings, Cronbach’s alphas, composite reliabilities, and t-values ............................................................ 54
TABLE 7 AVE, construct correlations, square root of AVE (on the diagonal), means, and standard deviations ........................................ 55
TABLE 8 Direct effects model ................................................................. 56
TABLE 9 Moderating effects model .......................................................... 58
TABLE 10 PLS-MGA results ................................................................. 59
## CONTENTS

**ABSTRACT**  
**FIGURES AND TABLES**  
**CONTENTS**

### 1 INTRODUCTION .......................................................... 9  
1.1 Research background .................................................. 9  
1.2 Research objectives and problems .................................. 11  
1.3 Research structure .................................................... 12

### 2 CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT. 14  
2.1 Behavioral online brand engagement ............................ 14  
2.1.1 Introduction to engagement concept ......................... 14  
2.1.2 Customer engagement ............................................. 15  
2.1.3 Engagement in online context ................................. 20  
2.1.3.1 Customer online engagement behaviors ............... 22  
2.2 Motivational drivers of engagement ............................. 24  
2.2.1 Community ......................................................... 26  
2.2.2 Information ......................................................... 27  
2.2.3 Entertainment ...................................................... 29  
2.2.4 Identity .............................................................. 30  
2.2.5 Remuneration ...................................................... 32  
2.3 Brand commitment ..................................................... 33  
2.4 Trust in online content .................................................. 36  
2.5 Brand purchase intention ............................................. 40  
2.6 Research model ......................................................... 43

### 3 METHODOLOGY ............................................................. 45  
3.1 Quantitative research ................................................... 45  
3.2 Data collection and practical implementation .................. 46  
3.2.1 The questionnaire .................................................. 48  
3.3 Data analysis ............................................................ 49

### 4 RESULTS ....................................................................... 51  
4.1 Demographic and background information ..................... 51  
4.2 Exploratory factor analysis ......................................... 52  
4.3 Measurement model ................................................... 53  
4.4 Structural model ....................................................... 55  
4.4.1 Direct effects ....................................................... 55  
4.4.2 Moderating effects .............................................. 57

### 5 DISCUSSION .................................................................. 60  
5.1 Theoretical contributions ............................................ 60
REFERENCES ............................................................................................................... 67

APPENDICES ............................................................................................................... 81

APPENDIX 1: LIST OF SURVEY ITEMS IN ENGLISH

APPENDIX 2: RESULTS OF THE EXPLORATORY FACTOR ANALYSIS
1 INTRODUCTION

1.1 Research background

The Internet is so big, so powerful and pointless that for some people it is a complete substitute for life. (Andrew Brown, 1938-1994)

The amount of time people spend on the Internet has nearly doubled globally since 2010 (ZenithOptimedia 2015). In addition, some 20% of European and 34% of American Facebook users utilize the site to follow retailers (McKinsey & Company 2013). Companies try to take advantage of this trend by finding best ways to harness interactive online environment to increase their performance and make more profits (Kaplan & Haenlein 2010). The Internet has provided companies new ways to influence brand attitudes and thus relationship outcomes (Hennig-Thurau, Malthouse, Friege, Gensler, Lobschat, Rangaswamy & Skiera 2010). In fact, the Internet is very cost-effective (Hanna, Rohm & Crittenden 2011) and enables interaction with a very large number of consumers (Yan 2011). Thus, there is also an increasing interest to study possibilities of online environment in the marketing literature (e.g. Brodie, Ilic, Juric & Hollebeek 2013; Bickart & Schindler 2001; Heinonen 2011; Muntinga, Moorman & Smith 2011; Gummerus, Liljander, Weman & Pihlström 2012).

Engagement is another current and interesting topic in marketing. Majority of research (e.g. Brodie, Hollebeek, Juric & Ilic 2011; Hollebeek, Glynn & Brodie 2014; Dwivedi 2015) consider it a three-dimensional construct which consists of cognitive, emotional, and behavioral dimensions. Customer engagement has many positive outcomes such as customer satisfaction, loyalty, commitment, and trust (Brodie et al. 2011; Brodie et al. 2013). Therefore, companies want to have engaged customers (Schultz & Peltier 2013). In addition, customer engagement is considered a superior predictor of customer loyalty intentions in comparison to satisfaction, perceived value, and quality (Dwivedi 2015). As this study focuses on behavioral dimension of engagement in online environment, the definition of behavioral online brand engagement is based on a slight modification of Hollebeek et al.’s (2014) activation dimension of customer brand engagement. Thus, behavioral online brand engagement is considered “a consumer’s level of energy, effort and time spent […] [online] in a particular consumer/brand interaction” (Hollebeek et al. 2014, 154). In online environment, customer activities or behaviors can be divided based on customer’s level of activeness into consumption, contribution, and creation of own content (Muntinga et al. 2011; Heinonen 2011).

Many different types of stakeholders have created Facebook groups which are used to interact with consumers. However, online groups in general seem to offer their members different types of content. For example, members share funny and entertaining pictures and videos that aren’t focused on any specific
object in Facebook group called “9GAG”. This group has over 24 million followers. On the other hand, McDonald’s seems to offer mainly informative content, and chances to win prizes and get discounts on Facebook. Finally, Moottoripyora.org is a Facebook group which seems to offer chances to share own and consume other users’ experiences related to motorcycles. (Facebook.)

If different stakeholders were able to identify which kind of online content drives the behavioral online (brand) engagement, they could apply this knowledge to maximize the amount of visits on their online sites.

In broad terms, the marketing literature has identified participation, involvement, and flow as antecedents of three-dimensional engagement construct (Brodie et al. 2011; Vivek, Beatty & Morgan 2012; Hollebeek et al. 2014). In addition, due to process nature of engagement, outcomes of engagement may act as antecedents of engagement for existing customers (Brodie et al. 2011; Brodie et al. 2013; Bowden 2009a/b). However, when the focus is on the behavioral aspect of online content consumption, McQuail’s (1983) classification of motivations to consume traditional media is widely recognized and applied in the literature (Mersey, Malthouse & Calder 2012; Heinonen 2011; Muntinga et al. 2011). According to this classification, motivations can be categorized into four distinct categories: 1) entertainment, 2) integration and social interaction, 3) personal identity, and 4) information (McQuail 1983). This classification is also applicable to online context (Men & Tsai 2013; Heinonen 2011; Muntinga et al. 2011; Jahn & Kunz 2012). Moreover, remuneration is also mentioned as a motivation to consume online content in the marketing literature (Men & Tsai 2013; Muntinga et al. 2011). Based on a literature review, this study focuses on five potential motivational drivers of behavioral online brand engagement: 1) community, 2) information, 3) entertainment, 4) identity, and 5) remuneration.

However, the relationship between motivational drivers and engagement may be influenced by certain factors (Brodie et al. 2011; van Doorn, Lemon, Mittal, Nass, Pick, Pirner & Verhoef 2010). In their conceptual study, van Doorn et al. (2010) proposed that several customer, firm, and context-based factors may act as antecedents of customer engagement behaviors. However, these factors may also help enhance or inhibit the effects of other factors on customer engagement behaviors (van Doorn et al. 2010). This study investigates the role of brand commitment and trust in online content as moderators. They have specifically been proposed to be potential moderators by van Doorn et al. (2010). Brand commitment is defined as “an enduring desire to maintain a valued relationship” (Moorman, Zaltman & Deshpande 1992, 316) with a brand. Mayer, Davis & Schoorman (1995, 712) defined trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party“. In general, both brand commitment (e.g. Kim, Choi, Qualls & Han 2008; Carlson, Suter & Brown 2008; Bateman, Gray & Butler 2011) and trust (e.g. Horppu, Kuivalainen, Tarkiainen
have been identified as important constructs in online environment.

1.2 Research objectives and problems

The need for customer engagement research in online environment is widely recognized in the marketing literature (e.g., Schultz & Peltier 2013; Hollebeek et al. 2014; Dwivedi 2015; Brodie et al. 2013). The Marketing Science Institute (MSI) has identified customer engagement as a key research priority. It is stated that engagement especially requires studying in social media (MSI 2014-2016 Research Priorities). Moreover, Brodie et al. (2013) expressed the need for comparative research between offline and online engagement. Brodie et al. (2011) also highlighted contextual factors as a future research direction in context of customer engagement.

The aim of this research is to study behavioral online brand engagement in content consumption context. The focus is on the relationship between motivational drivers of engagement and behavioral online brand engagement. This relationship is further investigated through moderating effects of brand commitment and trust in online content. As a secondary objective, the impact of behavioral online brand engagement on brand purchase intention is investigated. Studying purely behavioral aspect of engagement is justified since the nature of engagement dimensions differ (Vivek et al. 2012). This approach allows the examination of the relationship between engagement and its antecedents in a more detailed level. Consumption behavior is chosen because it is the first and necessary step to other online activities (Shao 2009). Furthermore, Shang, Chen & Liao (2006) found support that passive consumption behavior has a stronger impact on brand loyalty than active commenting. Thus, following research questions are applied:

Primary research questions:

- Which motivational drivers have a positive effect on behavioral online brand engagement in content consumption context?
- Do brand commitment and trust in online content strengthen the relationship between motivational drivers and behavioral online brand engagement in content consumption context?

Secondary research question:

- Does behavioral online brand engagement have a positive effect on brand purchase intention in content consumption context?

Studying this topic is relevant for two reasons. First, moderating effects related to online engagement is totally unexplored domain in quantitative terms in the
marketing literature. Second, earlier studies (e.g. Gummerus et al. 2012; Men & Tsai 2013; Zheng, Cheung, Lee & Liang 2015) view behavioral engagement purely on frequency of visits/use basis in online context thus not capturing the relative essence (cf. share of wallet – purchase dichotomy) of behavioral dimension proposed by extensive study of Hollebeek et al. (2014). Those constructs are rather related to participation which is considered a necessary antecedent of engagement (Brodie et al. 2011; Vivek et al. 2012).

This study is conducted in tractor context. The quantitative approach is selected for this explanatory research since it allows the identification of causal relationships by gathering vast amount of data in a structured form (Hirsjärvi, Remes & Sajavaara 2005, 129, 131). The data is collected through an online questionnaire which can be accessed through several national and international tractor discussion boards and online magazines, private Facebook groups, and a tractor manufacturer’s website and Facebook group. In addition, Facebook advertising is used. The data is analyzed using IBM SPSS Statistics 22 and SmartPLS 3.2.

1.3 Research structure

This study consists of five separate chapters. Existing theoretical knowledge is discussed in chapter 2. Moreover, hypotheses are developed in this very same chapter. Chapter 3 concerns the methodological considerations of the study. Chapter 4 reports the results of this study. Finally, chapter 5 draws both theoretical and managerial conclusions from the results, presents the limitations of the study, and offers recommendations for further research. Figure 1 illustrates the structure of this study in greater detail.
FIGURE 1 Structure of the study

1 INTRODUCTION
- Research background
- Research objectives and problems
- Research structure

2 CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT
- Behavioral online brand engagement
- Motivational drivers of engagement
- Brand commitment & trust in online content
- Brand purchase intention
- Research model

3 METHODOLOGY
- Quantitative research
- Data collection and practical implementation
- Data analysis

4 RESULTS
- Demographic and background information
- Exploratory factor analysis
- Measurement model
- Structural model

5 DISCUSSION
- Theoretical contributions
- Managerial implications
- Evaluation of the research
- Limitations of the research
- Future research
2 CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

This chapter explores the theoretical background of the study. Concepts of behavioral online brand engagement, motivational drivers of engagement (community, information, entertainment, identity, and remuneration), brand commitment, trust in online content, and brand purchase intention are introduced. Finally, hypotheses are developed and an appropriate research model is presented.

2.1 Behavioral online brand engagement

Since engagement is a fairly new concept in the marketing literature, and other related fields have a longer tradition of engagement studies (Brodie et al. 2011, 255), it is beneficial to briefly discuss the background of the concept. Next, the focus is shifted to customer engagement. Finally, engagement in online context is discussed.

2.1.1 Introduction to engagement concept

The word “engagement” has its roots in employee engagement (So, King & Sparks 2014, 306). For instance, Kahn (1990) examined personal engagement at work. He defined personal engagement as “the simultaneous employment and expression of a person's ‘preferred self’ in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances” (Kahn 1990, 700). This definition of personal engagement is mentioned in many significant customer engagement studies (e.g. Brodie et al. 2011; Bowden 2009a; Hollebeek 2011b) and probably partly influenced many marketing studies (e.g. Brodie et al. 2011; Hollebeek et al. 2014) to apply the multidimensional nature of customer engagement.

Nevertheless, many studies have taken a unidimensional approach to engagement. For instance, Roberts & Davenport (2002) emphasized the person’s involvement and enthusiasm in job engagement and adopted the emotional perspective of engagement. On the other hand, Blumenfeld & Meece (1988) focused on the cognitive aspect of engagement in their study. Moreover, Downer, Rimm-Kaufman & Pianta (2007) studied behavioral engagement in learning context. Furthermore, different combinations of these dimensions are also applied (Brodie et al. 2011). For instance, Hu (2010, 151) emphasized the cognitive and behavioral elements of student engagement by referring to it as “the quality of effort students put forth in educational purposeful activities”. Three-dimensional (trait, state, and behavioral engagement) approach was applied by Macey & Schneider (2008) who studied employee engagement and
stated that these constructs are related to each other resulting a common outcome. In summary, the literature considers different behavioral, emotional, and cognitive aspects of engagement. Yet, the three-dimensional approach seems to give the most comprehensive view of engagement (Brodie et al. 2011).

Brodie et al. (2011) made a significant contribution to the marketing literature by applying the knowledge of similar construct from other disciplines to form a solid definition and conceptual model of customer engagement. Related non-marketing constructs include civic engagement, state engagement, comprehensive (state) engagement, social engagement, task engagement, occupational engagement, student engagement, and employee engagement. In addition, these related disciplines include sociology, political science, psychology, educational psychology, and organizational behavior. Similarly, many other marketing researchers leaned on other engagement research from these related disciplines when they defined customer engagement or other engagement concepts (e.g. online brand engagement and customer engagement process). (Brodie et al. 2011, 255, 256, 265.)

2.1.2 Customer engagement

As already mentioned earlier, this study concerns the behavioral perspective of online brand engagement. Moreover, the focus is specifically on brand-related content consumption behavior in online environment. However, it is necessary to discuss customer engagement in general terms first because 1) cognitive, emotional, and behavioral dimensions of engagement have a lot in common, for example, in terms of antecedents and consequences (Brodie et al. 2011; Hollebeek et al 2014; Dwivedi 2015), and 2) it helps to understand this phenomenon and the context of this study better.

As customer engagement is a fairly new concept in the marketing literature (Brodie et al. 2011, 255), it lacks a widely accepted definition. However, many studies apply a three-dimensional (cognitive, emotional, and behavioral) approach to modeling engagement (Brodie et al. 2011). The marketing literature uses a variety of different engagement definitions which reflect the context in which the authors examine the engagement concept. These terms include, for example, customer engagement, consumer engagement, online brand engagement, customer engagement process, customer engagement behavior, customer brand engagement, engagement behavior, online engagement, media engagement, and engagement (Brodie et al. 2011, 256; Mollen & Wilson 2010; Calder & Malthouse 2008). Table 1 presents a summary of many widely cited definitions of customer engagement and – considering the context of this study – the most relevant related concepts.
<table>
<thead>
<tr>
<th>Definitions of different engagement concepts in the marketing literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer engagement</strong></td>
</tr>
<tr>
<td>“a focal agent/object (e.g., a brand) in focal service relationships. It occurs under a specific set of context-dependent conditions generating differing CE levels; and exists as a dynamic, iterative process within service relationships that co-create value. CE plays a central role in a nomological network governing service relationships in which other relational concepts (e.g., involvement, loyalty) are antecedents and/or consequences in iterative CE processes. It is a multidimensional concept subject to a context- and/or stakeholder-specific expression of relevant cognitive, emotional and/or behavioral dimensions.” (Brodie et al. 2011, 260.)</td>
</tr>
<tr>
<td>“the intensity of an individual’s participation in and connection with an organization’s offerings and/or organizational activities, which either the customer or the organization initiate” (Vivek et al. 2012, 127).</td>
</tr>
<tr>
<td><strong>Customer brand engagement</strong></td>
</tr>
<tr>
<td>“the level of an individual customer’s motivational, brand-related and context-dependent state of mind characterised by specific levels of cognitive, emotional and behavioural activity in direct brand interactions” (Hollebeek 2011a, 790).</td>
</tr>
<tr>
<td>“a consumer's positively valenced brand-related cognitive, emotional and behavioral activity during or related to focal consumer/brand interactions” (Hollebeek et al. 2014, 149).</td>
</tr>
<tr>
<td><strong>Customer engagement behaviors</strong></td>
</tr>
<tr>
<td>“a customer’s behavioral manifestations that have a brand or firm focus, beyond purchase resulting from motivational drivers” (van Doorn et al. 2010, 254).</td>
</tr>
<tr>
<td><strong>Media engagement</strong></td>
</tr>
<tr>
<td>“the sum of the motivational experiences consumers have with the media product” (Calder &amp; Malthouse 2008, 5).</td>
</tr>
<tr>
<td><strong>Online engagement</strong></td>
</tr>
<tr>
<td>“a cognitive and affective commitment to an active relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value. It is characterized by the dimensions of dynamic and sustained cognitive processing and the satisfying of instrumental value (utility and relevance) and experiential value (emotional congruence with the narrative schema encountered in computer-mediated entities).” (Mollen &amp; Wilson 2010, 923.)</td>
</tr>
<tr>
<td><strong>Consumer engagement in a virtual brand community</strong></td>
</tr>
<tr>
<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 characterized by fluctuating intensity levels that occur within dynamic, iterative engagement processes. Consumer engagement is a multidimensional concept comprising cognitive, emotional, and/or behavioral 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, 107.)</td>
</tr>
</tbody>
</table>

Probably the most comprehensive definition of customer engagement (CE) is provided by Brodie et al. (2011). This definition is based on five fundamental
propositions (FPs) that were formed through literature review and panelist feedback:

“FP1: CE reflects a psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific service relationships.

FP2: CE states occur within a dynamic, iterative process of service relationships that cocreates value.

FP3: CE plays central role within a nomological network of service relationships.

FP4: CE is a multidimensional concept subject to a context- and/or stakeholder-specific expression of relevant cognitive, emotional, and behavioral dimensions.

FP5: CE occurs within a specific set of situational conditions generating differing CE levels.” (Brodie et al 2011, 258.)

Many customer engagement studies (e.g. Patterson, Yu & de Ruyter 2006; Hollebeek 2011a; Mollen & Wilson 2010), are aligned with the definition provided by Brodie et al. (2011) by considering customer engagement as a psychological state. Dwivedi (2015) characterized consumer brand engagement as a deep bond between consumers and brands. Hollebeek (2011a) also viewed the interaction between engagement subject and engagement object as a necessity of engagement. These subjects have varied in other disciplines (Hollebeek 2011a, 787), whereas subject refers to the customer or consumer in the marketing domain. However, engagement objects have included constructs such as brands, products/services, organizations (Hollebeek 2011a; Brodie et al. 2011; Brodie et al. 2013), and industries (Brodie et al. 2013). For example, Hollebeek et al. (2014) focused on consumer-brand interactions. Similarly, Calder & Malthouse (2008) emphasized the role of experiences that consumers have with media in their definition of media engagement.

Brodie et al. (2013) found qualitative support that engagement consists of cognitive, emotional, and behavioral dimensions. Vivek et al. (2012) stated that the cognitive and affective dimensions capture customer’s experiences and feelings, whereas the behavioral dimension captures customer’s participation. Hollebeek et al. (2014) created a valid measurement scale for engagement that can be applied to many contexts. In the measurement scale, the cognitive dimension is measured through cognitive processing customers goes through when they use the brand. The questions of the emotional dimension focus on positive feelings that the usage of the brand evokes. Finally, the behavioral perspective is evaluated through the use of brand with respect to other options in the same product category. (Hollebeek et al. 2014.)

Patterson et al. (2006) also vouched for the three-dimensional nature of customer engagement and measured customer engagement through vigor, dedication, absorption, and interaction. Similarly, Dwivedi (2015) applied vigor, absorption, and dedication in his engagement research. Hollebeek et al. (2014) also found support that these dimensions are equal rather than sequential: they explored the fit of alternative model in which the behavioral dimension was
considered as a consequence of the emotional and cognitive dimensions. However, as stated, this rival model had a worse fit in comparison to the original model (Hollebeek et al. 2014). In addition, Brodie et al. (2011, 258) stated that depending on stakeholders and situational factors these dimensions are different in terms of importance thus generating “distinct CE complexity levels”. For instance, Dwivedi (2015) found support that the emotional component of engagement is the most dominating one in mobile phone context. In general, engagement is a continuum ranging from non-engaged to highly engaged (Brodie et al. 2011, 260).

Nevertheless, some non-mainstream classifications of engagement exist in the marketing literature. For instance, Gambetti, Graffigna & Biraghi (2012) expressed the need to measure also experiential and social dimensions of engagement since these constructs appear to be central elements of customer brand engagement, and the traditional classification of engagement dimensions is too limited. Vivek et al. (2012) also discussed the social dimension of customer engagement. Moreover, Mollen & Wilson (2012) divided dimensions of online engagement into 1) dynamic and sustained cognitive processing, 2) instrumental value, and 3) experiential value. In addition, Calder & Malthouse (2008) divided media engagement experiences into 1) transportation, 2) irritation, 3) promotion/prevention, and (4) rejection. Furthermore, Calder, Malthouse & Schaedel (2009) identified eight engagement dimensions that are related to experiences. However, Hollebeek et al. (2014) considered experiences and engagement as different concepts.

Some studies are mainly focused on the behavioral nature of customer engagement. A significant conceptual research is provided by van Doorn et al. (2010) whose study emphasized the perspective that customer engagement behaviors (CEBs), which arise from motivational drivers, go beyond transactions. They proposed that there are five dimensions in customer engagement behavior: valence, form or modality, scope, nature of impact, and customer goals (van Doorn et al. 2010). Valence refers to negative or positive outcomes of engagement from firm’s perspective (van Doorn et al. 2010, 255; Brady, Voorhees, Cronin & Bourdeau 2006, 85). Form and modality simply refer to different ways in which engagement can be expressed by customers. For instance, customer may utilize time and money. Scope refers to temporal and geographic factors: engagement can, for example, be temporarily occurring or ongoing. Engagement can also be local (e.g. posting on a Facebook group that consists of close friends) or global (e.g. posting on a global online discussion forum). Impact of CEBs can be classified into four sub-dimensions: immediacy of impact, intensity of impact, breadth of impact, and longevity of impact. Customer goals can be viewed from three perspectives: 1) target of the engagement, 2) is engagement planned, and 3) are customer’s and firm’s goals aligned? (van Doorn et al. 2010, 255.)

Brodie et al. (2011) made the distinction between required and potential antecedents of customer engagement: the former refers to antecedents (involvement and participation) that are essential predecessors of CE, whereas
the latter includes antecedents (e.g. flow) that may act as predecessors of CE in some contexts. They also noted that outcomes of engagement may become antecedents of engagement for existing customers (Brodie et al. 2011). In comparison to customer engagement, involvement and participation are similar, yet different, constructs (Brodie et al. 2011). Involvement is rather defined as "perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky 1985, 342). On the other hand, participation generally refers to the degree to which customer produces and delivers service (Bolton & Saxena-Iyer 2009). Moreover, engagement concept – unlike these two other constructs - captures interactive and co-creative experiences that customers have with specific engagement object (Brodie et al. 2011, 257). The measurement scale developed by Hollebeek et al. (2014) further elucidated the difference between participation and behavioral dimension of engagement: the former deals with absolute quantities, whereas the latter focuses on the relative quantity of favorable behavioral responses. Vivek et al. (2012) also considered involvement and participation as separate constructs in comparison to customer engagement. Hollebeek et al. (2014) confirmed the positive relationship between involvement and customer brand engagement in their quantitative study.

Van Doorn et al. (2010) classified antecedents of customer engagement behaviors into customer-based (e.g. satisfaction, trust/commitment, identity, and resources), firm-based (e.g. brand characteristics, firm reputation, and industry), and context-based (e.g. competitive, social, and technological) factors. These factors, however, are not independent of each other: they can interact and help enhance or inhibit the effects of other factors on CEBs. Therefore, there is a continuum (only antecedent-only moderator) in which these factors can be placed.

Customer engagement has many potential consequences such as rapport (Brodie et al. 2011), satisfaction (Hollebeek 2011a; Brodie et al. 2013), commitment (Hollebeek 2011a; Brodie et al. 2013), trust (Hollebeek 2011a; Brodie et al. 2013), (self-brand) connection (Brodie et al. 2013; Hollebeek et al. 2014), emotional attachment (Brodie et al. 2013), empowerment (Brodie et al. 2013), purchase/usage intent (Cheung, Zheng & Lee 2014; Hollebeek et al. 2014), and loyalty (Brodie et al. 2013; Bowden 2009a/b; Cheung et al. 2014). Similarly to antecedents of customer engagement behaviors, van Doorn et al. (2010) classified consequences of CEBs into customer-related (e.g. cognitive, attitudinal, identity, and emotional), firm-related (e.g. financial, reputation, and competitive), and other factors (e.g. consumer welfare, and economic and social surplus). Many studies (e.g. van Doorn et al. 2010; Brodie et al. 2011, Brodie et al. 2013; Hollebeek et al. 2014) discuss the process nature of customer engagement. Thus, a factor once result of customer engagement may act as an antecedent of customer engagement (Brodie et al. 2011; Hollebeek et al. 2014; van Doorn et al. 2010). Figure 2 illustrates the dynamic nature of engagement.

Bowden (2009a/b) took this process nature of customer engagement into account in greater detail than other customer engagement studies and provided a unique perspective of engagement. These two studies explored the new
customer – repeat customer dichotomy. In these studies, engagement was considered as a process which culminates in loyalty. According to these studies, satisfaction is considered important in starting the process for both new and repeat customers. Calculative commitment, however, plays an important role for new customers whose knowledge structures are still undeveloped. It leads to negative evaluation, customer delight, and/or returning. Trust and involvement are key structures for repeat customers, and they influence affective commitment, which has a stronger impact on repeat customer’s return and recommendation intention than calculative commitment. In addition, also loyalty affects repeat customer’s knowledge structure. (Bowden 2009a/b.) Similarly, Sashi (2012) argued for the necessity of delight, loyalty, commitment, and trust in a way to engagement.

FIGURE 2 Customer engagement process (adapted from Brodie et al. 2011; Brodie et al. 2013; Hollebeek et al. 2014)

2.1.3 Engagement in online context

Nowadays, consumers use a mix of different media forms (Brasel 2012, 284). However, the Internet has become a mass media, and consumers are turning away from traditional media (Mangold & Faulds 2009). Yet, Mitchelstein & Boczkowski (2010) concluded that consumption of online news isn’t significantly different from consumption of news in traditional media. Gummerus et al. (2012, 859) concluded that social media is one of the most important forums that customers use to engage with firms. Both user-generated and firm-created content are considered important for branding in social media (Bruhn, Schoenmueller & Schäfer 2012). Men & Tsai (2013) found that heavy social media users were more likely to engage with companies in social media.

One of the most extensive studies of engagement in online context is provided by Brodie et al. (2013) who focused on virtual communities. They discussed consumer engagement sub-process which is initiated by specific triggers. This engagement sub-process consists of five interrelating dimensions: learning, sharing, advocating, socializing, and co-developing. This sub-process
leads to certain outcomes such as satisfaction, trust, loyalty, and commitment. (Brodie et al. 2013.) Similarly, Wirtz, den Ambtman, Bloemer, Horváth, Ramaseshan, van de Klundert, Canli & Kandampully (2013) divided their model of online brand community engagement into drivers of engagement, online brand community engagement itself, moderators (product, customer, and situational online brand community factors), customer outcomes, and organizational outcomes.

Figure 3 illustrates the interplay of different engagement dimensions “generating different levels of engagement intensity” (Brodie et al. 2013, 109). The behavioral dimension is hypothesized to be related to the cognitive and emotional dimensions of engagement but also to offline engagement (Brodie et al. 2013). Accordingly, Jahn & Kunz (2012, 349) stated that customer may use brand fan pages on a regular basis without being highly engaged. In addition, Brodie et al. (2013) pointed out the possibility of dormancy and disengagement in virtual community context, which refers to the absence of behavioral engagement. However, as the figure implies, customers engage with different objects emotionally in virtual community context (Brodie et al. 2013).

FIGURE 3 Consumer engagement in a virtual community (Brodie et al. 2013)

Many engagement studies (e.g. Gummerus et al. 2012; Men & Tsai 2013; Zheng et al. 2015) apply measurement scales that measure behavioral online engagement through frequency of visits/use. However, this approach is not compatible with engagement concept because participation, which these measures capture, is rather an antecedent of engagement (Brodie et al. 2011;
Vivek et al. 2012). On the other hand, Jahn & Kunz (2012) measured fan page engagement through consumer’s perceived level of integration, activeness, interaction, participation, and engagement. Moreover, fan page usage intensity was measured separately (Jahn & Kunz 2012). On the other hand, Wirtz et al. (2013, 229) characterized online brand community engagement as “the consumer’s intrinsic motivation to interact and cooperate with community members” thus emphasizing both the attitudinal and behavioral perspectives of engagement. Moreover, this definition clearly focuses on the role of active behaviors instead of passive consumption behavior (Wirtz et al. 2013). Finally, Karjaluoto, Munnukka & Tiensuu (2015) relied on measurement scale developed by Jahn & Kunz (2012) but also included some items that measured behavioral activity on Facebook (e.g. liking and sharing content) in their engagement study.

2.1.3.1 Customer online engagement behaviors

Muntinga et al. (2011) and Heinonen (2011) applied term “activities” when they discussed different customer online behaviors in social media. Gummerus et al. (2012) divided customer engagement behaviors into two dimensions: community engagement behaviors and transactional engagement behaviors. Muntinga et al. (2011) divided consumer online brand-related activeness into three categories: consumption, contribution, and creation. Consumption refers to, for example, viewing brand-related video, reading product reviews, following threads on online brand community, and watching brand-related pictures. Thus, consumers are rather passive receivers than active contributors in this stage. As contributors, consumers may rate products or brands, join a brand profile on social network site, engage a branded conversation on online communities or social network sites, and comment on brand-related blogs, video, audio etc. Finally, creation refers to, for example, publishing own brand-related blog, uploading brand-related content, and writing brand-related articles and product reviews. (Muntinga et al. 2011.) Shao (2009) and Heinonen (2011) proposed a similar classification that consisted of consumption, participation, and production. Nevertheless, Gummerus et al. (2012) recommended that classification into active and passive behaviors should be done based on frequency of activity instead of forms of activity. Cvijikj & Michahelles (2013) classified social media activities based on site functions into likes, comments, and shares. In addition, interaction duration was considered (Cvijikj & Michahelles 2013). Table 2 provides more examples of different brand-related activities on the Internet.

In this study, only consumption behavior is considered. Although these activities are separate concepts, it is important to understand these other activities as well since they are interconnected to each other: consumers gradually move from consumption behavior to production. Thus, content consumption is the first and necessary step in this process. (Shao 2009.) Moreover, Ho & Dempsey (2010) found support that consumption of online content has a positive impact on forwarding online content. In addition,
Daugherty, Eastin & Bright (2008) found support that attitude towards user-generated content mediates the relationship between consumption and generation of user-generated content.

Different activities are driven by different motivational factors (Muntinga et al. 2011; Shao 2009). Furthermore, different types of online media content (e.g. video, photo, link) have different effects on different activities (Cvijikj & Michahelles 2013). Moreover, Bateman et al. (2011) found support that different types of commitment have a different impact on different activities. Continuance commitment was a good predictor of reading threads, whereas affective commitment predicted posting replies and moderating discussions, and normative commitment only predicted moderating discussions (Bateman et al. 2011). Furthermore, Gummerus et al. (2012) found that the type of engagement behavior had an impact on received benefits. For instance, community engagement behaviors had a positive effect on economic benefits, whereas transactional engagement behaviors had no significant effect on economic benefits (Gummerus et al. 2012).

TABLE 2 Examples of different activity types on the Internet (Muntinga et al. 2011)

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Examples of brand-related Internet use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>- Viewing brand-related video</td>
</tr>
<tr>
<td></td>
<td>- Listening to brand-related audio</td>
</tr>
<tr>
<td></td>
<td>- Watching brand-related pictures</td>
</tr>
<tr>
<td></td>
<td>- Following threads on online brand community forums</td>
</tr>
<tr>
<td></td>
<td>- Reading comments on brand profiles on social network sites</td>
</tr>
<tr>
<td></td>
<td>- Reading product reviews</td>
</tr>
<tr>
<td></td>
<td>- Playing branded online videogames</td>
</tr>
<tr>
<td></td>
<td>- Downloading branded widgets</td>
</tr>
<tr>
<td></td>
<td>- Sending branded virtual gifts/cards</td>
</tr>
<tr>
<td>Contribution</td>
<td>- Rating products and/or brands</td>
</tr>
<tr>
<td></td>
<td>- Joining a brand profile on a social network site</td>
</tr>
<tr>
<td></td>
<td>- Engaging in branded conversations, e.g. on online brand community forums or social network sites</td>
</tr>
<tr>
<td></td>
<td>- Commenting on brand-related weblogs, video, audio, pictures, etc.</td>
</tr>
<tr>
<td>Creation</td>
<td>- Publishing a brand-related weblog</td>
</tr>
<tr>
<td></td>
<td>- Uploading brand-related video, audio, pictures or images</td>
</tr>
<tr>
<td></td>
<td>- Writing brand-related articles</td>
</tr>
<tr>
<td></td>
<td>- Writing product reviews</td>
</tr>
</tbody>
</table>

Major amount of users in online groups are passive readers rather than active contributors. However, the amount of these “lurkers” varies significantly depending on the context. (Nonnecke & Preece 2000.) For instance, Nonnecke & Preece (2000) found that health-support discussion lists have remarkably fewer lurkers (46 %) on average in comparison to software-support lists (82 %). They also stated that many lurkers are not selfish free-riders: they simply have other reasons for not being active. In their research, many consumers just didn’t feel the need to post actively. Other reasons included the lack of encouragement,
need to get to know the community first, usability issues, and disliking the group. (Nonnecke & Preece 2000.) Shang et al. (2006) studied Apple and Apple-related virtual community. Interestingly, lurking in the virtual community had a stronger impact on brand loyalty than message posting (Shang et al. 2006).

2.2 Motivational drivers of engagement

Nowadays, consumers may choose whether they want to receive commercial content (Keller 2009, 142). If consumers don’t benefit from using a particular medium, they will stop using it (Joines, Scherer & Scheufele 1999, 93). Thus, engagement must create value for consumers (Brodie et al. 2011). Through engagement behaviors, customer receives certain benefits (Gummerus et al. 2012) which influence the future participation (Nambisan & Baron 2009). Therefore, the engagement literature (e.g. van Doorn et al. 2010; Hollebeek 2011a; Vivek et al. 2012; Brodie et al. 2013; Calder & Malthouse 2008) emphasizes engagement as a result of motivational drivers and experiences which provide customers with different kinds of benefits (e.g. Wirtz et al. 2013; Hennig-Thurau, Gwinner, Walsh & Gremler 2004). Experiences can be defined as “a consumer’s beliefs about how […] [an object] fits into his/her life” (Calder et al. 2009, 322).

Many online studies (e.g. Heinonen 2011; Men & Tsai 2013; Muntinga et al. 2011; Park, Kee & Valenzuela 2009) apply user-centric uses and gratifications (U&G) approach which has been used to explain consumer’s underlying motivations to use media. Ruggiero (2000) also highlighted the significance of U&G approach in online studies. In particular, U&G approach is useful in explaining continuing use of media because initial use may be caused by accidental exposure or curiosity (Joines et al. 1999, 93). In addition, Ruggiero (2000) also pointed out that U&G is a useful approach in explaining the use of new media types.

McQuail’s (1983) U&G-based classification of motivations to use media is widely recognized and used as a baseline in many studies (e.g. Calder et al. 2009; Men & Tsai 2013; Muntinga et al. 2011). He categorized these motivations into four distinct categories: 1) entertainment, 2) integration and social interaction, 3) personal identity, and 4) information. These four categories each include several sub-motivations. (McQuail 1983.) This classification is also applicable to online context (Men & Tsai 2013; Heinonen 2011; Muntinga et al. 2011; Jahn & Kunz 2012). Some studies (e.g. Men & Tsai 2013; Muntinga et al. 2011) have also identified remuneration as a motivation to consume content in online environment. Moreover, Heinonen (2011) found that some of these motivations have different levels that depend on consumer’s input. In addition, Mull & Lee (2014) found that motivations to use social media can vary remarkably depending on the online platform and other contextual factors.

Table 3 provides an overview of different motivational drivers of online content consumption categorized into five different categories: integration and
social interaction, information, entertainment, identity, and remuneration. Some of the motivations that are presented in the table weren’t specifically studied in context of content consumption. In spite of this, these motivations were included because 1) the amount of studies that specifically focus on online content consumption is limited and the consumption behavior isn’t always even separated from other activities, and 2) all motivations that are gathered around these main themes are pretty similar. Since many of these motivations are already related to online content consumption, it can further be hypothesized that even though some motivations weren’t studied in this specific context, they are also related to it. However, motivations that required active participation were excluded from the table since they go beyond pure consumption behavior and are therefore irrelevant considering the context of this study.

TABLE 3 Overview of motivations driving online content consumption

<table>
<thead>
<tr>
<th>Integration and social interaction</th>
<th>Information</th>
<th>Entertainment</th>
<th>Identity</th>
<th>Remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration and social interaction (McQuail 1983; Muntinga et al. 2011)</td>
<td>Information (Cvijikj &amp; Michahelles 2013; McQuail 1983; Heinonen 2011; Muntinga et al. 2011; Men &amp; Tsai 2013; Shao 2009)</td>
<td>Entertainment (Courtois et al. 2009; Cvijikj &amp; Michahelles 2013; Dholakia Bagozzi &amp; Pearo 2004; McQuail 1983; Heinonen 2011; Muntinga et al. 2011; Men &amp; Tsai 2013; Shao 2009)</td>
<td>Personal identity (McQuail 1983; Men &amp; Tsai 2013; Muntinga et al. 2011)</td>
<td>Remuneration (Cvijikj &amp; Michahelles 2013; Muntinga et al. 2011; Men &amp; Tsai 2013)</td>
</tr>
<tr>
<td>Social interaction (value) (Jahn &amp; Kunz 2012; Men &amp; Tsai 2013)</td>
<td>Utilitarian experience/value (Calder et al. 2009; Rafaeli 1986)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation (Kaye 2010)</td>
<td>Advice seeking (Hennig-Thurau et al. 2004; Kaye 2010)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community (Calder et al. 2009)</td>
<td>Functional benefits/value (Jahn &amp; Kunz 2012; Wirtz et al. 2013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community identification (Men &amp; Tsai 2013)</td>
<td>Learning (Nambisan &amp; Baron 2009)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Link to the community, learn about others (Rafaeli 1986)</td>
<td>Stimulation and inspiration (Calder et al. 2009)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parasocial interaction (Men &amp; Tsai 2013)</td>
<td>Surveillance (Courtois et al. 2009)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social connection (Heinonen 2011)</td>
<td>Virtual exploration (Mull &amp; Lee 2014)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social facilitation (Calder et al. 2009)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social integrative (Nambisan &amp; Baron 2009)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: McQuail (1983) and Mersey et al. (2012) are related to traditional media consumption.
Five motivations – one from each category – are chosen for this study: community, information, entertainment, identity, and remuneration. Karjaluoto et al. (2015) applied almost similar motivations in their engagement study. Following chapters discuss each of these motivations in greater detail.

### 2.2.1 Community

In general, integration and social interaction motivations refer to gratifications that are related to others (Heinonen 2011; McQuail 1983; Muntinga et al. 2011). In media consumption context, McQuail (1983) further divided these motivations into helping to carry out social roles, enabling to connect with family, friends and society, having a substitute for real-life companionship, finding a basis for conversation and social interaction, identifying with others and gaining a sense of belonging, and gaining insight into the circumstances of others. In their exploratory study, Calder et al. (2009) described community experience which captures these elements (excluding social facilitation) in online environment.

Virtual communities seem to facilitate many of these activities (Bagozzi & Dholakia 2002). Carlson et al. (2008, 284) stated that research around brand communities had investigated social networks of brand users “in which individual acknowledge their membership in groups of like-minded brand admirers”. Virtual communities are places where people – possibly from very different backgrounds – can easily interact despite geographical and temporal barriers (de Valck, van Bruggen & Wierenga 2009). Virtual communities are more open and easily approachable than traditional communities (de Valck et al. 2009, 187). A simple online forum is considered a community in which people can engage passively by reading posts or more actively by taking part in conversations (Prendergast, Ko & Yuen 2010, 690). However, a common theme is a basis for online forum (Prendergast et al. 2010, 692). Due to this common passion that virtual communities help to facilitate, a bond is created between users because of their willingness to meet like-minded people (Muntinga et al. 2011), and seek support and a sense of community (Park et al. 2009). Social function causes consumers to spend time together and feel like they belong to community (Daugherty et al. 2008).

Individuals who feel a sense of community may tend to satisfy their needs within that community (McMillan & Chavis 1986, 13). This communal experience is considered engaging on social networking sites (Men & Tsai 2013). Interestingly, Carlson et al. (2008) suggested that perceiving a sense of community doesn’t require active social interaction. This psychological sense of brand community exists among unbound group of brand admirers. In fact, many consumers never engage socially with other brand users but perceive a psychological sense of brand community. The authors also found support that consumers who perceived a sense of community with other users of the brand were also committed to the brand. In addition, they found partial support that identification with the group and identification with the brand had a significant impact on psychological sense of brand community. (Carlson et al. 2008.)
Algesheimer et al. (2005) found support that brand community identification leads to community engagement. Moreover, Bagozzi & Dholakia (2002) discussed we-intentions that are a result of identification process in a virtual community.

The marketing literature has associated community-related motivations with both passive consumption and active contribution behavior in virtual community context. For example, Muntinga et al. (2011) identified integration and social interaction as a motivation to contribute and create content. Similarly, Shao (2009) identified social interaction and community development as motivations to actively participate in virtual community. Men & Tsai (2013) found that consumers who could identify themselves with social media channel community were more likely to consume community content but also to actively contribute (Men & Tsai 2013). Heinonen (2011) viewed consumption activities related to social connection as an important area since it involves the highest amount of potential users. When consumer’s online content consumption behavior is driven by social connection, he/she conducts social surveillance, and shares and experiences with others. When consumer becomes an active participant or a creator of online content, belonging and bonding, being up-to-date, creation and management of social network, and staying in touch emerge. (Heinonen 2011.)

In their quantitative study, Men & Tsai (2013) identified social interaction as the third most influential reason for Chinese to visit and like corporate social networking sites. Hennig-Thurau et al. (2004) found that concern for other consumers and social benefits had a positive impact on platform visit frequency and comment writing. Interestingly, Jahn & Kunz (2012) found no support to the relationship between social interaction value and fan page usage intensity, whereas social interaction value was a significant predictor of fan page engagement which was measured through customer’s perceived level of integration, participation, interaction, activeness, and engagement. Nambisan & Baron (2009) found that social integrative benefits had a positive relationship with customer participation in value creation in online environment. Gummerus et al. (2012) studied the use of social media and found that both the effects of transactional and community engagement behaviors on satisfaction are mediated through social benefits. However, this relationship was negative, which could be due to omitted mediator. Both types of engagement behaviors had a positive impact on social benefits. (Gummerus et al. 2012.)

Based on these findings, the following hypothesis is proposed:

_**H1: Community experience has a positive effect on behavioral online brand engagement in content consumption context.**_

### 2.2.2 Information

As a motivational driver, information simply refers to getting useful information (Shao 2009; Muntinga et al. 2011). Getting information is considered to be an important motivational driver of customer engagement in
In general, information seeking is driven by the desire to increase awareness and knowledge (Shao 2009). According to Muntinga et al. (2011), the information motivation can be divided into four sub-motivations: surveillance, knowledge, pre-purchase information, and inspiration. In other words, consumers want to know what is going on in the community or what others have done (surveillance), consume brand-related content in order to learn more (knowledge), acquire relevant information to make good purchase decisions (pre-purchase information), and want to get new ideas (inspiration) (Muntinga et al. 2011). Similarly, Heinonen (2011) specified certain activities in consumption level of engagement for customers who are motivated by the chance to get information. These include retrieving product information or content, news surveillance, and collecting factual information. Yet, she also acknowledged that information may be a motivation for higher level of engagement activities such as applying knowledge, and sharing and accessing opinion reviews and ratings.

Brodie et al. (2013) argued that consumer engagement process in a virtual community is largely driven by the need for information, and joining virtual community reduces information search cost and perceived risk. Consumers value information found in social media because it is accessible, real-time, exclusive, and it covers multiple viewpoints. However, trustworthiness of the information is questionable. (Heinonen 2011, 359.) Kaye (2010) also identified convenience of information seeking as a motivation to read blogs. Moreover, she identified other information-related motivations such as guidance/opinion seeking, variety of opinion, and specific inquiry (Kaye 2010). Furthermore, Brodie et al. (2013) identified learning as one activity of customer engagement sub-process in a virtual brand community. Courtois et al. (2009) simply referred to “surveillance” when they studied gratifications to use the Internet.

Shao (2009) noted that user-generated media, such as YouTube, MySpace, and Wikipedia, has become increasingly popular source of information. However, de Valck et al. (2009) stated that differences between online platforms exist. For instance, wikis and community databases are more important in information search than forums and blogs. On the other hand, forums and blogs are more relevant for forming and changing preferences (de Valck et al. 2009). Rafaeli (1986) studied electronic bulletin boards and noted that message selection by content referred to utilitarian informational behavior. Thus, information-related utilitarian experience may engage customers (Calder et al. 2009). Bickart & Schindler (2001) discovered that consumers who sought information from online discussions were more interested in the product category than those who sought information from company-generated sources. The authors proposed that the phenomenon behind this difference is the capability of online discussions to stimulate consumer’s desire to learn (Bickart & Schindler 2001). Similarly, Calder et al. (2009) stated that online sites can stimulate and inspire its users. After all, brand community members have extensive knowledge of brand and its products which makes them innovative.
problem solvers (Füller, Matzler & Hoppe 2008). However, Ho & Dempsey (2010) didn’t find support to the relationship between consumer’s curiosity and consumption of online content.

Men & Tsai (2013) found that Chinese use corporate social networking sites as a primary source of product and corporate information. Moreover, consumers visited those sites mainly for information acquisition purposes (Men & Tsai 2013). Consistent with this study, Shao (2009) acknowledged information as one of the motivations of user-generated media consumption. Similarly, Muntinga et al. (2011) and Heinonen (2011) identified information as an important motivation to consume online content in their qualitative studies. Cvijikj & Michahelles (2013) studied likes, comments, shares, and interaction duration on Facebook brand pages. They found that content that provided brand-related information had a positive effect on likes and comments ratios, and on interaction duration but no effect on shares ratio. Furthermore, informative content had the biggest impact on interaction duration. (Cvijikj & Michahelles 2013.)

Based on these findings, the following hypothesis is proposed:

H2: Information experience has a positive effect on behavioral online brand engagement in content consumption context.

2.2.3 Entertainment

Entertainment as a motivational driver refers to consumer’s desire to escape or be diverted from problems or routine, have emotional release or relief, relax, enjoy cultural or aesthetic content, pass time, or experience sexual arousal (Muntinga et al. 2011). In general, many people view leisure and mass media related (Ruggiero 2000, 18). Interaction can be an interesting and pleasurable experience in virtual environment (Nambisan & Baron 2009, 391). For example, Calder et al. (2009) identified intrinsic enjoyment as an experience that consumer experiences in online news sites. Shao (2009, 11) also concluded that majority of popular YouTube channels are entertainment-related. Dholakia et al. (2004, 244) argued that entertainment value is derived from fun and relaxation that occurs through playing or interacting with others.

Muntinga et al. (2011) specifically identified enjoyment, relaxation, and pastime as sub-motivations to consume brand-related content online. Similarly, Heinonen (2011) discussed entertainment-related sub-motivations to consume social media content. Based on qualitative findings, she argued that consumers want to escape the real world and relax for a while but also simply enjoy themselves online. Moreover, Muntinga et al. (2011) also acknowledged entertainment as a motivation for higher level of engagement (i.e. contribution and creation). Heinonen (2011) further categorized these sub-motivations that are related to more active level of engagement into becoming inspired, mood management, and self-expression. However, Shao (2009) associated mood management already with consumption behavior. For instance, stressed
individuals can use the Internet to relax, whereas bored individuals can use it to become excited (Shao 2009, 12).

Many other studies have also recognized entertainment as an important motivation in online environment. For instance, Rafaeli (1986) suggested that seeking lighter content is the main motivation to use electronic bulletin boards. Moreover, Men & Tsai (2013) identified entertainment as the second most important motivation for Chinese consumers to visit corporate social networking sites. Cvijikj & Michahelles (2013) studied likes, comment, shares, and interaction duration on Facebook brand pages. Besides having a positive impact on likes, comments and shares ratios, and on interaction duration, entertaining content also had a stronger impact than informative or remuneration-related content except in the case of interaction duration (Cvijikj & Michahelles 2013). Study conducted by Jahn & Kunz (2012) also emphasized the role of content that offers hedonic value to customers. In this study, hedonic value was one of the main drivers of fan page usage intensity (Jahn & Kunz 2012). Mull & Lee (2014) identified entertainment as a motivation to use photo sharing website Pinterest. Similarly, Sheldon (2008) found support that students consider entertainment an important factor when they use Facebook. Lin & Lu (2011) discovered that enjoyment is the most influential reason for continued use of social networking sites. On the other hand, Sangwan (2005) viewed entertainment as a contextual factor which may enhance participation in virtual communities.

Gummerus et al. (2012) discovered that the influence of transactional engagement behaviors on satisfaction is fully mediated through entertainment benefits. In addition, these same benefits partially mediated the effect of community engagement behaviors on satisfaction. Finally, entertainment benefits mediated the impact of community engagement behaviors on loyalty. (Gummerus et al. 2012.) Raney, Arpan, Pashupati, & Brill (2003) discovered that the level of entertainment in online sites affects both attitudes toward the site and return intention. The site that was the most entertaining had the most positive customer evaluations, and the customers reported the greatest intent to visit that specific site again (Raney et al. 2003). However, one must take context into account since, for instance, age and education are negatively associated with the use of the Internet as an entertainment media (Courtois et al. 2009).

Based on these findings, the following hypothesis is proposed:

**H3: Entertainment experience has a positive effect on behavioral online brand engagement in content consumption context.**

### 2.2.4 Identity

Vignoles, Regalia, Manzi, Golledge & Scabini (2006) noted that constructs of self, self-concept, identity, and self-identity are complex and used inconsistently in the literature. They defined identity as “the subjective concept of oneself as a person” (Vignoles et al. 2006, 309). Besides unique and personal traits, relational and collective aspects of identity need to be taken into account (Brewer &
In other words, one’s identity is also dependent on the comparison to other people (Sedikides & Brewer 2001). The word “social identity” is used to emphasize the relationship between an individual and other persons or groups (Bagozzi & Lee 2002). Moreover, social identity theory suggests that self-concept is formed in social groups (Wirtz et al. 2013, 230). Vignoles et al. (2006) also highlighted that one’s identity is based on psychological experience rather than objective “truth”.

In their qualitative study, Jones & McEwen (2000) proposed that person’s core identity is formed based on personal attributes, personal characteristics, and personal identity. Culture, race, sexual orientation, gender, religion, and class illustrate different identity dimensions. Moreover, conceptual factors, such as family background, sociocultural conditions, current experiences and career decisions, and life planning, act as influential background factors. (Jones & McEwen 2000.) Vignoles et al. (2006) studied identity construction and noticed that greater sense of self-esteem, continuity, distinctiveness, and meaning were perceived central in one’s identity formation process.

Identity-related motivations are related to self (Shao 2009; Muntinga et al. 2011). In media consumption context, these motivations include finding reinforcement for personal values, finding models of behavior, identifying with valued others, and learning about oneself (McQuail 1983). Identification refers to integration of one’s personal identity and identity of particular object (Wirtz et al. 2013). These objects include, for instance, brands (Wirtz et al. 2013), brand communities (Algesheimer et al. 2005), other users (Men & Tsai 2013), and cause (Wirtz et al. 2013). McQuail (1983), however, suggested that identification with other people in general is a matter of integration and social interaction, whereas identification with valued others is a matter of personal identity.

All voluntary consumption has symbolic associations (Elliott & Wattanasuwan 1998). Thus, many choices are identity-based (Oyserman 2009). Especially in case of tangible goods, consumer’s possessions become the extension of oneself (Belk 1988). Consumers also consume media content in order to build their identities, and media reinforces those identities (Mersey et al. 2012, 701). For example, Georgiou (2001) stated that ethnic media consumption is an important part of ethnic identity formation and ethnic media is used to renew images of ethnic culture. Moreover, Mersey et al. (2012) found support that identity experience is related to reading newspaper. Tufekci (2008a) highlighted the role of technology in identity expression, communication, and management in today’s environment. Tufekci (2008b) stated that some users are more willing to present themselves in online environment than others. Peluchette & Karl (2009) found support that consumers behave in a way in social media that was consistent with the image that they thought they portrayed.

Van Doorn et al. (2010) proposed that identity may act as an antecedent of customer engagement behavior in general. In online context, the marketing literature (e.g. Shao 2009; Muntinga et al. 2011) has usually viewed identity as a motivational driver for contribution and creation of own content. For instance,
Muntinga et al. (2011) specifically suggested that identity is a motivational driver for contribution and creation. Similarly, Shao (2009) associated self-expression and self-assurance with producing own content. However, Jahn & Kunz (2012, 348) stated that memberships of online groups are reflections of one’s personal identity and they can be used to show one’s self-concept to other people. Thus, identity signaling doesn’t necessarily require contribution or creation but simple consumption of online content.

Nov (2007) found that people who created content to Wikipedia were motivated by self-enhancement. Papacharissi (2007) stated that primary motivation for majority of bloggers is self-fulfillment that is achieved through self-expression. Nambisan & Baron (2009) found that personal integrative benefits had a positive relationship with customer participation in value creation in online environment. Jahn & Kunz (2012) found support that self-concept value drives active engagement on fan pages. Men & Tsai (2013) found that managing one’s personal identity was the fourth most important motivation to read and like corporate social networking sites in China.

Based on these findings, the following hypothesis is proposed:

$$H4: \text{Identity experience has a positive effect on behavioral online brand engagement in content consumption context.}$$

### 2.2.5 Remuneration

When remuneration is discussed as a motivational driver of engagement, it refers to situations in which consumer expects to receive some kind of reward (Muntinga et al. 2011). These rewards could be monetary-based such as money (Hars & Ou 2002), prizes (Muntinga et al. 2011) or discounts (Gwinner, Gremler & Bitner 1998), or non-monetary such as career-related (Nov 2007), special treatment and time saving (Gwinner et al. 1998). These incentives may, for example, be offered through games (Muntinga et al. 2011), lotteries, and competitions (Gummerus et al. 2012). In general, rewards are known to be significant influencers of human behavior (e.g. Wirtz, Mattila & Lwin 2007). However, Gummerus et al. (2012) found no support that received economic benefits have a significant influence on satisfaction or loyalty in online environment. Moreover, Gwinner et al. (1998) discovered that special treatment benefits, which consisted of monetary and non-monetary benefits, are considered less important than confidence and social benefits in service relationships in general.

Remuneration has also received some attention specifically in online context. For instance, remuneration was the least frequently mentioned motivation for consumption of online content in a qualitative study conducted by Muntinga et al. (2011). Furthermore, Men & Tsai (2013) found that economic rewards weren’t considered a decisive factor to use social networking sites in China. Cvijikj & Michaehelles (2013) studied social media content that provided remuneration. Their findings suggested that remuneration has a positive impact on comments ratio, and no impact on shares ratio or interaction duration.
Interestingly, remuneration had a significant negative impact on likes ratio. (Cvijikj & Michahelles 2013.) However, Hennig-Thurau et al. (2004) found support that economic incentives are one of the primary drivers of electronic word of mouth (eWOM) behavior but also an important predictor of online platform visit frequency. Finally, Wang & Fesenmaier (2003) studied the impact of expectancy on level of active contribution in online community. They found support that individuals who sought future exchange partners in the community had a higher contribution level (Wang & Fesenmaier 2003).

Gummerus et al. (2012) found support that community engagement behaviors have a positive effect on economic benefits received in Facebook brand communities. However, the transactional engagement behavior didn't have an effect on economic benefits in their study (Gummerus et al. 2012). Thus, they stated that it is rather interesting that many Facebook brand communities use competitions and lotteries in their attempts to get new potential customers (Gummerus et al. 2012, 869). However, Cvijikj & Michahelles (2013) found that brand page moderators used remuneration-related posts only in 8% of the posts. Hennig-Thurau et al. (2004) also found that the importance of remuneration as a motivational driver of engagement varies depending on customer segment. Thus, the outcomes of applying remuneration-related marketing strategies on online sites may vary considerably depending on the customer characteristics and other factors (Hennig-Thurau et al. 2004).

Based on these findings, the following hypothesis is proposed:

\[ H5: \text{Remuneration experience has a positive effect on behavioral online brand engagement in content consumption context.} \]

### 2.3 Brand commitment

Brand commitment refers to a desire to maintain a relationship with a brand because the relationship is considered important (Morgan & Hunt 1994; Geyskens, Steenkamp, Scheer & Kumar 1996; Moorman et al. 1992). Allen & Meyer (1990) studied commitment in organizational context. They identified three components of commitment: affective, continuance, and normative commitment (Allen & Meyer 1990). The affective component refers to person’s emotional attachment to, identification with, and involvement in the object that can include companies, products, or brands (Allen & Meyer 1990; Gustafsson, Johnson & Roos 2005). Continuance commitment refers to commitment that is based on person’s perceived cost of terminating the relationship (Allen & Meyer 1990). The marketing literature also uses the term “calculative commitment” as a synonym of continuance commitment (e.g. Geyskens et al. 1996). Geyskens et al. (1996) characterized calculative commitment as consumer’s perceived need to be in the relationship. Gustafsson et al. (2005) stated that calculative commitment is more rational and economic-based than affective commitment. Finally, the least applied commitment construct in the marketing literature is
normative commitment which refers to consumer’s perceived obligation to remain in the relationship. Although affective and normative components of commitment are separate constructs, they appear to be related. (Allen & Meyer 1990.)

Brand commitment is sometimes confused with other similar constructs. For example, brand loyalty and brand commitment are related but different concepts (Warrington & Shim 2000). Warrington & Shim (2000) argued that brand loyalty focuses more on behavioral aspects, whereas brand commitment focuses more on the emotional perspective. Yet, many researchers (e.g. Dick & Basu 1994; Bowen & Chen 2001; Homburg & Giering 2001) have emphasized both attitudinal and behavioral perspectives of loyalty. However, affective commitment is an important antecedent of both attitudinal and behavioral loyalty (Evanschitzky, Iyer, Plassmann, Niessing & Meffert 2006). Yet, some (e.g. Chaudhuri & Holbrook 2002) have considered brand commitment a two-dimensional phenomenon which consist of behavioral and attitudinal dimensions. In comparison to satisfaction, affective commitment characterizes the strength of the relationship to proceed forward, whereas satisfaction captures consumer’s assessment of the past experiences (Gustaffsson et al. 2005, 211). Furthermore, Warrington & Shim (2000) found empirical support that involvement and brand commitment are separate constructs.

Brands are used to give meanings to one’s life (Fournier 1988). Consumers tend to develop connections to a brand if there are strong associations between the brand and reference group, and connections between reference group and consumer’s self-concept (Escalas & Bettman 2003). Moreover, the closer the brand identity and consumer’s own identity are, the more attached consumer is to the brand (Amine 1998, 316). Thus, deep commitment is a combination of customer’s personal characteristics and brand-related characteristics (Grisaffe & Nguyen 2011). Kim & Ok (2009) discovered that consumers who were emotionally attached to the restaurant were more likely to visit again in the future (Kim & Ok 2009). Thus, emotionally committed customers are very valuable to companies (Grisaffe & Nguygen 2011). Fullerton (2005) discovered that affective commitment fully mediates the effects of brand satisfaction on both repurchase intentions and advocacy intentions in retail context. In addition, affective commitment has a more impactful effect on repurchase intention than continuance commitment. Moreover, the impact of continuance commitment on advocacy intentions is negative. (Fullerton 2005.)

Emotionally committed customers are also more unlikely to substitute their preferred brand. On the contrary, if commitment is purely calculative in nature, customer switches brands when the switching is beneficial. (Amine 1998, 310.) Without emotional dimension of commitment, purchase behavior or engagement is purely based on rational aspects which makes it vulnerable to situational factors (Bowden 2009b, 592). In addition, antecedents of commitment have different impacts on different types of commitment. For example, Geyskens et al. (1996) discovered that trust has a stronger impact on affective commitment than on calculative commitment, whereas
interdependence structure of the relationship has a stronger impact on calculative commitment than on affective commitment. In addition, Evanschitzky et al. (2006) found that affective commitment has a stronger impact on loyalty than calculative commitment. Amine (1998) proposed that antecedents of calculative commitment include perceived differences among the brands, perceived risk, and brand sensitivity, whereas brand liking or attachment, and brand sensitivity are drivers of affective commitment. Moreover, Bateman et al. (2011) found that affective commitment has a significant impact on posting replies and moderating discussions in a virtual community. Since different types of commitment clearly arise from different motivations to maintain a relationship (Geyskens et al. 1996, 304; Allen & Meyer 1990; Gustaffsson et al. 2005), it can further be hypothesized that brand commitment has an impact on the relationship between motivational drivers of engagement and behavioral online brand engagement.

Many studies (e.g. Morgan & Hunt 1994; Carlson et al. 2008; Kim et al. 2008) simply refer to commitment instead of different dimensions of commitment. In general, some of the antecedents of (brand) commitment include relationship benefits, relationship termination cost, shared values, trust (Morgan & Hunt 1994), psychological sense of brand community (Carlson et al. 2008), and brand community commitment (Kim et al. 2008). Brand commitment leads to – for example – acquiescence, propensity to stay in a relationship (Morgan & Hunt 1994), brand preference, celebrating brand history, attending brand events (Carlson et al. 2008), repurchase intention, cross-over buying, participation (Kim et al. 2008), loyalty (Evanschitzky et al. 2006), word of mouth (WOM) (Kim et al. 2008; Carlson et al. 2008), and cooperation (Morgan & Hunt 1994; Kim et al. 2008).

Some studies have specifically focused on the relationship between commitment and engagement in the marketing domain. For example, Bowden (2009a/b) viewed affective commitment as an integral part of customer engagement process for existing customers, whereas calculative commitment was considered more fundamental for new customers. Based on these findings, Brodie et al. (2011) interpreted commitment as an antecedent of customer engagement. Similarly, Sashi (2012) viewed commitment as a necessary step in a way to engagement. Brodie et al. (2013) viewed commitment as a consequence of engagement in virtual community context. Similarly, Wirtz et al. (2013) proposed that online brand community engagement leads to community and brand commitment. Vivek et al. (2012) also proposed that affective commitment is a consequence of engagement in general. Related disciplines have also studied engagement and commitment. For example, Saks (2006) viewed commitment as a consequence of organizational engagement. Similarly, Albrecht & Andreetta (2011) viewed affective commitment as a consequence of employee engagement in organizational context and found quantitative support to this hypothesis. In their quantitative study, Hallberg & Schaufeli (2006) found support that work engagement and organizational commitment are closely related.
The literature has mainly focused on the direct effects of commitment, and the moderating role of commitment has received very little attention. Yet, some studies have examined the role of commitment as a moderator. For instance, Mattila (2004) found support that affective commitment moderates the impact of service failures on post-recovery attitudes. Ahluwalia, Burnkrant & Unnava (2000) identified brand commitment as a moderator of negative information effects. After the exposition of negative information about a brand, there was a significant decline in positive attitudes towards the brand in case of low-commitment consumers (Ahluwalia et al. 2000). In their conceptual study, van Doorn et al. (2010) suggested that commitment may act as an antecedent of engagement behaviors. In addition, they proposed that commitment may also help enhance or inhibit the effects of other antecedents on engagement behaviors in some circumstances (van Doorn et al. 2010). Moreover, Brodie et al. (2011) suggested that customer engagement levels may be moderated by individual and contextual factors. Similarly, Wirtz et al. (2013) proposed that several product, customer, and situational factors may moderate the relationship between drivers of engagement and online brand community engagement.

Based on these findings, following hypotheses are proposed:

H6: Brand commitment strengthens the relationship between community experience and behavioral online brand engagement in content consumption context.
H7: Brand commitment strengthens the relationship between information experience and behavioral online brand engagement in content consumption context.
H8: Brand commitment strengthens the relationship between entertainment experience and behavioral online brand engagement in content consumption context.
H9: Brand commitment strengthens the relationship between identity experience and behavioral online brand engagement in content consumption context.
H10: Brand commitment strengthens the relationship between remuneration experience and behavioral online brand engagement in content consumption context.

2.4 Trust in online content

Mayer et al. (1995, 712) defined trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party”. As many other marketing concepts, trust has many definitions. That is perhaps why constructs such as cooperation, confidence, and predictability are not always clearly distinguished from trust in the literature even though they are different concepts. For example,
cooperation can occur without existence of trust between two parties. Moreover, constantly behaving in an untrustworthy way is predictable but it doesn’t help trust building. (Mayer et al. 1995, 712, 714.) Finally, if one doesn’t even consider alternatives in a specific choice situation, it can be characterized as confidence, whereas taking an action while realizing the possibility of being disappointed because of the actions of the other party is called trust (Luhmann 1988, 102).

Researchers have studied concepts such as person-to-person trust, organization-to-organization trust, people-to-computing systems trust, and person-to-organization trust (Lee & Turban 2001, 76).

According to Ganesan (1994), trust consists of two dimensions: credibility and benevolence. However, Gefen (2002) applied a three-dimensional model of trust in which credibility is further divided into integrity and ability. This three-dimensional model is adopted in many research (e.g. Chiu, Chang, Cheng & Fang 2009; Pavlou & Fygenson 2006; Lu et al. 2010). In general, benevolence refers to non-opportunistic behavior of the other party. In other words, the other party is fair. Integrity refers to keeping promises and playing by appropriate rules. Ability refers to trustee’s capability to behave as expected by the trustor. Therefore, the trustee needs to have appropriate skills and competence. (Gefen 2002, 42; Pavlou & Fygenson 2006, 123; Chiu et al. 2009, 766.) On the other hand, Mayer et al. (1995) and Sirdeshmukh, Singh & Sabol (2002) characterized these dimensions as factors of perceived trustworthiness that affect trust. Moreover, the propensity of trustor to trust affects the relationship between these dimensions and trust (Mayer et al. 1995).

In general, trustworthiness could be characterized as a continuum rather than simple alternatives of trustee being trustworthy or not. If trustee lacks any of trust dimensions, it may weaken trust. Moreover, perceived ability, integrity, and benevolence of trustee may vary depending on situational factors. (Mayer et al. 1995, 721, 727.) Interestingly, Sirdeshmukh et al. (2002) found support that the effects of these dimensions on trust are asymmetric. In other words, dimension-related negative performance may have a stronger impact on trust than positive performance and vice versa (Sirdeshmukh et al. 2002). Despite the dimension-related classification of trust, researchers agree that there is overall trust (Chen & Dhillon 2003, 305; Mayer et al. 1995; Sirdeshmukh et al. 2002). This refers to a simple general belief whether the other party can be trusted (Gefen 2002, 39). This overall trust has been applied in many marketing studies (e.g. Chaudhuri & Holbrook 2001; Gefen 2002).

Doney & Cannon (1997) introduced five different trust-building processes which are all driven by different factors. In the calculative process, trustor calculates the price of trustee acting in an untrustworthy way. When trustor acquires experience of trustee, he/she develops confidence because trustee’s actions can be predicted (prediction process). The capability process refers to trustor assessing the ability of trustee to keep its promises. The intentionality process refers to the situation in which trustor evaluates the motives of the other party. Finally, trust is transferred from one party to another in the transference process. (Doney & Cannon 1997, 38.) Lewicki & Bunker (1995)
presented an alternative trust-building process. They emphasized that trust may develop from calculus-based through knowledge-based to identification-based trust over time. In this process, trust potentially develops from trust that is based on control (calculus-based trust) to trust that the other party shares the same values, needs, and preferences (identification-based trust). However, many relationships are based on the prior knowledge that trustee will behave accordingly (knowledge-based trust), whereas the other two types of trust concern a smaller portion of relationships. (Lewicki & Bunker 1995.)

In general, trust has many antecedents such as communication (Selnes 1998; Morgan & Hunt 1994; Geyskens, Steenkamp & Kumar 1997; Ball, Coelho & Machâs 2003), satisfaction (Selnes 1998; Horppu et al. 2008), shared values (Nicholson, Compeau & Sethi 2001; Morgan & Hunt 1994), familiarity (Gefen 2000), buyer independence (Handfield & Bechtel 2002), liking (Nicholson et al. 2001), image (Ball et al. 2003), and non-opportunistic behavior (Morgan & Hunt 1994). In addition, some antecedents are rather context-specific. For example, privacy is an antecedent of trust in online environment in general (Bart, Shankar, Sultan & Urban 2005), and system quality is a predictor of trust in e-commerce (Yoon & Kim 2009). Trust also has many consequences such as enhancement (Selnes 1998), commitment (Morgan & Hunt 1994), cooperation (Morgan & Hunt 1994), satisfaction (Geyskens et al. 1997), functional conflict (Morgan & Hunt 1994), responsiveness (Hanfield & Bechtel 2002), uncertainty reduction (Morgan & Hunt 1994), loyalty (Chaudhuri & Holbrook 2001; Horppu et al. 2008; Ball et al. 2003), value (Sirdeshmukh et al. 2002), and purchase (Gefen 2000). Moreover, Mayer et al. (1995, 730) proposed that the outcomes of actions person has taken due to trust have an effect on perceived trustworthiness.

Trust is context-specific depending on factors such as stakes involved, available alternatives, and the level of risk perceived (Mayer et al. 1995, 726, 727). Gefen (2002) expressed the need for trust in online environment. It is more difficult to evaluate trustworthiness of others online (Friedman, Kahn & Howe 2000, 40). Trust can be based on perceived similarity between receiver and sender of eWOM in online environment (Fan & Miao 2012). However, online information that is provided by independent experts is considered more trustworthy than information provided by the seller or other users (Burgess, Sellitto, Cox & Buultjens 2011). Yet, eWOM is considered more impactful than traditional commercial communication (Trusov, Bucklin & Pauwels 2009). Since trust decreases perceived risk and feeling of uncertainty, trusting customers feel comfortable in online environment (McKnight, Choudhury & Kacmar 2002, 334). If consumers lack trust in the other party, they are probably too concerned about potential risks to engage online (Harridge-March 2006).

Information must be perceived credible so that engagement is enhanced in online environment (Men & Tsai 2013, 16). When evaluating the credibility of information, three aspects must be considered: the medium, the source, and the message (Metzger, Flanagan, Eyal, Lemos & McCann 2003). Since errors are likely corrected by other user in popular sites, information is perceived more
credible in these sites (Men & Tsai 2013, 16). In addition, weblogs are perceived very credible in comparison to other media (Johnson & Kaye 2004). Moreover, consumers must evaluate credibility of the source which concerns perceived expertise and trustworthiness of the source (Yang, Kang & Johnson 2010, 476). In addition, Pan & Chiou (2011) found support that consumers trust negative online information more than positive information in some contexts.

Due to special nature of online environment, trust has received a lot of attention in the marketing literature. For example, Lu et al. (2010) studied the role of trust in online community context. They discovered that trust propensity, and perceived similarity between user and other members had a positive influence on trust (integrity and benevolence) in other members. Member’s ability to provide useful information also had a positive effect on trust in the website. Moreover, trust (ability) in the website also had a positive impact on intentions to get information and purchase. (Lu et al. 2010.) Horppu et al. (2008) discovered that parent-brand level trust has a positive effect on website trust, which further has a positive effect on website loyalty.

Nolan et al. (2007) studied business online communities. They deconstructed trust into its component parts: risk, benefit, utility value, interest, effort and power, and presented trust development model in online communities. These components are evaluated related to each other and the outcome of the evaluation determines whether consumer engages with the virtual community. For instance, when risks outweigh utility value, consumer doesn’t participate in the online community. When these components are equal in importance, consumer only partly participates (e.g. reads conversations or “lurks”). When utility outweighs risks, consumer takes part in conversations. (Nolan et al. 2007.) Finally, risk and trust are related in online environment (e.g. Pavlou 2003; Nolan et al. 2007), and perceived risk is known to moderate the relationship between different types of value and purchase intention in online context (Chiu, Wang, Fang & Huang 2014). Thus, it can be hypothesized that trust moderates the relationship between drivers of engagement and engagement in online environment.

Some studies have examined the relationship between trust and customer engagement. For instance, Bowden (2009a/b) identified trust as a part of engagement process for repeat customers. Based on this, Brodie et al. (2011) classified trust as an antecedent of customer brand engagement for existing customers. However, trust may also be a consequence of consumer brand engagement for new customers (Brodie et al. 2011; van Doorn et al. 2010). Similarly, Vivek et al. (2012) proposed that trust is a consequence of customer engagement. In their qualitative study, Brodie et al. (2013) proposed that trust is a consequence of consumer engagement in virtual community context. Hughes, Avey & Norman (2008) investigated the relationship between trust and engagement in organizational context. In their quantitative study, they found support that trust is an antecedent of employee engagement. However, only emotional dimension of engagement was considered. (Hughes et al. 2008.) Ugwu, Onyishi & Rodríguez-Sánchez (2014) also examined the relationship
between trust and engagement in their quantitative study. Similarly, their findings suggested that organizational trust is a predictor of work engagement (Ugwu et al. 2014).

Some studies have studied trust also as a moderator. For example, Anderson & Srinivasan (2003) found that trust strengthens the relationship between satisfaction and loyalty in online context. In their conceptual study, van Doorn et al. (2010) proposed that trust is an antecedent of customer engagement behaviors. However, it is also noted that trust may act as a moderator that helps enhance or inhibit the influence of other factors on engagement behaviors (van Doorn et al. 2010). Similarly, Brodie et al. (2011) proposed that customer engagement levels may be moderated by certain individual or contextual factors. Similarly, Wirtz et al. (2013) proposed that several product, customer, and situational factors may moderate the relationship between drivers of engagement and online brand community engagement. However, Fang, Shao & Lan (2009) found no support that trust moderates the relationship between attitude and intention in context of web survey participation.

Based on these findings, following hypotheses are proposed:

H11: Trust in online content strengthens the relationship between community experience and behavioral online brand engagement in content consumption context.
H12: Trust in online content strengthens the relationship between information experience and behavioral online brand engagement in content consumption context.
H13: Trust in online content strengthens the relationship between entertainment experience and behavioral online brand engagement in content consumption context.
H14: Trust in online content strengthens the relationship between identity experience and behavioral online brand engagement in content consumption context.
H15: Trust in online content strengthens the relationship between remuneration experience and behavioral online brand engagement in content consumption context.

### 2.5 Brand purchase intention

Purchase intention is customer’s self-reported likelihood of the purchase in the future (Seiders, Voss, Grewal & Godfrey 2005, 39). It is a widely used construct in many domains because it is an easily applicable proxy for customer behavior (Chandon, Morwitz & Reinartz 2005, 1). It can be used to evaluate whether a current customer remains as a customer of specific company (Zeithaml, Berry & Parasuraman 1996, 31). Measuring purchase intention is important since companies with low defection rate are likely to outperform its rivals because
their customers are, for example, cheaper to serve and they buy more (Reichheld & Sasser 1990). However, also contradictory findings exist in the marketing literature (e.g. Reinartz & Kumar 2002). Moreover, purchase intention doesn’t necessarily lead to actual purchasing behavior (Seiders et al. 2005) which makes the application of purchase intention sometimes problematic. The relationship between purchase intention and actual purchase behavior varies depending on contextual factors such as product category (Kalwani & Silk 1982).

One of the most well-known models of behavior intention and behavior is proposed by Ajzen (1991). According to this model, three interrelated factors have an impact on behavior intention (i.e. purchase intention). These are 1) attitude towards the behavior, 2) subjective norm, and 3) perceived behavioral control. Execution of actual behavior (i.e. purchase) depends both on intention and perceived behavioral control. (Ajzen 1991.) In general, the marketing literature has identified many constructs that have a positive influence on purchase intention. These include for example brand confidence (Laroche, Kim & Zhou 1996), perceived value (Chang & Wildt 1994), satisfaction (Yi & La 2004), perceived risk (Wu, Yeh & Hsiao 2011), perceived quality, and – in some contexts – perceived price (Eunju, Kim & Zhang 2008).

Purchase intention has also been studied as an outcome of customer engagement. Dwivedi (2015) studied consumer brand engagement in mobile phone context. His study gave support to the positive relationship between consumer brand engagement and loyalty intentions, which included both purchase intention and WOM intention. Moreover, consumer brand engagement was considered a superior predictor of loyalty intentions since it explained variations in loyalty intentions significantly better than satisfaction, customer perceived value, and quality. (Dwivedi 2015.) Similarly, loyalty is a culmination point in the customer engagement process models provided by (Bowden 2009a/b). Furthermore, similar results have been obtained from related disciplines. For instance, Saks (2006) discovered that engaged employees were more unlikely to quit their jobs. Algesheimer et al. (2005) studied engagement in European car clubs in offline context. The ones who had higher engagement levels also reported higher intentions to continue their memberships and to participate in community activities in the future (Algesheimer et al. 2005) thus indicating that the phenomenon doesn’t exist exclusively in online context.

In their quantitative study, Hollebeek et al. (2014) examined the relationship between customer brand engagement (cognitive, emotional, and behavioral dimensions) and brand usage intent in social media context. They found that highly engaged Linkedin.com users reported a higher intention to keep using Linkedin.com (Hollebeek et al. 2014). This study supported the evidence provided by Brodie et al. (2013) who described customer engagement process in a virtual community. In their qualitative study, both loyalty to the brand and community were identified as consequences of customer engagement (Brodie et al. 2013). Wirtz et al. (2013) also proposed that online
brand community engagement leads to several brand-related outcomes – including brand engagement and loyalty. Cheung, Zheng & Lee (2014) conducted a longitudinal customer engagement study in which cognitive, emotional, and behavioral engagement towards Chinese online shopping platform was examined. The positive relationship between customer engagement and repurchase intention was supported in this study (Cheung et al. 2014). Zheng et al. (2015) found that online community commitment had a positive impact on brand loyalty, which was partly measured through purchase intention.

Consumers are also exposed to eWOM when they consume content online. Unlike traditional WOM recommendations, eWOM recommendations come from unknown individuals (Park & Lee 2009, 61). The marketing research has identified two aspects of eWOM: quantity and quality (Fan, Miao, Fang & Lin 2013). Park, Lee & Han (2007) found support that both the amount of eWOM and the quality of eWOM have a positive impact on purchase intention. Similarly, Jalilvand & Samiei (2012) found support to the positive relationship between eWOM and purchase intention in travel industry. However, their measurement scale actually emphasized customer’s online travel review consumption behavior. As brand is mentioned more often in online discussions, it is perceived more popular (Cheung & Thadani 2010). Thus, the more often consumer consumes brand-related content online, the more likely consumers is to find (positive) eWOM. Moreover, if online reviews are persuasive, they have a stronger impact on purchase intention (Park et al. 2007).

Gupta & Harris (2010) investigated the influence of eWOM on product consideration and choice. They discovered that the influence of eWOM varies across customer motivation. Customers with low motivation used eWOM recommendations as decision heuristics. Customers with high motivation, instead, spend more time on analyzing information and considering the recommended product. (Gupta & Harris 2010.) Moreover, Harris & Gupta (2008) found that eWOM has a significant effect on buyer confidence when consumer is choosing the product. Yet, Bickart & Schindler (2001) didn’t find support that reading online forums has an effect on purchase likelihood. However, they proposed that the intention formation process may take longer than 12 weeks, which was the time frame of their study (Bickart & Schindler 2001). Prendergast et al. (2010) discovered that both similarity between consumer’s interests and topic of the online forum, and consumer attitudes towards the forum were good predictors of consumer’s purchase intention. Finally, de Valck et al. (2009) stated that virtual communities influence through membership characteristics (e.g. attachment to community), consumer interaction characteristics (e.g. frequency and duration of visit), and general consumer characteristics (e.g. age and education) on purchase process.

Based on these findings, the following hypothesis is proposed:

\[ H16: \text{Behavioral online brand engagement has a positive effect on brand purchase intention in content consumption context.} \]
2.6 Research model

Figure 4 illustrates the research model of this study. Two control variables (age and frequency of consumption) are also included. In general, Brodie et al. (2011, 260) proposed that “particular CE levels may be moderated by specific individual-level and/or contextual variables”. Age is known to have an effect on Internet usage (e.g. Thayer & Ray 2006; Shah, Kwak & Holbert 2001). For instance, young people have the highest preference to communicate with unknown individuals on the Internet (Thayer & Ray 2006). However, the effects of user age aren’t necessarily so straightforward in every context (Teo 2001). Age also affects technology adoption in general (Morris & Venkatesh 2000). The marketing literature (e.g. Gummerus et al. 2012; Men & Tsai 2013; Zheng et al. 2015) has considered behavioral online (brand) engagement purely as a frequency-based phenomenon. These frequency-based constructs are rather related to participation which is a necessary antecedent of engagement (Brodie et al. 2011; Vivek et al. 2012). Brodie et al. (2011, 258) also concluded that engagement and participation can occur concurrently. Therefore, age and frequency of consumption are used as control variables in this study.

FIGURE 4 Research model

Earlier chapters discussed the previous literature that supported these hypotheses. Table 4 provides a summary of key supporting literature for the hypotheses.
<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Key supporting literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Community → Behavioral online brand engagement</td>
<td>Algesheimer et al. (2005); Calder et al. (2009); Gummerus et al. (2012); Heinonen (2011); Hennig-Thurau et al. (2004); McQuail (1983); Men &amp; Tsai (2013)</td>
</tr>
<tr>
<td>H2: Information → Behavioral online brand engagement</td>
<td>Cvijikj &amp; Michahelles (2013); Heinonen (2011); Kaye (2010); McQuail (1983); Men &amp; Tsai (2013); Muntinga et al. (2011); Shao (2009)</td>
</tr>
<tr>
<td>H3: Entertainment → Behavioral online brand engagement</td>
<td>Cvijikj &amp; Michahelles (2013); Gummerus et al. (2012); Heinonen (2011); Jahn &amp; Kunz (2012); Lin &amp; Lu (2011); McQuail (1983); Men &amp; Tsai (2013); Muntinga et al. (2011); Mull &amp; Lee (2014); Shao (2009); Sheldon (2008)</td>
</tr>
<tr>
<td>H4: Identity → Behavioral online brand engagement</td>
<td>Georgiu (2001); McQuail (1983); Men &amp; Tsai (2013); Mersey et al. (2012); van Doorn et al. (2010)</td>
</tr>
<tr>
<td>H5: Remuneration → Behavioral online brand engagement</td>
<td>Hennig-Thurau et al. (2004); Men &amp; Tsai (2013); Muntinga et al. (2011)</td>
</tr>
<tr>
<td>H6-H10: Brand commitment (moderating effect)</td>
<td>Allen &amp; Meyer (1990); Brodie et al. (2011); Geyskens et al. (1996); Gustaffsson et al. (2005); van Doorn et al. (2010); Wirtz et al. (2013)</td>
</tr>
<tr>
<td>H11-H15: Trust in online content (moderating effect)</td>
<td>Anderson &amp; Srinivasan (2003); Brodie et al. (2011); Chiu et al. (2014); Harridge-March (2006); van Doorn et al. (2010); Wirtz et al. (2013)</td>
</tr>
<tr>
<td>H16: Behavioral online brand engagement → Brand purchase intention</td>
<td>Brodie et al. (2013); Cheung et al. (2014); de Valck et al. (2009); Hollebeek et al. (2014); Jalilvand &amp; Samiei (2012); Park et al. (2007); Wirtz et al. (2013); Zheng et al. (2015)</td>
</tr>
</tbody>
</table>
3 METHODOLOGY

Methodology concerns a general approach to research problem (Metsämäuronen 2005, 198). Research has always an objective which further affects methodological choices (Hirsjärvi et al. 2005, 128). In other words, chosen research method should fit theory, hypotheses, and methodology (Metsämäuronen 2005, 198). This chapter discusses methodological choices that were found the most appropriate for this study. First, quantitative research method is discussed. Methods concerning data collection and practical implementation are explained next. Finally, data analysis processes are discussed.

3.1 Quantitative research

Study objectives can be divided into four categories: explorative, explanatory, descriptive, and predictive. This study is explanatory in nature because it tries to find causal relationships that explain reasons why things are the way they are. (Hirsjärvi et al. 2005, 129.) Hirsjärvi et al. (2005, 131) stated that conclusions from earlier studies, previous theories, hypotheses, construct definition, careful planning of data collection, making variables statistically analyzable, and conclusions based on statistical analysis are typical main aspects of quantitative approach. Thus, quantitative approach focuses on testing of models (Bryman & Bell 2007, 425) and hypotheses (Hair, Hult, Ringle & Sarstedt 2014, 3). Quantitative approach may be reasonable if the object of the study can be measured systematically. In addition, quantitative approach allows examining causal relationships (Bryman & Bell 2007, 168). Finally, quantitative studies are relatively easy to replicate (Bryman & Bell 2007, 171). Quantitative approach has also faced some criticism. For instance, the measurement process can be characterized to possess “an artificial and spurious sense of precision and accuracy” (Bryman & Bell 2007, 174). In addition, the analysis of relationships creates a static view of social life that doesn’t necessarily reflect everyday life (Bryman & Bell 2007, 174). Quantitative studies also focus on some specific aspects (Alkula et al. 1994, 20) thus limiting the results on these aspects (cf. qualitative research). Finally, in contrast to traditional science, measures are based on individuals’ interpretations of experiences in social sciences (Bryman & Bell 2007, 174).
Because of the nature of the research problem, adequate amount of previous literature, and the benefits that quantitative approach offers, quantitative approach was selected for this study.

3.2 Data collection and practical implementation

Survey research is a traditional quantitative research strategy (Hirsjärvi et al. 2005, 125). In survey research, extensive amount of data is gathered in a standardized form from many people at a single point in time (Bryman & Bell 2007, 56). This means that many questions are asked exactly the same way from each respondent (Hirsjärvi et al. 2005, 184). In this research strategy, a sample is picked from the whole population after which data is gathered and analyzed. Interviews or questionnaires may be used to gather data in survey research. (Hirsjärvi et al. 2005, 125.) According to Hirsjärvi et al. (2005, 186), questionnaires can be applied to gather data about facts, behavior, knowledge, values, attitudes, beliefs, and opinions. Online questionnaire is one type of self-completion questionnaire (Bryman & Bell 2007, 676) in which the influence of the researcher on respondents is minimized (Hirsjärvi et al. 2005, 183).

Furthermore, Cobanoglu, Ward & Moreo (2001) found that online surveys achieved a higher response rate and a faster response speed, and was cheaper in comparison to traditional mail surveys. In addition, respondents can complete the survey when they feel the most comfortable (Bryman & Bell 2007, 242).

Nevertheless, surveys also have some drawbacks. For example, there is no guarantee that respondents have answered the questions carefully and honestly (Hirsjärvi et al. 2005, 184). Furthermore, respondents may misunderstand questions or lack the required knowledge to answer questions (Bryman & Bell 2007, 174). In addition, the researcher can’t provide respondents with assistance if they have further questions in case of self-completion questionnaires (Bryman & Bell 2007, 242). In addition, respondent fatigue may emerge if the survey is long. Moreover, response rate may be low in some cases in survey research (Hirsjärvi et al. 2005, 184). Internet users also form a biased sample of the population since they tend to be younger, wealthier, better educated, and belong to certain ethnic groups (Couper 2000). Based on evaluation of benefits and drawbacks related to online questionnaire, it was considered an appropriate data collection method in this study - especially when the context of the study is taken into account.

Five separate questionnaires were constructed in five different languages (English, Finnish, German, French, and Polish). The first questionnaire was created in English using Webropol 2.0 online survey platform after which the content was translated to other languages. The Finnish translation of the items was made by the author. The German translation was made by a native German speaker. The French and Polish translations were made by a translation agency. The data was gathered using five sources: 1) popular national and international
online tractor discussion forums, 2) Facebook advertising (target audience: users that liked different tractor brands and lived in United Kingdom, Finland, Germany, Poland, or France and spoke that specific language), 3) popular online tractor magazines, 4) an online site of a tractor brand and its Facebook group, and 5) private Facebook groups. Thus, the sample is a convenience sample (Metsämuuronen 2005, 53).

Background information (e.g. the purpose of the survey, who conducts the survey, and how long it takes to complete the survey) was included at the beginning of the survey and the motivational letter. Moreover, respondents were motivated to participate through a raffle in which an exclusive day ticket to Agritechnica 2015 (the world’s largest trade fair for agricultural machinery and equipment) worth 75 € could be won.

The data was gathered during 4.8.-16.8.2015. In total, 825 responses were received. 6 of them were later removed because the respondents didn’t own a tractor. The questionnaires were opened 5452 times in total. Thus, the effective response rate was 15.1 %. However, the actual response rate is slightly higher since this calculation method doesn’t take users that accessed the survey more than once into account. Moreover, the survey was accessed by various non-target group stakeholders (e.g. staff at online magazines and discussion board moderators). There were also remarkable differences in response rates between the language versions. The response rates ranged from 7.2 % (the Polish language version) to 28.9 % (the Finnish language version). Furthermore, 54.9 % of the respondents accessed the survey through Facebook. Other ways included discussion forums (33.2 %), manufacturer’s or retailers’ website (6.1 %), online magazines (3.9 %), and “other” (1.8 %).

Nonresponse bias was examined by comparing early (N=250; 25 from the English, 35 from the Polish, 40 from the French, 65 from the German, and 85 from the Finnish language version of the questionnaire) and late (N=250) respondents. The logic behind this is that it is generally assumed that late respondents that are sent a reminder letter and non-respondents are similar (Hébert, Bravo, Korner-Bitensky & Voyer 1996). Theoretically similar items that were later used in the confirmatory phase were summed up and divided by the amount of summed items. The comparison of construct means was made using Kruskal-Wallis test.

There were significant differences in five out of nine construct means. However, around two-thirds of late respondents accessed the survey through Facebook, whereas the same ratio was approximately one-third for early respondents. When the construct means were compared regarding the survey access method, there was a significant difference in every construct mean in the whole sample. In addition, a reminder letter was posted on the discussion forums but the Facebook advertising was ongoing. Furthermore, in contrast to traditional mail or e-mail, members don’t notice announcements in online forums at the same time which means that late respondents aren’t actually “late respondents”. Thus, the data collection methods weren’t well-compatible with the basic logic of this comparison approach. Therefore, it should be concluded
that the comparison of early and late respondents is not a worthwhile approach in this study.

### 3.2.1 The questionnaire

The questionnaire was constructed using structured claims. Multiple-indicator measures were applied to ensure reliability (Bryman & Bell 2007, 161-162). Moreover, all items were measured through established and validated scales. The construct measurement was based on reflective measures (Hair et al. 2014, 13) as suggested by Bagozzi (2011).

Community was measured using five items that were adopted from Calder et al. (2009). One item (“This site does a good job of getting its visitors to contribute or provide feedback”) was removed because it wasn’t suited in this context. Similarly, four information-related items were based on Calder et al.’s (2009) construct of utilitarian experience which focuses on information. One item (“You learn how to improve yourself from this site”) was removed because it didn’t fit the context of this study. Entertainment was measured using three items that were adopted from Park et al. (2009). Three identity-related items were adopted from Mersey et al. (2012). Two remuneration-related items were adopted from Hennig-Thurau et al. (2004). Examples of rewards and incentives that were mentioned in these two items were given.

Hollebeek et al. (2014) constructed a context-independent measurement scale for behavioral dimension of consumer brand engagement. Behavioral online brand engagement was measured using three items adopted from their research. Since the respondents were probably unaware of the term “online content consumption”, it was shortly explained (“reading discussions, looking at pictures, watching videos and browsing websites on the Internet”) prior to the relevant items. Moreover, other sources than the Internet for brand-related content consumption (“reading print magazines and paper brochures related to tractors, discussing tractors face-to-face with friends or colleagues, visiting farm shows and exhibitions, taking part in tractor-related courses, and visiting dealer outlets”) were named prior to the relevant items.

Brand commitment was measured using four items adopted from Kim et al. (2008). Trust in online content was measured using four items that were adopted from Chaudhuri & Holbrook (2001). Three items were adopted from Salisbury, Pearson, Pearson & Miller (2001) to measure brand purchase intention. Finally, frequency of consumption was measured using one item and based on Gummerus et al.’s (2012) frequency of visits measurement scale.

To ensure good fit of the items in this context, minor modifications in the wording were made. Moreover, items were formulated to be as short and simple as it was possible in this context. A person who works in a tractor manufacturer and has an extensive knowledge of tractor owners was consulted. In addition, these items were evaluated by three other assistants. Based on feedback received during this process, some items were reformulated. The items were translated to different languages in a way that they captured the original meaning even though this meant minor changes in diction.
The multiple-indicator items were measured using 7-point Likert scale ranging from “strongly disagree” to “strongly agree”. Likert scale is good for measuring – for example – attitudes and motives (Metsämuuronen 2005, 61). The 7-point scale was applied instead of the 5-point scale because it tends to be more reliable (Metsämuuronen 2005, 70). However, scales ranging from “disagree” to “agree” may sometimes be problematic since respondents may give their responses based on social desirability (Metsämuuronen 2005, 192). “I don’t know” option wasn’t provided since the items were mainly related to respondents’ experiences.

As suggested by Hirsjärvi et al. (2005, 192), the easiest questions were asked first. These included for example gender, age group, country, and primary tractor brand. In total, there were 50 items of which 37 were relevant in this specific study. Thus, some items weren’t analyzed in this study. The items were organized into small groups. However, to minimize common method bias, the items were mixed in the questionnaire. All items were compulsory. It took approximately from 10 to 15 minutes to complete the survey. The survey items are provided in the appendix.

3.3 Data analysis

The data analysis consisted of three steps. The first step was to transfer the data from Webropol 2.0 to IBM SPSS Statistics 22. The data was checked so that insufficient responses could be located. No insufficient responses existed. In addition, the data not relevant to this study was removed. The first phase concerned only the basic statistical analysis of the data that included calculating frequencies and percentage of distributions. Many of these results are included in the section that concerns demographic and background factors.

The second phase concerned exploratory factor analysis that was executed using IBM SPSS Statistics 22. The purpose of exploratory factor analysis was to reveal different combinations of responses and categorize them into latent factors (Metsämuuronen 2005, 598). In other words, different variables (responses) were categorized into factors by estimating how strongly the responses load to a certain factor (Metsämuuronen 2005, 600). Since exploratory factor analysis is data-driven (Tabachnick & Fidell 2013, 662) and especially applicable to situations in which it is known how some of these variables are supposed to be related to each other (Metsämuuronen 2005, 615), exploratory factor analysis was applied as a pre-analysis of confirmatory factor analysis so that unsuitable variables could be eliminated.

In the last phase, confirmatory factor analysis was carried out using partial least square structural equation modeling (PLS-SEM) with SmartPLS 3.2 (Ringle, Wende & Becker 2015) to test the hypotheses (Hair et al. 2014, 3). In general, SEM refers to several statistical techniques that can be used to conduct multiple regression analyses of factors. Confirmatory factor analysis is a special type of SEM. (Ullman 2013, 731.)
PLS-SEM consists of two elements: the inner model that represents the constructs and shows the relationships between different constructs, and the outer model that displays the relationships between constructs and the indicator variables (Hair et al. 2014, 12). Hair et al. (2014, 19) suggested using PLS-SEM if the purpose of the study is to predict key constructs or identify key drivers of constructs. One advantage of PLS-SEM is that it doesn’t generally make assumptions regarding data distributions (Hair et al. 2014, 10). Moreover, PLS-SEM can be applied to small sample sizes (Hair et al. 2014, 19). However, PLS-SEM can’t be applied if the model is non-recursive (Hair et al. 2014, 15, 17). Moreover, PLS-SEM is not an ideal technique for theory testing and confirmation (Hair et al. 2014, 17, 18).

The results of the data analysis are covered in a more detailed level in the following chapters.
4 RESULTS

This chapter concerns the results of this study. First, demographic and other background information of the respondents are presented. This is followed by phases related to exploratory factor analysis, the measurement model, and the structural model.

4.1 Demographic and background information

The vast majority of respondents (97.2 %) were male. The largest age group was between 18 and 25 who made up 27.8 % of the respondents. The second largest age group was between 26 and 35 (21.2 %) and the third largest between 36 and 45 (19.4 %). 33.8 % of the respondents lived in Finland. The next common responses in this category were Germany (20.9 %), France (15.4 %), and Poland (13.1 %). The most popular primary tractor brand was Valtra (20.9 %) followed by John Deere (15.5 %), Fendt (9.9 %), Massey Ferguson (9.6 %), and Case IH (9.4 %). More than one-third of the respondents (35.0 %) consumed online content related to their primary tractor brand once a month or more seldom, whereas 22.1 % of the respondents consumed it 2-3 times per month. In addition, 21.5 % of the respondents consumed brand-related online content 1-3 times per week. Table 5 presents these results in greater detail.

TABLE 5 Demographic and background factors of the respondents

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>796</td>
<td>97.2</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>819</td>
<td>100</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 18</td>
<td>65</td>
<td>7.9</td>
</tr>
<tr>
<td>18-25</td>
<td>228</td>
<td>27.8</td>
</tr>
<tr>
<td>26-35</td>
<td>174</td>
<td>21.2</td>
</tr>
<tr>
<td>36-45</td>
<td>159</td>
<td>19.4</td>
</tr>
<tr>
<td>46-55</td>
<td>116</td>
<td>14.1</td>
</tr>
<tr>
<td>Over 55</td>
<td>77</td>
<td>9.4</td>
</tr>
<tr>
<td>Total</td>
<td>819</td>
<td>100</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>277</td>
<td>33.8</td>
</tr>
<tr>
<td>Germany</td>
<td>171</td>
<td>20.9</td>
</tr>
</tbody>
</table>

(continues)
TABLE 5 (continues)

<table>
<thead>
<tr>
<th>Country</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>126</td>
<td>15.4</td>
</tr>
<tr>
<td>Poland</td>
<td>107</td>
<td>13.1</td>
</tr>
<tr>
<td>Austria</td>
<td>37</td>
<td>4.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>36</td>
<td>4.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>28</td>
<td>3.4</td>
</tr>
<tr>
<td>Other European</td>
<td>21</td>
<td>2.6</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>819</td>
<td>100</td>
</tr>
</tbody>
</table>

Primary tractor brand

<table>
<thead>
<tr>
<th>Brand</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valtra</td>
<td>171</td>
<td>20.9</td>
</tr>
<tr>
<td>John Deere</td>
<td>127</td>
<td>15.5</td>
</tr>
<tr>
<td>Fendt</td>
<td>81</td>
<td>9.9</td>
</tr>
<tr>
<td>Massey Ferguson</td>
<td>79</td>
<td>9.6</td>
</tr>
<tr>
<td>Case IH</td>
<td>77</td>
<td>9.4</td>
</tr>
<tr>
<td>New Holland</td>
<td>68</td>
<td>8.3</td>
</tr>
<tr>
<td>Deutz-Fahr</td>
<td>48</td>
<td>5.9</td>
</tr>
<tr>
<td>Ursus</td>
<td>46</td>
<td>5.6</td>
</tr>
<tr>
<td>Other</td>
<td>122</td>
<td>14.9</td>
</tr>
<tr>
<td>Total</td>
<td>819</td>
<td>100</td>
</tr>
</tbody>
</table>

Frequency of consumption

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>87</td>
<td>10.6</td>
</tr>
<tr>
<td>4-6 times per week</td>
<td>88</td>
<td>10.7</td>
</tr>
<tr>
<td>1-3 times per week</td>
<td>176</td>
<td>21.5</td>
</tr>
<tr>
<td>2-3 times per month</td>
<td>181</td>
<td>22.1</td>
</tr>
<tr>
<td>Once a month or more seldom</td>
<td>287</td>
<td>35.0</td>
</tr>
<tr>
<td>Total</td>
<td>819</td>
<td>100</td>
</tr>
</tbody>
</table>

4.2 Exploratory factor analysis

As exploratory factor analysis is a data-driven analysis method (Tabachnick & Fidell 2013, 662), it was used as a pre-analysis method in this study. Thus, unsuitable items could be eliminated prior to the confirmatory phase. As factor analysis contains some prerequisites, these preconditions were examined prior to conducting exploratory factor analysis. As suggested by Metsämuuronen (2005, 619), Kaiser-Meyer-Olkin’s test (KMO) and Bartlett’s test were applied. These tests examine correlation matrix of the items (Metsämuuronen 2005, 619). The results of these tests (KMO: 0.959, Bartlett’s test: $p < 0.01$) suggested that preconditions of factor analysis had been met (Karjaluoto 2007, 44). In addition, communalities were evaluated. The stronger an indicator loads to a certain factor, the closer to 1 the communality is (Metsämuuronen 2005, 618). The lowest communality value was 0.364 which is above the suggested level (Karjaluoto 2007, 48).
Exploratory factor analysis was conducted using SPSS Statistics 22. Widely used principal axis factoring (Tabachnick & Fidell 2013, 688) and varimax rotation were applied as suggested by Karjaluoto (2007, 45, 46). In general, principal factor extraction attempts to maximize variance extracted (Tabachnick & Fidell 2013, 688). Varimax rotation further lowers low loadings and increases strong loadings (Tabachnick & Fidell 2013, 692). The number of potential factors wasn’t pre-set (Eigenvalue 1 criterion).

Only four factors were extracted. Items related to information, trust in online content, and community loaded to the first factor. Items related to brand commitment and brand purchase intention loaded to the second factor. The third factor consisted of items related to remuneration and identity. Finally, items related to behavioral online brand engagement and entertainment loaded to the fourth factor. All primary loadings were 0.435 or stronger. However, there were many cross-loadings that exceeded 0.300. After the rotation, the first factor explained 15.8 % of the total variance. The second factor explained 14.9 %, the third 14.7 %, and the fourth 10.8 % of the total variance. Thus, these factors explained 56.2 % of the total variance cumulatively. COM3 and INF2 loaded to different factors than other theoretically similar items. Therefore, they were excluded from further analyses. The results are provided in the appendix.

4.3 Measurement model

Confirmatory factor analysis was conducted through partial least squares structural equation modeling with SmartPLS 3.2 (Ringle et al. 2015). Based on the results of the exploratory factor analysis, two items (COM3 and INF2) were removed. In addition, TRU3 was removed since it was later discovered that dropping it increases reliability of trust construct. The factor structure was based on the theory. As suggested by Anderson & Gerbing (1988), a two-step approach was adopted: the measurement model concerned the evaluation of the reliability and validity, whereas the structural model concerned the hypotheses testing.

Constructs of motivational drivers had VIF values ranging from 1.655 (remuneration) to 3.009 (community) which are far below the suggested cut-off level of 10 (Kleinbaum, Kupper, Nizam & Rosenberg 2014, 368). Cronbach’s alphas and composite reliabilities were used to measure internal consistencies of the measurement scales. Cronbach’s alpha measures inter-correlations between indicators (Metsämuuronen 2005, 67), whereas composite reliability doesn’t assume equal indicator loadings (Hair et al. 2014, 115). Values between 0.70 and 0.90 are considered acceptable for both types of measures (Nunnally & Bernstein 1994, in Hair et al. 2014, 102). All values were 0.771 or greater in this study thus signaling good internal consistency. Outer loadings demonstrate indicator’s coefficient regarding the latent factor and t-value presents the significance of the relationship (Hair et al. 2014, 77, 134). Standardized loadings ranged from 0.733 to 0.956 which were above the suggested level of 0.70 (Hair
et al. 2011, 145). All relationships were significant ($t$-values > 31). Thus, these indicators loaded to the latent factors well and are thus considered reliable measurement indicators. Table 6 presents the result in a more detailed level.

**TABLE 6 Factor loadings, Cronbach’s alphas, composite reliabilities, and $t$-values**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
<th>Item</th>
<th>Standardized loading</th>
<th>$t$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>.771</td>
<td>.853</td>
<td>COM1</td>
<td>.733</td>
<td>32.686</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>COM2</td>
<td>.787</td>
<td>45.321</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>COM4</td>
<td>.800</td>
<td>54.577</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>COM5</td>
<td>.757</td>
<td>36.369</td>
</tr>
<tr>
<td>Information</td>
<td>.781</td>
<td>.872</td>
<td>INF1</td>
<td>.852</td>
<td>68.397</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>INF3</td>
<td>.839</td>
<td>59.667</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>INF4</td>
<td>.807</td>
<td>45.044</td>
</tr>
<tr>
<td>Entertainment</td>
<td>.829</td>
<td>.897</td>
<td>ENT1</td>
<td>.890</td>
<td>92.844</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENT2</td>
<td>.832</td>
<td>45.375</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENT3</td>
<td>.866</td>
<td>85.139</td>
</tr>
<tr>
<td>Identity</td>
<td>.804</td>
<td>.885</td>
<td>IDE1</td>
<td>.831</td>
<td>56.189</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IDE2</td>
<td>.850</td>
<td>65.392</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IDE3</td>
<td>.863</td>
<td>75.945</td>
</tr>
<tr>
<td>Remuneration</td>
<td>.872</td>
<td>.939</td>
<td>REM1</td>
<td>.925</td>
<td>83.048</td>
</tr>
<tr>
<td>Behavioral online brand</td>
<td>.834</td>
<td>.901</td>
<td>ENG1</td>
<td>.810</td>
<td>50.795</td>
</tr>
<tr>
<td>commitment</td>
<td></td>
<td></td>
<td>ENG2</td>
<td>.907</td>
<td>109.809</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENG3</td>
<td>.883</td>
<td>88.131</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BCO1</td>
<td>.788</td>
<td>46.381</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BCO2</td>
<td>.801</td>
<td>53.340</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BCO3</td>
<td>.832</td>
<td>53.595</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BCO4</td>
<td>.822</td>
<td>54.370</td>
</tr>
<tr>
<td>Trust in online content</td>
<td>.847</td>
<td>.908</td>
<td>TRU1</td>
<td>.900</td>
<td>116.297</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRU2</td>
<td>.871</td>
<td>81.800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRU4</td>
<td>.854</td>
<td>65.287</td>
</tr>
<tr>
<td>Brand purchase intention</td>
<td>.865</td>
<td>.917</td>
<td>PUI1</td>
<td>.859</td>
<td>56.424</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PUI2</td>
<td>.914</td>
<td>120.424</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PUI3</td>
<td>.886</td>
<td>84.050</td>
</tr>
</tbody>
</table>

Convergent validity of the measurement model was examined through average variance extracted (AVE) values. All AVE values were above 0.50 thus signaling that latent variables explain more than half of their indicators’ variance (Hair, Ringle & Sarstedt 2011, 146). Discriminant validity was evaluated through Fornell-Larcker criterion and cross-loadings (Hair et al. 2014, 145). The square root of AVE was higher than correlations between the latent construct and other latent constructs in all of the cases (Table 7). In addition, indicators’ loadings
were higher than their cross-loadings. Thus, both convergent validity and discriminant validity of the measurement model were achieved.

### TABLE 7 AVE, construct correlations, square root of AVE (on the diagonal), means, and standard deviations

<table>
<thead>
<tr>
<th></th>
<th>COM</th>
<th>INF</th>
<th>ENT</th>
<th>IDE</th>
<th>REM</th>
<th>ENG</th>
<th>BCO</th>
<th>TRU</th>
<th>PUI</th>
<th>Age</th>
<th>FoC</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM</td>
<td>.592</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INF</td>
<td>.694</td>
<td>.769</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENT</td>
<td>.745</td>
<td>.658</td>
<td>.598</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDE</td>
<td>.719</td>
<td>.656</td>
<td>.653</td>
<td>.637</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REM</td>
<td>.885</td>
<td>.460</td>
<td>.464</td>
<td>.385</td>
<td>.609</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG</td>
<td>.753</td>
<td>.643</td>
<td>.616</td>
<td>.611</td>
<td>.505</td>
<td>.277</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCO</td>
<td>.658</td>
<td>.562</td>
<td>.564</td>
<td>.670</td>
<td>.588</td>
<td>.347</td>
<td>.581</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRU</td>
<td>.766</td>
<td>.678</td>
<td>.723</td>
<td>.662</td>
<td>.599</td>
<td>.393</td>
<td>.670</td>
<td>.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUI</td>
<td>.786</td>
<td>.468</td>
<td>.469</td>
<td>.524</td>
<td>.405</td>
<td>.282</td>
<td>.512</td>
<td>.730</td>
<td>.588</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>n/a</td>
<td>-.302</td>
<td>-.273</td>
<td>-.347</td>
<td>-.274</td>
<td>-.130</td>
<td>-.219</td>
<td>-.327</td>
<td>-.291</td>
<td>-.318</td>
<td>n/a</td>
</tr>
<tr>
<td>FoC</td>
<td>n/a</td>
<td>.344</td>
<td>.324</td>
<td>.418</td>
<td>.362</td>
<td>.122</td>
<td>.365</td>
<td>.344</td>
<td>.308</td>
<td>.257</td>
<td>-.225</td>
</tr>
<tr>
<td>Mean</td>
<td>n/a</td>
<td>4.33</td>
<td>4.34</td>
<td>4.33</td>
<td>3.58</td>
<td>2.83</td>
<td>4.58</td>
<td>4.83</td>
<td>4.65</td>
<td>4.96</td>
<td>n/a</td>
</tr>
<tr>
<td>SD</td>
<td>n/a</td>
<td>1.40</td>
<td>1.54</td>
<td>1.58</td>
<td>1.68</td>
<td>1.82</td>
<td>1.55</td>
<td>1.49</td>
<td>1.51</td>
<td>1.66</td>
<td>n/a</td>
</tr>
</tbody>
</table>

n/a: not applicable, FoC: frequency of consumption

### 4.4 Structural model

The hypotheses were tested using structural path modeling. First, the direct effects were tested after which the moderation hypotheses were examined. Statistical significance of the relationships was evaluated using bootstrapping with 5000 subsamples (Hair et al. 2011). PLS relies on nonparametric bootstrapping which involves repeated random sampling with replacement from the original sample so that a bootstrap sample can be created. Thus, standard errors can be obtained for hypothesis testing. (Hair et al. 2011, 148.)

#### 4.4.1 Direct effects

Path coefficients ($\beta, [-1, 1]$) present the relationships between factors (Hair et al. 2011). Multiple motivations were found to have a significant effect on behavioral online brand engagement. The strongest predictors were community ($\beta = 0.286, p < 0.01$), entertainment ($\beta = 0.281, p < 0.01$), and information ($\beta = 0.243, p < 0.01$). Thus, H1, H2, and H3 are supported. Identity had no significant effect. Therefore, H4 isn’t supported. Remuneration had a small negative effect on behavioral online brand engagement ($\beta = -0.090, p < 0.01$) which means that H5 isn’t supported. Behavioral online brand engagement had a strong positive impact on brand purchase intention ($\beta = 0.512, p < 0.01$) thus supporting H16. In terms of control variables, only frequency of consumption had a significant
effect ($\beta = 0.085, p < 0.01$) on behavioral online brand engagement. The results are presented in Table 8.

### TABLE 8 Direct effects model

<table>
<thead>
<tr>
<th></th>
<th>$\beta$</th>
<th>$f^2$</th>
<th>$R^2$</th>
<th>$Q^2$</th>
<th>$q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Community $\rightarrow$ Behavioral online brand engagement</td>
<td>.286***</td>
<td>.056</td>
<td>.510</td>
<td>.379</td>
<td>.032</td>
</tr>
<tr>
<td>H2: Information $\rightarrow$ Behavioral online brand engagement</td>
<td>.243***</td>
<td>.044</td>
<td></td>
<td></td>
<td>.026</td>
</tr>
<tr>
<td>H3: Entertainment $\rightarrow$ Behavioral online brand engagement</td>
<td>.281***</td>
<td>.073</td>
<td></td>
<td></td>
<td>.043</td>
</tr>
<tr>
<td>H4: Identity $\rightarrow$ Behavioral online brand engagement</td>
<td>.015(ns)</td>
<td>.000</td>
<td></td>
<td></td>
<td>-.002</td>
</tr>
<tr>
<td>H5: Remuneration $\rightarrow$ Behavioral online brand engagement</td>
<td>-.090***</td>
<td>.010</td>
<td></td>
<td></td>
<td>.005</td>
</tr>
<tr>
<td>H16: Behavioral online brand engagement $\rightarrow$ Brand purchase intention</td>
<td>.512***</td>
<td>n/a</td>
<td>.262</td>
<td>.200</td>
<td>n/a</td>
</tr>
<tr>
<td>Age $\rightarrow$ Behavioral online brand engagement</td>
<td>.043(ns)</td>
<td>.003</td>
<td></td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>Frequency of consumption $\rightarrow$ Behavioral online brand engagement</td>
<td>.086***</td>
<td>.012</td>
<td></td>
<td></td>
<td>.005</td>
</tr>
</tbody>
</table>

n/a: not applicable, ns: not significant, ***: $p < 0.01$ (two-tailed test)

Coefficient of determination ($R^2$) is used to explain the amount of variance in dependent variable that is explained by all independent variables linked to it (Hair et al. 2014, 175). $R^2$ values for behavioral online brand engagement and brand purchase intention were 0.510 and 0.262 respectively. The effect size ($f^2$) is used to evaluate the effects of the independent construct on $R^2$ value of the dependent construct. The effect may be small (0.02), medium (0.15), or large (0.35). (Hair et al. 2014, 186.) Thus, entertainment (0.073), community (0.056), and information (0.044) had a small impact on the $R^2$ value of behavioral online brand engagement. $Q^2$ values larger than zero demonstrate that independent variables have predictive relevance for a particular dependent variable (Hair et al. 2011, 145). Behavioral online brand engagement and brand purchase intention had $Q^2$ values of 0.379 and 0.200 respectively. Its effect size ($q^2$) indicates the relative predictive relevance of the independent construct on the dependent construct (Hair et al. 2014, 203). Similarly to $f^2$, the impact may be small, medium, or large (Hair et al. 2014, 184). Thus, entertainment (0.043), community (0.032), and information (0.026) had a small effect.

Figure 6 presents the structural model with coefficients and $t$-values related to direct effects.
4.4.2 Moderating effects

As strongly suggested by Henseler & Fassott (2010, 721), moderating effects were examined through product term approach. This meant that direct effects of brand commitment and trust in online content on behavioral online brand engagement were also included in the research model at this stage of the study. However, it wasn’t considered an issue since the previous chapter already concerned the hypotheses related to the direct impacts. In addition, this was also theoretically applicable (Brodie et al. 2011; Brodie et al. 2013; van Doorn et al. 2010; Bowden 2009a/b). Product indicator approach was chosen as calculation method as suggested by Henseler & Chin (2010).

Based on the analysis, the moderation hypotheses (H6-H15) aren’t supported. However, both brand commitment and trust in online content had a significant positive effect on behavioral online brand engagement ($\beta = 0.155$, $p < 0.01$; $\beta = 0.248$, $p < 0.01$). Insertion of these two variables also lowered the coefficients of some other independent variables. Table 9 presents the results of the moderation analysis in a more detailed level.

![Figure 6 Structural model]
### TABLE 9 Moderating effects model

<table>
<thead>
<tr>
<th>Relationship</th>
<th>( \beta )</th>
<th>( f^2 )</th>
<th>( R^2 )</th>
<th>( Q^2 )</th>
<th>Brand commitment</th>
<th>Trust in online content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community → Behavioral online brand engagement</td>
<td>.233***</td>
<td>.039</td>
<td>.567</td>
<td>.410</td>
<td>-.029 (ns)</td>
<td>-.037 (ns)</td>
</tr>
<tr>
<td>Information → Behavioral online brand engagement</td>
<td>.096**</td>
<td>.007</td>
<td>.026 (ns)</td>
<td>-.039 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment → Behavioral online brand engagement</td>
<td>.140***</td>
<td>.016</td>
<td>.016 (ns)</td>
<td>-.011 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity → Behavioral online brand engagement</td>
<td>-.019</td>
<td>.000</td>
<td>.016 (ns)</td>
<td>.023 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remuneration → Behavioral online brand engagement</td>
<td>-.077**</td>
<td>.007</td>
<td>.076 (ns)</td>
<td>-.038 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand commitment → Behavioral online brand engagement</td>
<td>.155***</td>
<td>.019</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in online content → Behavioral online brand engagement</td>
<td>.248***</td>
<td>.043</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral online brand engagement → Brand purchase intention</td>
<td>.512***</td>
<td>n/a</td>
<td>.262</td>
<td>.200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age → Behavioral online brand engagement</td>
<td>.059**</td>
<td>.007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of consumption → Behavioral online brand engagement</td>
<td>.091***</td>
<td>.015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ns: not significant, ***: \( p < 0.01 \), **: \( p < 0.05 \) (two-tailed test)

Potential moderating effects were further examined through the traditional low-high group dichotomization since this approach doesn’t include the direct effects of moderator variables. Thus, median split was performed using unstandardized latent factor scores of brand commitment and trust in online content. The moderation analysis was conducted using partial least squares – multi group analysis (PLS-MGA) as suggested by Henseler, Ringle & Sinkovics (2009). In this method, the compared subsamples are exposed to separate bootstrap analyses. The outcomes of these bootstrap analyses provide a basis for hypotheses testing and thus determine whether there is a difference between two groups.

The results (Table 10) are mainly consistent with the earlier results. However, both brand commitment and trust in online content positively moderated the relationship between identity and behavioral online brand engagement \( (\Delta \beta = 0.184, p < 0.05; \Delta \beta = 0.232, p < 0.01) \). Yet, only the differences between the two groups were statistically significant since the direct effect of identity on behavioral online brand engagement failed to reach \( p \)-value of 0.05 in both cases. In addition, remuneration had a significant direct impact on
behavioral online brand engagement only in the case of high trust group. Based on the results of these two moderation analyses, hypotheses H6-H8, H10-13, and H15 don’t get any support in this study. H9 and H14 are partially supported.

TABLE 10 PLS-MGA results

<table>
<thead>
<tr>
<th>Brand commitment</th>
<th>Trust in online content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta_H$</td>
</tr>
<tr>
<td>Community → Behavioral online brand engagement</td>
<td>.234***</td>
</tr>
<tr>
<td>Information → Behavioral online brand engagement</td>
<td>.203***</td>
</tr>
<tr>
<td>Entertainment → Behavioral online brand engagement</td>
<td>.234***</td>
</tr>
<tr>
<td>Identity → Behavioral online brand engagement</td>
<td>.088</td>
</tr>
<tr>
<td>Remuneration → Behavioral online brand engagement</td>
<td>-.060</td>
</tr>
</tbody>
</table>

N_H=411, N_L=408

L: low group, H: high group, $\Delta \beta = \beta_H - \beta_L$, ns: not significant, ***: $p < 0.01$, **: $p < 0.05$ (two-tailed test)
5 DISCUSSION

This final chapter concerns the discussion of the empirical findings presented in the earlier chapter in relation to previous studies. Furthermore, research questions set at the beginning of the research are answered. Theoretical contributions are also discussed and managerial implications are proposed. Moreover, this study is evaluated, limitations are discussed, and suggestions for future research are given in this chapter.

5.1 Theoretical contributions

The aim of this research was to study behavioral online brand engagement in content consumption context. The focus was on the relationship between motivational drivers of engagement and behavioral online brand engagement. This relationship was further investigated through moderating effects of brand commitment and trust in online content. In addition, the impact of behavioral online brand engagement on brand purchase intention was investigated. Thus, the following primary research questions were applied in the beginning of the study:

- Which motivational drivers have a positive effect on behavioral online brand engagement in content consumption context?
- Do brand commitment and trust in online content strengthen the relationship between motivational drivers and behavioral online brand engagement in content consumption context?

In addition, one secondary research question was applied:

- Does behavioral online brand engagement have a positive effect on brand purchase intention in content consumption context?

The best predictors of behavioral online brand engagement were community, entertainment, and information. These results are similar to many previous studies (e.g. Jahn & Kunz 2012; Muntinga et al. 2011; Heinonen 2011; Shao 2009; Men & Tsai 2013). Yet, these three motivational drivers weren’t strong predictors separately. Probably the most notable result is the role of community since the relationship between social aspects and engagement is sometimes associated only with contribution or creation of content (e.g. Muntinga et al. 2011; Shao 2009) or the relationship is insignificant in terms of content consumption (e.g. Jahn & Kunz 2012). Identity had no significant effect on behavioral online brand engagement in content consumption context which
suggests that identity may be a relevant factor only in terms of contribution and creation of own content (Muntinga et al. 2011; Shao 2009).

One of the most unexpected results of this study is the significant negative impact of remuneration on behavioral online brand engagement. A similar situation occurred to Cvijikj & Michahelles (2013) regarding remuneration and Facebook likes, and to Gummerus et al. (2012) regarding social benefits and satisfaction. One potential reason for this is that tractor owners, indeed, dislike competitions and lotteries and consider them as interruption – like television advertising. Another potential reason is that taking part in lotteries or other activities that provide remuneration is cumbersome and time-consuming and tractor owners therefore choose to prioritize offline sources over the Internet. In addition, perceived remuneration experience was low on average which may have had an effect on the results.

Another unexpected result was the lack of empirical support to the moderation hypotheses in most of the cases. The contextual nature of engagement is acknowledged in the literature (e.g. Brodie et al. 2011) and it is proposed that many different moderators may have an effect on the relationship between engagement and its antecedents (van Doorn et al. 2010; Wirtz et al. 2013) – trust and commitment among them. This research found very little support to these conceptualizations. Only two moderation hypotheses received partial support: when the relationship between identity and behavioral online brand engagement was concerned, there was a statistically significant difference between the low and high group regarding both moderators. Thus, it seems that consumers mainly seek same benefits and experiences on the Internet no matter their level of brand commitment or trust in online content. It may be that brand commitment and trust in online content are mainly rather directly linked to perceived level of benefits and experiences. Furthermore, the first moderation analysis revealed that brand commitment and trust in online content had a direct impact on behavioral online brand engagement. It is consistent with prior qualitative and conceptual studies related to engagement (e.g. Brodie et al. 2011; Brodie et al. 2013; van Doorn et al. 2010; Bowden 2009a/b).

In addition, the relationship between behavioral online brand engagement and brand purchase intention was examined. This relationship was significant and behavioral online brand engagement was a moderate predictor of brand purchase intention. It is consistent with previous qualitative and quantitative studies (e.g. Brodie et al. 2013; de Valck et al. 2009; Hollebeek et al. 2014; Jalilvand & Samiei 2012; Wirtz et al. 2013). However, this study compared online engagement to offline engagement unlike previous engagement studies as suggested by Hollebeek et al. (2014) and requested by (Brodie et al. 2013). Based on the study results, customers’ online activities drive brand purchase intention significantly better than offline activities regarding content consumption. As this is an emerging research domain, the marketing literature doesn’t yet provide justifications for this. However, online content is more
accessible, and the Internet provides a wider variety of engagement platforms that may help loyalty building towards the brand more efficiently.

In addition, age and frequency of consumption were used as control variables in this study. Age didn’t have a significant impact on behavioral online brand engagement. This supports the results of Teo (2001) who found support that age has a significant negative impact on messaging and downloading but not on browsing and purchasing. Frequency of consumption had a weak impact on behavioral online brand engagement thus supporting the participation-engagement dichotomy that was adopted in this research. This relationship has been conceptualized (Vivek et al. 2012; Brodie et al. 2011) but not quantitatively tested or discussed in greater detail thus leaving the nature of participation almost unexplored in engagement context.

5.2 Managerial implications

Engagement has many positive outcomes in general such as satisfaction, trust, loyalty, and self-brand connection (Brodie et al. 2011; Brodie et al. 2013; Hollebeek et al. 2014). This study provides support to managers that consuming brand-related content online rather than using other sources leads to higher intentions to buy the brand. Therefore, companies should focus on finding the best ways to engage with their customers. The Internet is an excellent platform for engagement because it allows the interaction with a very large number of consumers (Yan 2011) with a small monetary investment (Hanna et al. 2011). Brand-related content consumption is also the first step to other activities in online context (Shao 2009) and should therefore be considered first.

Based on the results of this research, companies should shift away from online marketing actions that offer economic incentives. Instead, they should create online content that offers social benefits, entertains consumers, or provides useful information if they want that their customers use the Internet as their primary content consumption platform. Creating these types of online content as a part of companies’ marketing activities provides a good basis for holistic marketing communication. However, marketing managers should always take context into account since providing specific type of content may hurt brand image or be otherwise inappropriate. Thus, manager’s own evaluation of the situation is strongly encouraged.

Companies can provide community, entertainment, and information related experiences and benefits in many ways. For example, Men & Tsai (2013, 21) suggested the use of riddles, jokes, daily horoscopes, music video of celebrity endorsers, and human interest stories to increase the entertainment value of the content. Similarly, Gummerus et al. (2012, 870) suggested that comic strips, videos, or photos should be used to make customers feel good. Heinonen (2011, 363) encouraged companies to create games which should be easy to use and free of charge so that different consumers can enjoy them. These types of experiences can also offer social benefits (e.g. playing with friends and
sharing your results with other people) if proper implementations are made (Heinonen 2011, 363). Moreover, Gummerus et al. (2012, 870) suggested offering social benefits by providing opportunities for interactions between consumers. Furthermore, Heinonen (2011, 362) suggested that companies should offer information that could be accessed by anyone in order to attract consumers and direct them to contribution. In addition, Jahn & Kunz (2012, 354) proposed providing exclusive content.

Based on the results of this research, there is very little reason for managers to consider brand commitment and trust in online content as contextual factors when creating online content - that is related to community, information, or entertainment experience - and choosing target audience or deciding proper engagement platforms. However, it should still be noted that trust and commitment may be consequences of engagement in general (Brodie et al. 2013; Vivek et al. 2012) and due to the process nature of engagement (Brodie et al. 2011; Brodie et al. 2013) they may be important reason influencing content consumption on the Internet. Thus, managers should also create content that boosts brand commitment or is perceived trustworthy.

5.3 Evaluation of the research

Yin (2014, 26) stated that quality of research design is commonly evaluated in social sciences through 1) construct validity, 2) internal validity, 3) external validity, and 4) reliability. In general, reliability refers to repeatability of the study with the same results, whereas validity concerns proper measurement of the concept (Bryman & Bell 2007, 163, 165).

Construct validity examines the correct operationalization of the concepts (Yin 2014, 46). In this research, the hypotheses were based on previous theories in which similar hypotheses had received support. Moreover, all measures were adopted from previous peer-reviewed studies. However, some items needed to be dropped because they didn’t work in this context. Metsämuuronen (2005, 113) stated that theoretically similar items should correlate more than theoretically different items. Thus, the convergent validity was examined through the average variance extracted (AVE), and the discriminant validity was examined through Fornell-Larcker criterion and cross loadings (Hair et al. 2011, 145). All these traditionally used tests were passed thus confirming the construct validity of this study. However, it should still be noted that one correlation exceeded the acceptable threshold limit in re-emerging heterotrait-monotrait test (Henseler, Ringle & Saerstedt 2015).

As in survey research in general, common method bias is present to some extent (Podsakoff, MacKenzie, Lee & Podsakoff 2003). Several measures were taken to mitigate its effect. First, the respondents were allowed to give their response anonymously so that they could answer the questions honestly. Items were also structured as simply and unambiguously as possible in this context. Moreover, unfamiliar concepts were given clear explanations and practical
examples. Four persons - one of which possesses extensive knowledge of the target group – evaluated the survey and modifications were made based on the feedback. Items were also asked randomly in the questionnaire. In addition, multiple platforms were used in the data collection process. The effect of common method bias was evaluated through Harman’s (1967) one factor test. The one extracted factor explained 42.9 % of the total variance. In addition, following Podsakoff et al. (2003), a PLS model with a common method factor with indicators that included all the principal constructs was run, and each indicator’s variance was substantively explained by the principal construct. This analysis shows that average variance substantively explained the variance of the indicators (0.730) while the average method-based variance was 0.012. Given the magnitude of method variance, common method bias is unlikely to be a serious concern in this study.

Internal validity concerns causality (Yin 2014, 46). In other words, does factor x cause factor y (Metsämuuronen 2005, 1128)? If the relationship is incorrectly concluded as causal, the research design has failed in terms of internal validity (Yin 2014, 47). This research is not an experimental study which is ideal for testing causal connections (Metsämuuronen 2005, 1128). However, previous literature strongly suggests causal relationships between constructs that were studied in this study and therefore causal assumptions are justified.

External validity refers to the generalization of the results (Yin 2014, 46). First of all, it must be noted that the sample wasn’t randomly picked since it isn’t practical in this context. In total, 819 accepted responses were received, which can be considered fairly high. However, the effective response rate of the study was relatively low (15.1 %). There are many potential reasons for this. It is possible that the survey was considered too long or unimportant by the participant or the prize wasn’t appealing enough after all. In addition, farmers are busy in this time of year so it is possible that they accessed the survey out of curiosity with no intention to complete it. Comparing early and late respondents wasn’t a fruitful approach in this study. However, the data was well-distributed both in terms of demographic and background information, and actual responses thus supporting external validity of this study. The vast majority of respondents were male but it seems that tractor owners are predominantly men in general (see Takeshima, Edeh, Lawal & Isiaka 2014) and therefore the gender distribution isn’t considered an issue in this study. Thus, one can interpret these results with small caution in context of Finnish, German, French, and Polish tractor owners which made up more than 80 % of the respondents.

Careful documentation of research procedures is a basis for replication (Yin 2014, 49). Thus, careful documentation was applied in this research to ensure transparency of the research process. The internal consistency reliability of the measurement indicators was evaluated through Cronbach’s alphas and composite reliabilities (Metsämuuronen 2005, 67). Based on the results of the
evaluation, there should be no reason to doubt the internal consistency of these measurement scales.

5.4 Limitations of the research

This research has several limitations. First of all, this study used self-reported measures. Thus, there may be a difference between perceived behavioral online brand engagement and actual behavioral online brand engagement. In addition, items that were used to measure behavioral online brand engagement and were adopted from Hollebeek et al. (2014) rely on words “a lot” and “usually” which Hirsjärvi et al. (2005, 191) recommended not to use since they may mean different things for different people. However, this same limitation applies to many different types of items to some extent in general. Furthermore, this measurement scale was considered the most valid and appropriate for this context. Moreover, it is possible that when respondents were asked about brand purchase intention, the intention was created by the question if no such cognition existed prior to asking (Feldman & Lynch 1988). However, considering the product category of this study, the effects of this phenomenon are probably more limited.

As the survey was administrated in five different languages, the questionnaires aren’t perfectly identical due to linguistic differences. However, this is not considered a severe issue since the items were carefully translated, and a translation agency was used in some cases. However, there is no certainty if the respondents have answered the questions honestly and seriously. Moreover, common method bias can’t be completely ruled out despite the efforts made to reduce it. In addition, evaluating possible non-response bias was difficult if well-distributed frequencies weren’t taken into account. There was also a minor issue in construct validity regarding the HTMT test.

The scope of this study was limited to content consumption. However, it must be noted that different activities (consumption, contribution, and creation) can occur concurrently. In addition, although commitment has three dimensions, the focus was on the emotional aspect. Thus, if other dimensions of brand commitment are examined, the results are probably different. However, the literature (e.g. Zheng et al. 2015; Saks 2006; Kim et al. 2008) seems to apply the emotional perspective of commitment if the objective is to study commitment in general.

The study was conducted in tractor context. Thus, there is no guarantee that the results are similar – for example - in other industries. The vast majority of respondents were also male which should be kept in mind if the results are applied to other contexts. In addition, some groups (e.g. Finnish people and Valtra owners) are over-presented in this sample which should be kept in mind.
5.5 Future research

Customer engagement and especially customer engagement in online context is a current and important topic that needs further research (Schultz & Peltier 2013; Hollebeek et al. 2014; Dwivedi 2015; Brodie et al. 2013; MSI 2014-2016 Research Priorities). Thus, many possible future research directions emerge.

Conduction a global and longitudinal study is a potential future research direction which could specifically support the results of this study. Furthermore, the results of this study should be tested in different contexts so that the generalization of these results beyond tractor customers could be discussed. In addition, the marketing literature that studies moderating effects related to behavioral online brand engagement is very limited. Since this study found no support to the moderating role of commitment and trust in most of the cases, other potential moderators could be investigated. It should also be noted that this study specifically concerns online content consumption. Future research could focus on more active behaviors such as contributing and creating own content. There are many studies that discuss these activities but, similarly to online content consumption, moderators are not studied in quantitative terms. In addition, this study concerned online content in general. Future studies could focus on specific online platforms and also study company-provided and user-generated content separately.

Moreover, other dimensions of online brand engagement should be examined as eagerly as the behavioral perspective. In particular, the cognitive perspective could be a fruitful research domain since the marketing literature related to this dimension is limited both in terms of quantity and quality. Understanding online brand engagement requires careful examination of these dimensions separately but also investigating the phenomenon as a whole. The extensive study of Hollebeek et al. (2014) provides a good basis for this. In addition, comparison of online and offline engagement in qualitative terms is a reasonable future research topic. Finally, Dwivedi (2015) applied three-dimensional measurement scale for consumer brand engagement that was adopted from organizational context. It would be interesting to study how this scale and the scale developed by Hollebeek et al. (2014) compare in online context.
REFERENCES


APPENDIX 1: LIST OF SURVEY ITEMS IN ENGLISH

**Community** (Calder et al. 2009)
[COM1] I am as interested in content provided by other tractor owners as I am in the online content generated by the company of my primary tractor brand
[COM2] I consume online content that is related to my primary tractor brand because of what I get from other tractor owners
[COM3] I’d like to meet other people who regularly consume online content concerning my primary tractor brand ***
[COM4] I have gotten interested in things I otherwise wouldn’t have because of online content concerning my primary tractor brand
[COM5] Overall, other tractor owners on the Internet are pretty knowledgeable about my primary tractor brand so you can learn from them

**Information** (Calder et al. 2009)
[INF1] Consuming online content concerning my primary tractor brand helps me make good purchase decisions
[INF2] I give advice and tips concerning my primary tractor brand to people I know based on things I’ve read online ***
[INF3] Consuming online content related to my primary tractor brand helps me better use my primary tractor brand
[INF4] Online content related to my primary tractor brand provides information that helps me make important decisions concerning the brand

**Entertainment** (Park et al. 2009)
[ENT1] Consuming online content related to my primary tractor brand is entertaining
[ENT2] Consuming online content related to my primary tractor brand is funny
[ENT3] Consuming online content related to my primary tractor brand is exciting

**Identity** (Mersey et al. 2012)
[IDE1] Consuming online content related to my primary tractor brand makes me more interesting to other people
[IDE2] Consuming content concerning my primary tractor brand on the Internet is a little like belonging to a group
[IDE3] I like other people to know that I consume content related to my primary tractor brand on the Internet

**Remuneration** (Hennig-Thurau et al. 2004)
[REM1] When I consume online content related to my primary tractor brand, I receive a reward (e.g. free samples, discounts, prizes, special treatment, time saving)
[REM2] I receive incentives (e.g. free samples, discounts, prizes, special treatment, time saving), when I consume online content related to my primary tractor brand

**Brand commitment** (Kim et al. 2008)
[BCO1] I have emotional attachment to my primary tractor brand
[BCO2] I want my primary tractor brand to be continuously successful
[BCO3] I think that using my primary tractor brand is important
[BCO4] I am a loyal customer of my primary tractor brand
Trust in online content (Chaudhuri & Holbrook 2001)
[TRU1] I trust online content concerning my primary tractor brand
[TRU2] I rely on content concerning my primary tractor brand on the Internet
[TRU3] Content concerning my primary tractor brand is reliable on the Internet***
[TRU4] Consuming content concerning my primary tractor brand is safe on the Internet

Behavioral online brand engagement (Hollebeek et al. 2014)
[ENG1] I spend a lot of time consuming content related to my primary tractor brand on the Internet compared to other sources
[ENG2] Whenever I want to consume content related to my primary tractor brand, I usually go to the Internet
[ENG3] The Internet is one of the sources I usually use when I want to consume content related to my primary tractor brand

Brand purchase intention (Salisbury et al. 2001)
[PUI1] I plan to buy my primary tractor brand in the future
[PUI2] Buying my primary tractor brand is something I am going to do
[PUI3] I could see myself buying my primary tractor brand

Age
Under 18
18-25
26-35
36-45
46-55
Over 55

Frequency of consumption (Gummerus et al. 2012)
How often do you consume online content related to your primary tractor brand? (Reverse coded)
Daily
4-6 times per week
1-3 times per week
2-3 times per month
Once a month or more seldom

Note: All items except age and frequency of consumption were measured using 7-point Likert scale (strongly disagree – strongly agree). *** = item removed
### APPENDIX 2: RESULTS OF THE EXPLORATORY FACTOR ANALYSIS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>FACTOR 3</th>
<th>FACTOR 4</th>
<th>COMMUNALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>INF4</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
<td>0.518</td>
</tr>
<tr>
<td>INF3</td>
<td>0.618</td>
<td>0.35</td>
<td></td>
<td></td>
<td>0.57</td>
</tr>
<tr>
<td>TRU4</td>
<td>0.597</td>
<td>0.361</td>
<td></td>
<td></td>
<td>0.571</td>
</tr>
<tr>
<td>TRU3</td>
<td>0.578</td>
<td>0.309</td>
<td></td>
<td></td>
<td>0.542</td>
</tr>
<tr>
<td>TRU1</td>
<td>0.564</td>
<td>0.429</td>
<td></td>
<td></td>
<td>0.644</td>
</tr>
<tr>
<td>COM5</td>
<td>0.561</td>
<td>0.303</td>
<td>0.321</td>
<td>0.585</td>
<td>0.453</td>
</tr>
<tr>
<td>INF1</td>
<td>0.541</td>
<td>0.373</td>
<td></td>
<td></td>
<td>0.56</td>
</tr>
<tr>
<td>COM2</td>
<td>0.504</td>
<td>0.404</td>
<td></td>
<td></td>
<td>0.484</td>
</tr>
<tr>
<td>TRU2</td>
<td>0.487</td>
<td>0.394</td>
<td>0.301</td>
<td></td>
<td>0.585</td>
</tr>
<tr>
<td>COM1</td>
<td>0.45</td>
<td></td>
<td>0.338</td>
<td></td>
<td>0.364</td>
</tr>
<tr>
<td>COM4</td>
<td>0.435</td>
<td>0.399</td>
<td>0.356</td>
<td></td>
<td>0.546</td>
</tr>
<tr>
<td>PUI3</td>
<td></td>
<td></td>
<td></td>
<td>0.788</td>
<td>0.698</td>
</tr>
<tr>
<td>PUI2</td>
<td></td>
<td>0.742</td>
<td></td>
<td></td>
<td>0.672</td>
</tr>
<tr>
<td>PUI1</td>
<td></td>
<td></td>
<td>0.715</td>
<td></td>
<td>0.57</td>
</tr>
<tr>
<td>BCO4</td>
<td></td>
<td></td>
<td>0.706</td>
<td></td>
<td>0.612</td>
</tr>
<tr>
<td>BCO3</td>
<td></td>
<td></td>
<td>0.605</td>
<td></td>
<td>0.564</td>
</tr>
<tr>
<td>BCO2</td>
<td>0.33</td>
<td>0.572</td>
<td></td>
<td></td>
<td>0.522</td>
</tr>
<tr>
<td>BCO1</td>
<td>0.454</td>
<td>0.391</td>
<td>0.409</td>
<td>0.536</td>
<td>0.639</td>
</tr>
<tr>
<td>RE2</td>
<td></td>
<td>0.769</td>
<td></td>
<td></td>
<td>0.639</td>
</tr>
<tr>
<td>RE1</td>
<td></td>
<td></td>
<td>0.735</td>
<td></td>
<td>0.595</td>
</tr>
<tr>
<td>IDE1</td>
<td></td>
<td></td>
<td>0.699</td>
<td></td>
<td>0.631</td>
</tr>
<tr>
<td>IDE3</td>
<td>0.304</td>
<td></td>
<td>0.611</td>
<td></td>
<td>0.564</td>
</tr>
<tr>
<td>COM3***</td>
<td></td>
<td></td>
<td>0.603</td>
<td></td>
<td>0.531</td>
</tr>
<tr>
<td>IDE2</td>
<td>0.423</td>
<td>0.52</td>
<td></td>
<td></td>
<td>0.548</td>
</tr>
<tr>
<td>ENG2</td>
<td>0.439</td>
<td></td>
<td>0.615</td>
<td></td>
<td>0.632</td>
</tr>
<tr>
<td>ENG3</td>
<td>0.495</td>
<td></td>
<td>0.564</td>
<td></td>
<td>0.625</td>
</tr>
<tr>
<td>ENT1</td>
<td>0.302</td>
<td>0.36</td>
<td>0.548</td>
<td></td>
<td>0.557</td>
</tr>
<tr>
<td>ENG1</td>
<td></td>
<td></td>
<td>0.307</td>
<td>0.508</td>
<td>0.511</td>
</tr>
<tr>
<td>ENT3</td>
<td>0.335</td>
<td>0.417</td>
<td>0.487</td>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td>INF2***</td>
<td>0.342</td>
<td>0.399</td>
<td>0.451</td>
<td></td>
<td>0.517</td>
</tr>
<tr>
<td>ENT2</td>
<td>0.367</td>
<td>0.436</td>
<td></td>
<td></td>
<td>0.46</td>
</tr>
</tbody>
</table>

*** = item removed based on the results of the exploratory factory analysis. All loadings .300 or stronger presented. Principal axis factoring and varimax rotation were applied.