University of Massachusetts Amherst

SOCIOTECHNICAL CONSUMPTION: A DIGITAL STORY OF EMPOWERMENT AND SOCIAL CONSUMER EXPERIENCES

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SOCIOTECHNICAL CONSUMPTION:

A DIGITAL STORY OF EMPOWERMENT AND SOCIAL CONSUMER EXPERIENCES

A Dissertation Presented

by

MUJDE YUKSEL

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

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Isenberg School of Management

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DEDICATION

To those who tell stories.

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My doctoral education at UMass has been an experience where I have been taught and guided by respected scholars and administrators, where I have developed cherished companionships and lifelong friends, and where I have started to evolve into the scholar I want to be. It has been challenging—at times even a struggle—but more often gratifying and rewarding; indeed, I am grateful for every second I have lived through it. In particular, I am grateful for the people that I have known and worked with throughout this experience, but I would like to acknowledge specifically those who have had a tremendous impact on my dissertation and without whom this dissertation could not have been completed.

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ABSTRACT

SOCIOTECHNICAL CONSUMPTION:

A DIGITAL STORY OF EMPOWERMENT AND SOCIAL CONSUMER EXPERIENCES

MAY 2014

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Digital technologies have become a ubiquitous element in contemporary consumption practices. Consumers shop online, take online classes, play fantasy sports, date online, have virtual personal trainers in their phones and even live virtual lives. How do such digital experiences integrate into and reflect upon consumption experiences in the material world? In this dissertation, I propose a theory of sociotechnical consumption that explores this relationship through the digital empowerment (technical) and social interaction (social) elements embedded in consumer products and services in digital spaces. Accordingly, I extend the concept of sociotechnical to the study of consumer behavior, advocating the perspective that studying the technological aspects of entities is incomplete without considering their relationships with the associated social aspects.

I develop and investigate this theory through a multi-method approach, which is elaborated via three essays. Essay one applies the grounded theory methodology to explore consuming experiences in digital spaces in the context of online fantasy football. Essay two provides a conceptual inquiry of consumer empowerment from a

sociotechnical perspective illustrating an integrative framework that bridges consumer empowerment literature with the social impact theory (Latané 1981) to discuss research gaps and theory development opportunities. In doing so, it also addresses the disarray surrounding the concept with a broader definition and an exhaustive typology. Finally, essay three quantitatively examines the complementary role of digital consumption on consumers' everyday lives in relation to the sociotechnical elements of complementary products and services.

Together, these essays highlight sociotechnical consumption as a theoretical tool to explore the interaction and the optimization of the social and technical elements of consumer offerings. More specifically, it provides a sociotechnical perspective for marketing and consumer research to simultaneously study the digital empowerment of consumers along with the many social interaction opportunities available during digital consumption. In doing so, it illuminates valuable insights for managers who want to optimize the social and technical elements of their digital market offerings in a way that would contribute to more positive consumer responses.

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CHAPTER 1

INTRODUCTION

"The stories we tell about technology reflect and can also affect our understanding of the place of technology in our lives and our society. Such stories harbor theories."

Wiebe E. Bijker, *Of Bicycles, Bakelites, and Bulbs*, 1995

Sociotechnical consumption theory is a story that harbors the ways digital technologies empower and socialize consumers. Specifically, it focuses on the reciprocal interrelationship between technological and social elements of consumer products and services in digital spaces. From posting photos on Instagram and shopping on eBay to watching movies on Netflix and having a Nike+ Fuelband, there is a plethora of consumer products and services that incorporate social and technological elements in their market offerings. These digital products and services provide empowerment and social interaction opportunities for consumers in ways that the material world may not readily offer. Yet, prior marketing and consumer research has considered digital empowerment of consumers from a narrow perspective, mostly focusing on the enhanced communication among consumers in peer-to-peer communities.

In this dissertation, I introduce the concept of sociotechnical consumption to investigate consumer empowerment through digital technologies with a special focus on social interactions in a three-essay format. Essay one grounds this theory in a qualitative examination of consuming experiences in digital spaces in the context of online fantasy football. Essay two provides a conceptual inquiry of consumer empowerment from a sociotechnical perspective illustrating an integrative framework that bridges consumer

empowerment literature with social impact theory to discuss research gaps and theory development opportunities. In doing so, it also addresses the disarray surrounding the concept with a broader definition and an exhaustive typology. Finally, essay three quantitatively examines the complementary role of digital consumption on non-virtual consumption in relation to sociotechnical elements of complementary products and services. Note that "non-virtual consumption" is the phrase I use throughout my dissertation to refer to traditional real-world activities that materialize in the actual reality such as going to a concert, hiking, cooking, watching a sports event, etc.

1.1 A Sociotechnical Focus on Digital Consumption

A sociotechnical perspective requires the collective investigation of the social and technical components that make up an entity in a way that acknowledges their interrelationships (Kling and Courtright 2003). In the field of management, the concept was established to study conditions of work to find the balance between efficiency and humanity (Ropohl 1999). Accordingly, focusing solely on the efficiency that results from the use of technology is widely accepted as not sufficient to address the theoretical and practical problems associated with conditions of work. The field of sociology applies a broader perspective to the concept, emphasizing the simultaneous shaping of technology and society through each other (Bijker and Law 1995). Nevertheless, technology provides individuals "with tools and techniques by which [they] use the world to extend [their] powers" (Johnstone 2007), and in any given entity this empowerment should be investigated in reference to its relationship with the social. In other words, a sociotechnical perspective requires the study of technological empowerment with a focus on how it affects and is affected by social interactions.

In the last decade, marketing and consumer research on technology consumption has predominantly been involved with digital technologies and how they have accompanied a more consumer-dominated framework, shifting the dynamics of the markets with technology-empowered consumers (Day 2011). Consequently, various studies refer to the concept of consumer empowerment through digital technologies (e.g., Berthon, Holbrook, and Hulbert 2000; Day 2011; Deighton and Kornfeld 2009; Denegri-Knott, Zwick, and Schroeder 2006; Ramani and Kumar 2008; Wathieu et al. 2002). Yet, little consensus exists around the definition of the concept. For instance, Pires, Stanton, and Rita (2006) specify a power shift through the advancement of information exchange opportunities among consumers, whereas Fuchs, Prandelli, and Schreier (2010) define empowerment as "a strategy firms use to give customers a sense of control over its product selection process" (p. 65). From another perspective, it is acknowledged as the freedom to control content, specifically in blogs, social networking, wikis, podcasts, and virtual games (Bonsu 2013).

Regardless of the perspective taken on empowerment, a sociotecnical focus on digital consumption advocates the study of such technology-related empowerment concepts in relation to their integration and optimization with the social interactions available to the consumers during consumption in digital spaces. Research, that has brought these two components together in relation to digital consumption (e.g., *social learning and empowerment in online peer-to-peer communities*; Jayanti and Singh 2010), has exclusively focused on consumer empowerment as an information-related consequence of enhanced social interaction among consumers through the use of digital technologies. However, digital consumption is not limited to exchanging information in

peer-to-peer platforms. This dissertation attempts to broaden this limited focus on the integration of empowerment and social interactions in the domain of digital consumption.

1.2 Contributions

This dissertation makes several contributions to marketing and consumer research. First, essay one brings attention to consuming experiences in digital spaces with an interpretative analysis of online fantasy football participation. This attention on digital virtual experiences contributes to the recent discussions on consumer attachment with digital consumer offerings (see Belk 2013; Lehdonvirta 2010) by broadening them to include digital experiences in addition to digital goods (i.e., attachment with "doing things" in addition to "having things" in digital platforms). More fundamentally, in relation to digital consumption, this represents a shift from online information search and shopping behavior to the consumption of goods and experiences in digital spaces. This focus shift broadens the conceptualization of both online consumer communities and consumer empowerment to account for digital spaces where consumers share not only the interest in but also the experience of a consumption object and are empowered to have access to such experiences that are not readily available through material products and services. Additionally this essay answers a call by Denegri-Knott and Molesworth (2010) and Llamas and Belk (2013) to systematically investigate the ways digital consumption is integrated into and reflects upon non-virtual consumption experiences. In doing so, it reveals the importance of a sociotechnical focus on consumption, and lays out a classification of consumer experiences in relation to their digital empowerment and social interaction levels to introduce a theory of sociotechnical consumption.

Essay two addresses the fragmented and incomplete literature on consumer empowerment that has accompanied the wide embrace of digital technologies by consumers in their everyday lives. While much work has been conducted on consumer empowerment resulting from enhanced communication among consumers (e.g., *eWOM*, Kozinets et al. 2010; *online consumer reviews*, Zhu and Zhang 2010), many other forms of digital empowerment remain understudied or unexplored. In addition, there is a need to investigate the concept from a sociotechnical perspective given the many facets of social interaction opportunities embedded in the digital products and services that empower consumers. Thus, this essay aims to provide not only a conceptual organization but also an integrative account of digital empowerment bridging it with research that studies social influence on consumption.

Essay three begins to fill an important gap in the digital consumption literature by empirically testing the individual and joint effects of digital empowerment and social interaction on the consumption of both digital and non-virtual activities. For these empirical tests, this essay explores digital activities that are complementary to non-virtual activities, which, taken together, form "consumption episodes" referring to groups of consumer activities associated with the same event and the same period of time (Dhar and Simonson 1999). Thus, this essay also addresses the need for research on the integration of digital consumption with more traditional real-world activities of consumers by demonstrating its complementary role on such activities.

Finally, the theorizing of digital consumption from a sociotechnical perspective in a multi-method three-essay format has implications for marketers seeking to optimize the technological and social components of their market offerings. From another point of

view, a sociotechnical consumption perspective may provide valuable insights into the optimization of empowering and social elements in brand campaigns if not in the branded products or services themselves.

1.3 Organization

This dissertation follows a three-essay format and the remainder is organized in four additional chapters. Essay one, "*A Sociotechnical Perspective on Consuming Experiences in Digital Spaces*," is presented in Chapter 2. In this essay, a qualitative exploration illustrates the social sharing of an empowering digital experience and how consumers follow different (or at least deviated) mechanisms toward adoption and attachment to such experiences compared to their non-virtual counterparts. Following this illustration, this essay introduces a theory of sociotechnical consumption. Essay two, "*A Sociotechnical Perspective on Consumer Empowerment*," is presented in Chapter 3. This conceptual essay provides a revised definition, an exhaustive typology, and an integrative framework for the concept of digital empowerment with a special focus on its dynamics with social interactions. Essay three, "*A Sociotechnical Perspective on Complementary Consumption*," is presented in Chapter 4. This empirical essay is comprised of three studies that examine the individual and joint effects of digital empowerment and social interaction on both complementary digital activities and the actual non-virtual activities they complement in consumption episodes. Finally, Chapter 5 closes this dissertation by illuminating theoretical and managerial implications, addressing limitations, and offering directions for future research.

CHAPTER 2

A SOCIOTECHNICAL PERSPECTIVE ON CONSUMING EXPERIENCES IN DIGITAL SPACES

2.1 Introduction

Every day people from all over the world engage in many forms of digital experiences in shared virtual realms: Svetlana plays volleyball on a virtual beach with her geographically distant cousin on a winter day via Kinect, Miguel digitally winks at people to express his interest in them on OkCupid, Yoon and Uljas contribute to the collaborative creation of the digital representation of Westeros from Game of Thrones in the virtual Minecraft, Ahmed gets some real insight into being a Formula 1 driver in the Lets Race simulator center with real spectators watching the digital race from the grandstand, and John updates his team roster for his fantasy football league. Such experiential activities constitute a substantial part of consumption behavior in digital spaces, where consumers can stimulate their desires, actualize daydreams and fantasies, and be empowered with experimentations in a way beyond what material possessions and non-virtual experiences can offer (Denegri-Knott and Molesworth 2010). Surprisingly little scholarship on digital virtual experiences exists in consumer research, despite their everyday application.

From a broader perspective, research on consumer behavior in digital spaces has recently been growing on a large scale covering a wide range of topics varying from personal display (e.g., Labrecque, Markos, and Milne 2011; Schau and Gilly 2003) and community dynamics (e.g., Algesheimer et al. 2010; Kozinets et al. 2010) to information

gathering (e.g., Klein and Ford 2003; Zhu and Zhang 2010) and purchase behavior (e.g., Childers et al. 2002; Spann and Tellis 2006). Delving into the consumers' lived experiences of a specific digital entertainment practice—online fantasy football, the essay aims to contribute to this stream of research by including an exploration on consuming experiences in digital spaces. In other words, it extends the literature on digital consumption to account for "doing virtual things" in digital spaces. Since "doing things" incorporate a greater social value than "having things" (Raghunathan and Corfman 2006; Van Boven and Gilovich 2003), consuming digital experiences is explored from a perspective based on the concept of sociotechnical, which focuses on the integration between social and technological components of structures.

The purpose of this essay is to investigate digital virtual experiences in relation to consumers' non-virtual experiences. In doing so, I highlight the social sharing of empowering virtual experiences, and illustrate the ways such experiences (e.g., online fantasy football) reflect upon and integrate into non-virtual experiences (e.g., the National Football League [NFL] consumption). More specifically, I investigate the essence of the fantasy football experience, the deviation of this experience from the non-virtual NFL consumption, and how it alters the consumer experience with the NFL games and with each other. Based on the review of the literature and interviews of 26 fantasy football participants, my findings result in a theory of sociotechnical consumption, which is conceptualized through digital empowerment and social interactions available in consumption experiences. Accordingly, this theory explores the relationship between the social and the technological components of consumer offerings and their optimization in different consumption contexts.

The contributions of this essay to consumer research are manifold. First, it extends digital consumption literature by shifting the focus from sharing information and possessions to sharing experiences (i.e., doing things together) in digital spaces. More specifically, it broadens the scope of online communities of consumption to include those that share not only the interest in but also the experience of the object of consumption, and expands the range of consumer empowerment to include digital spaces that empower consumers to participate in experiences that the real world cannot readily offer. Furthermore, it provides insights into the ways digital experiences deviate from and reflect upon their respective non-virtual experiences, unpacking the fundamental relevance of sociotechnical (digitally empowering and socially interactive) aspects of digital experiences. From another perspective, it systematically demonstrates the ways to get involved with and get attached to digital experiences. Finally, through the theoretical lens of sociotechnical consumption, it identifies and explains a new classification for consumption experiences.

In the following pages, I review the relevant literatures, locating my interpretive exploration of fantasy football participation at the intersection of three main fields of inquiry: (1) digital consumption, (2) digital experiences, and (3) the concept of sociotechnical. Following these conceptual reviews, I explain the methodological overview of the essay and report my empirical findings. Finally, I use these interpretative findings as a basis for the essay's introduced theory of sociotechnical consumption and discuss its meaning for consumer research.

2.2 Conceptual Background

2.2.1 Digital Consumption

Digital technologies constitute a ubiquitous part of daily consumption activities (Kozinets 2013; Llamas and Belk 2013), transforming the way consumers communicate, manage their homes, shop, socialize, entertain, and educate themselves (Venkatesh and Dunkle 2013). In this digital era, an essential point is that consumers are no longer restricted to immobile digital devices such as desktop computers to access digital platforms (Boellstorff 2013). According to recent Pew Internet & American Life Project reports, 56% and 34% of all American adults over 18 are now smartphone and tablet adopters, respectively, while 47% of teens own smartphones (Madden et al. 2013; Smith 2013; Zickuhr 2013). Given this wide embrace of digital technologies, consumers are continuously logged on, being empowered and connected in a multitude of consumption activities.

Research on digital consumption has generated a broad range of theoretical aspects on representing the self (e.g., Labrecque et al. 2011; Schau and Gilly 2003), interacting (e.g., McQuarrie, Miller, and Phillips 2013; Wilcox and Stephen 2013), sharing (e.g., Belk 2013; Giesler 2006), seeking information (e.g., Klein and Ford 2003; Mathwick and Rigdon 2004), and shopping (e.g., Childers et al. 2002; Spann and Tellis 2006) in digital spaces. However, the use of digital technologies is expanding and evolving, and in this rapid expansion and evolution there is an ever more need for research on digital consumption. Llamas and Belk (2013) point out that "the key issue is not about how technology is going to evolve in the future but how we, consumers, are going to evolve through incorporating these technologies as integral parts of our everyday

lives" (p. 10). It is here that much is to be gained from an exploration of the dynamics between digital and non-virtual experiences. For instance, Fox and Bailenson (2009) report that individuals who viewed an avatar of themselves exercising in a virtual online environment were more likely to voluntarily exercise in the real world the next day. Molesworth and Denegri-Knott (2013) also emphasize that digital virtual spaces make liminoid experiences available where the virtual and the material are always interwoven such that a digital experience is only meaningful through its reference to the non-virtual experiences in real-life.

The distinction between the virtual and the real is becoming increasingly blurred with digital spaces emerging as a fundamental dimension of reality (Castells 2010; Llamas and Belk 2013; Shields 2003). Recently, researchers have been interested in the ways virtual and material possessions reflect upon each other in terms of consumption motives, consumer satisfaction, and attachment (e.g., Belk 2013; Lehdonvirta 2010). However, there is an established distinction between the consumption of possessions and experiences (Carter and Gilovich 2012; Nicolao, Irwin, and Goodman 2009; Van Boven and Gilovich 2003). Thus, there is a need to expand the research focus to include "doing digital things" in addition to "having digital things."

2.2.2 Digital Experiences

Prior research has distinguished between the consumption of experiences and possessions in a theoretically meaningful and intuitively profound way (Carter and Gilovich 2012; Nicolao et al. 2009; Van Boven and Gilovich 2003). Accordingly, the consumption of material possessions is associated with tangible goods that can be carried around and kept in possession, whereas the consumption of experiences focuses on an

event or series of events that is bound by time, which the consumers live through. Experimental research on this distinction has illustrated that the purchase of experiences makes people happier than the purchase of material goods. Van Boven and Gilovich (2003) attribute this significance of experiences to their openness to positive reinterpretations, being more central to one's identity, and their considerable social value. However, traditionally, experiences have attracted far less attention among consumer researchers than have consumer choices or buying decisions (Holbrook et al. 1984).

This pattern persists when it comes to consumer research in digital spaces. Although both consumer possessions and consumer experiences are the subject of digital consumption, consumer behavior research has recently focused more on the dematerialized or nonmaterial possessions such as music, photos, and virtual goods (Bardhi, Eckhardt, and Arnould 2012; Belk 2013; Lehdonvirta 2010; Martin 2008). This stream of research discusses the comparisons between digital and material possessions in terms of consumer satisfaction and attachment. Lehdonvirta (2010) states that consumers' desires for consumption of virtual objects do not differ from those of material objects, whereas Belk (2013) suggests that virtual possessions lack certain characteristics associated with material possessions that may alter the way consumers are attached to material ones. In addition to this discussion on how digitalization influences the consumption of possesions, Denegri-Knott and Molesworth (2010) emphasize that digital spaces are especially accommodating for consumers to easily engage in new forms of virtual experiences such as consumption-like activities in digital simulations, and there is a need to explore how such activities match with and incorporate into non-virtual experiences.

2.2.3 The Concept of Sociotechnical

Experiences represent a socially valuable phenomenon (Raghunathan and Corfman 2006; Van Boven and Gilovich 2003), and digital experiences are the product of technology consumption. Thus, I adopt a sociotechnical perspective for the interpretive account of my study on digital experiences. Having been extensively studied in management and sociology literature, the concept of sociotechnical "refers to an ensemble, a practice, or even an analysis of any of these that integrates social and technical elements in a way that reveals their interactions and interpenetration" (Kling and Courtright (2003, p. 222). Sociotechnical theories in the field of management focus on the optimal integration of the social systems and the technology used for organizational improvement. These theories recognize the interaction between the social and the technical components as well as the interaction among the social components using the technology. For instance, the Sociotechnical Systems Theory studies not only the integration of individual employees with the technical requirements, but also group behavior among the employees (Denison 1982). In this regard, sociotechnical theories have provided a relevant platform for developing organizational change through strategies and experiments in sociotechnical systems (Pasmore and Sherwood 1978). Among the concepts studied are skill development, technological change, selection of peers, team approach, facilitative leadership, action group, autonomous work groups, and customer interface (Pasmore et al. 1982).

In relation to the field of sociology, the study of the sociotechnical centers on the directionality of the relationship between technology and society (Bijker and Law 1997). These studies focus on a simultaneous thinking about the social and the technological,

balancing the social shaping of technology and the technological shaping of the society. These studies are specifically important for the wellbeing of society since sociotechnical theories also focus on the social costs of using technology (Cummings 1978). In this regard, a number of sociologists define the study of consumers as an optimal medium to investigate the sociotechnical because of the apparent social impact of technology in the consumer-level (Callon 1987) and the reorganization of social structures through technological diffusions (Cowan 1987). Thus, the concept of the sociotechnical provides a great opportunity for marketing and consumer behavior literature to integrate its own theory that would synthesize and organize consumer studies pertaining to technology consumption with a specific focus on social interactions among consumers. Furthermore, it would provide a theoretical infrastructure for consumer researchers to investigate the interaction and the optimization of the social and technological components of consumption experiences.

2.3 Method

2.3.1 Research Context: Fantasy Football

I focus this essay on the digital experience of fantasy football, which has become the most dominant online fantasy game with approximately 26 million participants just in the US (Fantasy Sports Trade Association [FSTA] 2013). Online fantasy games, examples of which include many digital entertainment experiences ranging from fantasy basketball and fantasy survivor to fantasy congress and fantasy Wall Street, are based on real information (i.e., participants keep score of any real-world performances), and represent an inclusive relationship between the digital and the non-virtual consumer experience. Accordingly, online fantasy football allows consumers to experience the NFL

through self-created digital virtual teams that operate in relation to the real statistical performances of NFL players. Thus, the context of this essay, as shown in Figure 2.1, incorporates an informative connection from the non-virtual to the digital. Recently, fantasy football experience has been associated with numerous online service providers, informational custom websites, TV and radio programs, magazines, and experts. Furthermore, a transformative connection from the digital to the non-virtual is also evident in that fantasy football creates a participative spectatorship game that has been altering the consumer experiences in NFL spectatorship, and to some extent, the real games' focus and presentation (Belson 2013; Carter 2012; Daileda 2013). Finally, in addition to these informative and transformative connections, the social aspect of the digital experience represents a relation between the digital and the non-virtual worlds: the fantasy teams are virtual and they do not actualize in the real world, but the social interactions associated with fantasy football participation create a shared experience that is quite real in spite of lacking material existence. For instance, portraying social interactions in virtual worlds, Fleck, Dalmoro, and Rossi (2013) refer to digital games as a notably influential way to bond with one's social circle that can bolster both real-life and online socialization.

From being defined as a nerdy subculture activity, fantasy football has evolved into an extremely popular contemporary phenomenon (Berry 2013; McCormick 2012). Given the shift from game-related calculations by hand to computer-based statistical applications, the substantial role of digital technologies cannot be ignored in this rapidly expanding consumption phenomenon (Evans 2007; Fabiano 2007; Spitznagel 2010). The digital technologies in this regard empowered fantasy football players to do everything

related to their fantasy teams once they went online such as checking fantasy teams' stats, updating rosters any time of the day, sending trade proposals by instant messages or e-mails, displaying points without any necessary calculations by hand and customizing each league according to the demands of the players. Likewise, a recent study on the general trends of fantasy sports reveals that Internet websites are the most widely used source of information; however, there's also a current trend among fantasy sports players towards using a mobile device or app to get their information (FSTA 2013), indicating the recent emergence of mobile technologies as an important player in digital consumption.

2.3.2 Data Collection and Analysis

In this essay, I have adopted an inductive theorizing process to investigate the interplay between digital and non-virtual experiences in the context of fantasy football with a phenomenological perspective, through which I interpret in-depth interviews conducted with 26 fantasy football participants throughout a 3-year time span. The interpretation of the participants' experiences is derived from constant interaction among emerging themes and facilitating reviews of relevant literature: (1) digital consumption, (2) digital experiences, and (3) the concept of sociotechnical. However, it is typical for qualitative studies to identify their final conceptual backgrounds upon the completion of the research (Taylor and Bogdan 1998). Thus, I delved into these key literatures after I had completed my first set of interviews. Following Glaser and Strauss (1967), I adopted a constant comparative method, in which I coded and analyzed data simultaneously in order to develop my framework, and a theoretical sampling method, which included

selecting new cases to study according to their potential for helping to expand on or refine the concepts and theory that had already been developed.

First, I started with designing a flexible and dynamic interview plan with nondirective, unstructured, nonstandardized, and open-ended questions (Taylor and Bogdan 1998). Thus, my participants were the primary source to construct the interviews and I, as the interviewer, only led the conversations to cover a list of previously set issues. In most cases, these issues emerged spontaneously through the course of the conversation. I had not had any personal experiences with the phenomenon of fantasy football prior to the research. My committee members, who contributed to this essay with the coding and the analyzing of the themes, actively participated in fantasy football leagues during the course of the research. This deviation of the experience and knowledge about the phenomenon between me and my contributors supported a multi-perspective approach during coding and analyzing processes, allowing me to benefit from both familiar and naïve perspectives.

During the interviewing process, each participant was assured of full anonymity and signed a consent form that explained the preliminary purpose of the study. Adopting both the constant comparative and theoretical sampling methods, I conducted two sets of interviews for each qualitative research strategy. The first set of interviews were conducted with a constant redesigning of issues to address and codes to analyze as a consensus of all the contributors until the emerging themes started to repeat themselves in a series of interviews with no additional insights to the theoretical construction of the study (Glaser and Strauss 1967). This first set consisted of twenty interviews and resulted in approximately 300 single-spaced pages of written transcripts. The second set of

interviews was conducted upon the theoretical construction of the study to further contribute to the developed theoretical framework. This set of interviews was conducted with six additional participants and two participants from the previous set of interviews to follow up with their experiences upon starting to play fantasy football. These two participants were selected due to their geographic proximity and their diverse take on the experience: one continued to participate in fantasy leagues, whereas the other one decided to stop playing although they were competing in the same fantasy league. The list of all the participants can be viewed at Table 2.1.

After the coding and analysis were conducted in a simultaneous manner with the first set of interviews, the interpretive process began. In this process, I investigated and adopted key literatures along with phenomenological interpretations. This developing thematic structure throughout the interpretive process was continuously challenged and revised through a collaboration of the contributors along with the analysis of the second set of interviews.

2.4 Findings

My findings illuminate that the digitally empowering as well as the socially interactive attributes of online fantasy football are central to its dominant influence on NFL consumption. Thus, this essay provides a theoretical account on the meaning of shared virtual experiences in digital spaces and their role in consumers' daily realities. First, I evaluate how in-depth interviews reveal fantasy football as an empowering digital experience with the social exchange of the virtual, which is a derivative of a non-virtual consumption experience—the NFL games. Following this, I analyze four interrelated themes that were evident across the narratives of my participants: control, camaraderie,

customization, and competition. These themes demonstrate how fantasy football (digital experience) deviates from the traditional NFL consumption (non-virtual experience). Although some of these themes are not necessarily mutually exclusive, for the sake of clarity, I will refer to them separately. Finally, I lay out an integrative model to discuss the dynamics between digital and non-virtual experiences.

2.4.1 Digital Consumption of Fantasy Football: The Social Sharing of an Empowering Virtual Experience

Kozinets (1999) describes online communities of consumption as "affiliative groups whose online interactions are based upon shared enthusiasm for, and knowledge of, a specific consumption activity or related group of activities" (p. 254). Thus far, consumer research on online communities has mostly focused on brand communities, peer-to-peer communities (e.g., online blogs, forums), and online stores, investigating a multitude of topics ranging from self-representation (e.g., McQuarrie et al. 2013; Schau and Gilly 2003) and social dynamics (e.g., Bagozzi and Dholakia 2002; Jayanti and Singh 2010; Mathwick, Wiertz, and de Ruyter 2008) to eWOM activities (e.g., Kozinets et al. 2010; Ward and Ostrom 2006). Introducing the idea of brand community, Muniz and O'Guinn (2001) refer to the three defining characteristics of communities—shared consciousness, rituals and traditions, and a sense of moral responsibility. My findings are also indicative of these characteristics residing in the fantasy football experience. In Table 2.2, I attend to the voices of my participants to depict fantasy football experience as a community with reference to these characteristics.

The notion of sharing in online communities of consumption enhances the sense of community among its users (Belk 2013), and, particularly, sharing experiences

contributes to even more successful social relationships (Raghunathan and Corfman 2006; Van Boven and Gilovich 2003), fostering this community feeling. Consequently, shared digital platforms, which offer communal consumer experiences, may stand out among online communities of consumption with their elevated social value. Fleck et al. (2013) support this notion by defining online gamer communities as a place where the social interactions, in some cases, are more potent than the games themselves.

Jeff has been playing fantasy football with his friends from high school for seven years, and, like many of my respondents, he talks about this experiential sharing aspect of his fantasy football league:

> Jeff: It's a shared experience that we all kind of cherish a little bit. We have our draft meeting, we do all these things [related to having a virtual NFL team]. It's kind of like this block of time where it's just us, and we can revert back to our high school ways … Having all the stuff online, it makes it so much easier to stay in touch, and so now it gives us an excuse to see each other all the time … It's a pretty big mix of guys. There's one guy who works at an art gallery, another guy who's a teacher, another guy who's a lawyer, another guy who's a financial advisor, another guy is a general manager of a lacrosse team. There's just a wide range of guys but we all have this common thing. And it brings us together, lets us talk trash to each other for four months of the year.

According to Jeff, as much as it is a virtual competition, fantasy football provides an online digital platform for him and his friends where they can keep on creating shared experiences just like when they were sharing the same classroom in high school. Thus, their online fantasy football community allows them to re-experience their friendship dynamics even though they went on different paths in their lives. On the other hand, the fantasy football experience also represents an online community that "has the potential for new experiences of sociality" (Willson 2010, p. 748). Such is the case of Eric who appreciates fantasy football for offering him and his life-long friends for the last twenty years something that is fresher than continuing to talk about high school. These

manifestations of Jeff and Eric are indicative of fantasy football being a shared experience that is capable of keeping social ties alive in a both nostalgic and reviving way.

Here, it is important to note that this shared activity is made available within the digital virtual platform of fantasy football leagues. As it is evident in the above narrative of Jeff, for the experience to be shared readily, the participants need the digital empowerment to easily create their virtual NFL teams as well as the league rules associated with managing these teams. For my other participants too I have found this association in phrases such as "closest thing of actually being in a front office position" (Gary), "it's best to be a virtual manager" (Kenneth), and "the tiniest sliver of one little aspect of a job of a pro GM" (Richard). These reflections inform us that fantasy football represents a shared digital simulation of managing an NFL team. Consider Gary's complete narrative of this digital simulation:

> Gary: I want to reiterate the fact that initially, before I started doing it, I really thought that it was an absurd concept. I didn't understand why people got so into the technology and just changing around an electronic team. But now, I can say, it's definitely – for the closest thing of actually being in a front office position, being a general manager so to speak. I mean, we watch these guys on TV, which I'm a Jets fan. It's just fun to see what you can do about putting a team together of seemingly all stars and just seeing how they progress through the season.

As it is evident in Gary's case, most of my participants emphasize the empowerment associated with fantasy football that allows them to create and manage their own teams. This digital power, that provides experiences that are not available through material goods and services, deviates from the previous perspectives on consumer empowerment, which predominantly focus either on the enhanced availability of information through consumer-to-consumer communication technologies (e.g., Berthon et al. 2000) or on the

new digital interaction opportunities with suppliers to participate in production (e.g., Ramani and Kumar 2008).

Furthermore, this experiential perspective on empowerment is intensified through social sharing as evidenced in the narratives of the fantasy football participants on being able to experience how their self-created teams would perform in the common virtual platform that they share with other fantasy team owners. Steven illustrates this experiential empowerment as he mentions "fantasiz[ing] about having an all-star football team where you have all these guys who wouldn't normally play on the same team," and how these fantasies are then not just virtually but also socially experienced through digital simulations in online platforms such as Yahoo, ESPN and NFL.com. Denegri-Knott and Molesworth (2010) refer to such digital simulations as "manifestations of consumer culture rather than just economic exchanges" (p. 112), deriving this notion from the wide range of consumption-like activities in digital virtual spaces. Fantasy football, in this regard, is representative of this unique consumer culture, developing around the social exchange of the digitally empowering experiences. This social exchange may vary in relation to online and offline dynamics among the members of the digital experiential communities (Fleck et al. 2013). I observe this variation in the reflections of my participants on their experiences with public leagues that are available online for anyone to sign up for until they fill up. Consider how Richard compares public and private leagues:

> Richard: The pleasure of beating old college buddies and high school buddies, the pleasure of going up against them and the smack talk and all that, I don't need to play for money when we have that. It's not the same in a public league obviously. In a public league, if there is money on the line fine, if there's not money on the line fine, but you are mostly playing for your own edification there to challenge yourself. There's not the same connection to the league. I've never been in a

> public league where I felt any great emotional attachment to it that I really cared at the end of the day if I won that league. All the bad beats and big wins I have had, the ones you talk about or whatever, are all leagues full of friends.

Richard is a fantasy football analyst for a well-known online platform, and like several of my participants, he refers to the obvious difference in attachment between participating in a public league and being in a private one with familiar others. The communication among league participants, in this regard, may be based on both online and offline social interactions (e.g., Scott's and Jerry's narratives in Table 2.2). It is also interesting that Richard replaces the socialization motive in private leagues with monetary or personal improvement motives in public leagues, which represents another distinction for varying levels of social interactions derived from sharing this experience.

Thus, for fantasy football, the amount and quality of the social value associated with the sharing of the digital experience elevates the consumer attachment and varies the motives for consumption. This makes social sharing an evident and substantial factor in the theorization of consuming digital experiences. In their seminal paper on play as a consumption experience, Holbrook et al. (1984) reflect upon this significance of social sharing regarding experiences by removing social rewards from the experimental design of their investigation and classifying social factors among future research opportunities. In a study on massively multiplayer online role-playing games (MMORPGs), Cole and Griffiths (2007) demonstrate that 81% of gamers play with real-life friends and family, while also reporting a high percentage of participants making life-long friends and even partners out of their digital experiences shared with unfamiliar others. This variation in the integration of the social and the technical (i.e., digital technologies) calls for a systematic sociotechnical perspective on consuming experiences in digital spaces.

2.4.2 The Deviations of Fantasy Football from Non-Virtual NFL Consumption

Denegri-Knott and Molesworth (2010) suggest that digital experiences should be explored in terms of their integration to and reflection upon consumers' non-virtual experiences. My in-depth interviews reveal several themes that are associated with how the digital fantasy football experience deviates from the non-virtual NFL consumption, transforming and enriching it through virtual simulations. In Figure 2.2, I organize these deviations around four subsections: control, camaraderie, customization, and competition. A summary of these deviations along with their illustrative quotes can be viewed at Table 2.3.

2.4.2.1 Control

The Internet has been a substantial digital platform for consumers to be empowered with—and thus have control over—their consumption decisions and experiences (Day 2011; Deighton and Kornfeld 2009; Denegri-Knott et al. 2006; Kozinets 1999; Ramani and Kumar 2008). Online fantasy football, taking place in this empowering digital platform, offers its consumers a feeling of control that does not exist in the non-virtual sport spectator experience. Like several of my participants, Thomas merged his fantasy football experience with the notion of being in control when he was comparing it to his NFL team spectatorship. His narrative in Table 2.3 is interesting in that he attributes a childlike pleasure to the non-virtual experience with the excitement of waiting for something to happen such as a Christmas present, whereas he associates the digital experience with a more adult pleasure that results from control over the consumer experience. Another manifestation of control is evidenced in Dennis's description of how he and his peers experience fantasy football participation: "You know you have to build

the teams up. We do drafts, we do trades, we do everything involving having a team." These virtual activities elevate the impact of the consumer on the experience when compared to the ineffective nature of the traditional sports game experience, where spectators can only engage in imaginary interactions with the game "creat[ing] and play[ing] out a fantasy in which they are managing, in charge of play on the field" (Holt 1995, p. 7). Accordingly, fantasy football deviates from the restricted experience of rooting for an NFL team by providing a mighty and influential level for the consumers that can be acted out in the shared digital spaces of online fantasy leagues in a social reality beyond imagination.

2.4.2.2 Camaraderie

People use consumption objects not just to satisfy their needs but also to commune and socialize with others (Holt 1995). Consider how Eric, in Table 2.3, describes his reason to participate in fantasy football for the last 20 years. Just like he defines fantasy football as an ideal way to keep in touch with his childhood friends, most of my participants agreed on the community aspects of this digital experience. When we consider non-virtual NFL consumption, we see that sport, as a consumption object, has also been widely studied as a means to socialize and be part of a community (Holt 1995; Melnick 1993; Wann 2006). What differentiates the digital fantasy football participation from the non-virtual sport consumption—whether it is watching an NFL game or participating in recreational football—is that it provides a means to shift time and space for experiencing the NFL consumption in a socially interactive virtual community with people who may be temporally and spatially apart from each other. Kozinets and Kedzior (2009) define this power of digital technologies freeing us from the constraints of time

and space as “re-worlding” (p. 12). Accordingly, fantasy football experience provides a digital world, where the non-virtual NFL games are socially re-shaped with an alternative perspective regarding the virtual distribution of players in the shared reality of fantasy football leagues. Thus, the participants of a particular league can consume the same experience without restriction of time and space. Another manifestation of this is evidenced in Sophia’s narrative of the fantasy league she has constructed with her family members. Sophia and her sister are geographically distant—one lives in California and the other in Massachusetts—and she states, “to be so far apart geographically but to share something you both put a lot of time into each week is a lot of fun.” Thus, time-shifting and space-free shared experiences in digital platforms provide a distinctive form of social interaction, differentiating digital experiences from other online communities as well as from temporally and spatially restricted non-virtual experiences.

2.4.2.3 Customization

According to Fuchs et al. (2010), consumers develop a stronger feeling of psychological ownership with empowerment that allows them to be a part of the production process. Central to the literature on this consumer empowerment is customization of market offerings (Bendapudi and Leone 2003; Chan, Lim, and Yam 2010). Consistent with this literature, the concept of customization is manifested in my participants’ narratives through the depictions of empowerment, allowing a psychological ownership of the customized fantasy teams and leagues. Such is the case of Douglas, who emphasizes the notion of “my decisions” and “my players” that is inherent in fantasy football experience compared to the common experience for rooting for an NFL team (Table 2.3). Molesworth (2008) acknowledges this notion among different entertainment

experiences as consumers' discourses on their online game experiences entail the use of first person and possessive nouns whereas those on books consist of referrals to characters in third person. With respect to non-virtual NFL consumption, this similar pattern can be traced back to studies in social psychology where sport fans are investigated for their basking in reflected glory (BIRGing) behavior (Cialdini et al. 1976). Accordingly, BIRGing allows engagement in the success of the team during sport consumption. A well-known behavior related to this concept is the using of the term—"we"—to describe a team in material speech, indicative of a form of psychological ownership. However, this ownership is common to every other fan of that team and is not associated with any kind of personal customization. The feeling of psychological ownership associated with the digital experience, on the other hand, allows for a diffused and customized level that constructs its meaning in its shared digital space, and deviates from the non-virtual experience.

2.4.2.4 Competition

Shields (2003) emphasizes the integration of the virtual with the material not only through the digital experiences becoming a part of daily activities but also as a result of everyday life becoming mixed up in the digitally virtual. Certainly, there are aspects of digital experiences, which derive from the desired attributes of respective non-virtual experiences. I define these attributes as *experience-specific reflectors*. Digital experiences should possess or relate to at least one dominant experience-specific reflector to satisfy the needs of consumers virtually in a similar way as their respective non-virtual experiences do. In the context of this exploration, the feeling of competition resides in the heart of sport consumption (Schaaf 1995), representing an experience-specific reflector

that has an influential role on the dynamics between the digital and the non-virtual experiences. Sophia's discussion in Table 2.3 points out how the notion of competition in fantasy football experience deviates from that in the NFL spectatorship experience. In NFL spectatorship, the real competition is shared among the players who are physically active on the field, and spectators can only relate to vicarious achievement with regard to competition. Fantasy football, on the other hand, virtually imitates the feeling of competition that a consumer would get from actively participating in sport by providing a shared cerebral competition among the fantasy players on predicting the physical competition on the non-virtual field. Defining his and his friends' experience with sport participation by "never get[ting] a chance to go to any level passed high school," Jeff also provides his insights on competition as "a very good feeling to still have a competitive edge and beat people over the computer." Thus, the fantasy football experience provides a cerebral level in competition, deviating from the physically restricted competition of NFL consumption.

2.4.3 The Dynamics between Digital and Non-Virtual Experiences

Thus far, I have explored the digitally empowering as well as the socially interactive nature of digital experiences, and illustrated how these experiences deviate from non-virtual experiences with reference to the context of fantasy football participation. The illustration in Figure 2.3 organizes these previous themes to address the research question of how digital experiences reflect upon and integrate into non-virtual experiences from a consumer behavior perspective. Accordingly, digital empowerment and social interactions create a sociotechnical level for digital experiences to drive the attraction of consumers through making it easier to do things together in empowering

digital realms. This sociotechnical level feeds into the psychological ownership associated with the digital experience as well as strengthens the appeal of experience-specific reflectors. These four elements, through which digital experiences differentiate themselves from their non-virtual counterparts, each contribute to the psychological attachment to digital experiences. Finally, varying levels of psychological attachment assist digital experiences to complement, substitute, and/or transform respective non-virtual experiences.

A sociotechnical level requires the integration of the social and the technological in a way that reveals their interactions and interpenetration (Kling and Courtright 2003), and online fantasy football encompasses this level as an experience that has both social and technological components in its offering. Richard summarizes the sociotechnicality of fantasy football for us: "There is a nice network that we built up in fantasy and it's fun. It's nice to know that on game days, on Sundays, there are millions of us out there watching Red Zone and refreshing our browsers and watching scores." First, this sociotechnical level feeds into the psychological ownership associated with the digital experience. Pierce, Kostova, and Dirks (2003) define psychological ownership as "the state in which individuals feel as though the target of ownership or a piece of that target is theirs" (p. 86). The narratives of almost all of my participants use the terms—"my players," "my team," and "my decisions," indicating the psychological ownership they associate with their experience. This association is shaped dynamically with the social interactions of the shared experience as well as with the digital empowerment that allows the control to customize. For instance, in his interview, Scott reveals that his experience with respect to customizing his team is enhanced by the thought that he has outsmarted

his friends, referring to the social aspect of the customization during the draft. This social comparison of fantasy teams through psychological ownership would not have occurred if it were not for the mighty and influential level that is made available through digital empowerment. Consequently, the social sharing of the digitally customized—and therefore psychologically owned—virtual teams constitutes a substantial part of the dominance of this experience in the non-virtual NFL consumption.

Second, the sociotechnicality of the digital experience may be influential in strengthening the appeal of experience-specific reflectors. In the context of fantasy football, competition is substantially interrelated to control and camaraderie as the feeling of competition is associated with both the influence of the consumer on the experience and the presence of others to be compared to. It is quite evident that the feeling of competition is transformed beyond the vicarious achievement associated with the NFL spectatorship through the digital empowerment to carry imaginative fantasized teams to a shared virtual reality. The influence of camaraderie on perceived competition is also evidenced through the level of social interactions offered by the digital experience. In his narrative below of the comparison of the two fantasy football leagues he is involved with, Dennis stresses the familiarity with the participants as a way to describe the competitiveness and the involvement depth in each league:

> Dennis: Well, the one with my college buddies is pretty competitive. I went to college with them, so I have known them for 5 to 9 years, some more than that. So they're all friends that I've known for years. So it's more competitive, there's more involvement with that one. The other one is more people I've met at my job a couple years ago that I've just stayed in the league with. It's competitive but it's not as competitive or involved as the other one is.

These dynamics among the deviations of digital experiences from non-virtual experiences plays a substantial role in forming the psychological attachment associated

with digital experiences. Thus, consumer attachment to digital experiences is developed through different (or at least deviated) dynamics than attachment to non-virtual experiences. Psychological attachment to consumer goods and services has been widely studied in consumer research as an indicator of commitment predicting loyalty to the object of attachment (Thomson, MacInnis, and Park 2005). The Oxford Dictionary defines commitment as the state or quality of being dedicated to a cause, activity, etc., and loyalty as the act of giving or showing firm and constant support or allegiance to a person or institution. Accordingly, the narratives of my participants have revealed many indicators of being dedicated and showing allegiance to fantasy football (Table 2.4). Specifically when they express their opinions on stopping their playing of fantasy football, their psychological attachment levels are evidenced through manifestations such as "hooked and not going back" (Liam), "[not stopping] unless I die or get too sick or go blind" (Jerry), and "stop playing when nobody else plays" (Steven).

Diverse levels of psychological attachment are evidenced throughout the narratives of my participants as well as among real-life fantasy football stories in the media, ranging from defining fantasy football as "a hobby on the weekends" (Dennis) to Meat Loaf—an American musician and actor—dedicating his time to participate in as many as 60 leagues in one season (Diamos 2005). Denegri-Knott and Molesworth (2010) note that digital technologies provide easy access to so many experiences in virtual realms that "such developments may make excessive consumption (of digital virtual commodities, experiences and identities) even more central to individuals' lives" (p. 125). An article from the well-known New York Times N.F.L. Blog—The Fifth Down—supports this notion and illustrates a number of excessive attachment behaviors of fantasy

football players (e.g., not caring about Super Bowl, stopping the car and climbing rocks to get one bar in the phone and update rosters during a mountainous drive, and leaving the bathroom door open enough to watch the players of the fantasy team) and explores fantasy football as an addiction (Carter 2012). One of the excessive attachment behaviors mentioned in the article—not caring about the Super Bowl—exemplifies how a digital experience may become a substitute for a non-virtual experience. Jerry's narrative in Table 2.5 represents another manifestation of this substitution through his preference for his fantasy football team's digital Super Bowl to his non-virtual NFL team's playoff success. However, to the degree that consumer experiences in digital spaces influence their respective non-virtual experiences, I also observe positive effects that contribute to the enjoyment of the offline activity through the company of our imaginations and fantasies coming to life in a shared virtual realm as digital virtual spaces "combine aspects of both imagined ideals and material actualities" (Molesworth and Denegri-Knott 2013, p. 231). An illustration of this contribution is provided by Gary, who has started to watch games he would not normally be interested in since one or more players from that game belongs to his fantasy team. The fantasy of owning a real NFL player in a team he manages contributes to his enjoyment watching the game as he experiences that real NFL players are scoring for him. Richard's discussion in Table 2.5 also supports this complementary aspect of fantasy football experience.

Whether digital experiences complement or are substitutes for non-virtual experiences, they have become more and more intertwined with our everyday life. As the line between the real and the virtual become more indistinct through digital technologies, the ways we consume goods and experiences are transforming (Llamas and Belk 2013).

Like several of my informants, Scott merges his notion of fantasy football with the ways his non-virtual experience as a spectator has been transformed from a team-oriented level to a league-wide appeal that focuses on specific parts of the game relevant to the fantasy football experience. His narrative in Table 2.5 is interesting in that he draws attention to an NFL product—RedZone—that is advertised to be for every NFL consumer; however, he refers to purchasing it for his fantasy football experience. I also observe this transformation from the perspective of the marketers, as the Jacksonville Jaguars have recently become the first team in the NFL to offer a fantasy football lounge for their fans to enjoy RedZone at the stadium (Belson 2013).

2.5 Discussion

This essay contributes to the literature by providing interpretive insights into consuming experiences in digital spaces. More specifically, I argue that consumers follow different (or at least deviated) mechanisms toward adoption and attachment to digital virtual experiences compared to their non-virtual counterparts. My findings reveal that the empowering and the socially interactive aspects of digital experiences are fundamental to their influence on non-virtual experiences, and unpack the relevance of sociotechnical levels enabling consumers to have easy digital access to socially shared experiences that the material world cannot offer. Thus, this essay extends prior consumer research on digital consumption by shifting the focus from sharing information and possessions to sharing experiences in a way that reveals their dynamics with everyday reality. In doing so, I broaden Kozinets' (1999) definition of online communities of consumption to include those that share not only the interest in but also the experience of the object of consumption as well as introduce another perspective on consumer

empowerment through digital technologies that focuses on the availability of experiences that cannot be readily offered by material goods and services.

Primarily, a challenging aspect of this area of inquiry is to define digital experiences. I have purposefully adopted the phrase "consuming experiences" to present my theoretical investigation and avoided using the term "experiential consumption," which adopts a perspective that "is phenomenological in spirit and regards consumption as a primarily subjective state of consciousness with a variety of symbolic meanings, hedonic responses, and esthetic criteria" (Holbrook and Hirschman 1982, p. 132). This perspective encompasses any goods or services with which consumers have experiences. My inquiry of consuming experiences on the other hand focuses on the experiences themselves as consumer products, which refer to an event or occurrence that is bound by time such as going on vacation, running outdoors, and attending a concert. This conceptualization brings in further challenges in the area of digital consumption as the borderline between possessions and experiences in digital spaces can be vague with some online behaviors. Both digital possessions and digital experiences extend the digital consumption literature beyond communicating online, seeking online information, and online shopping to account for consuming online. Previous research on digital possessions focuses on the dematerialization of physical products and nonmaterial virtual goods, and how they differentiate from material possessions (Bardhi et al. 2012; Belk 2013; Lehdonvirta 2010; 2012; Magaudda 2011; Martin 2008; Odom et al. 2012). Although Lehdonvirta (2012) argues against a distinction between material and virtual possessions, others advocate a view that distinguishes digital possessions from their material counterparts in terms of consumer involvement and attachment. For instance,

Bardhi et al. (2012) emphasize the distinction of digital possession by drawing attention to their ability to facilitate mobility: "Digital objects enable global nomads to be flexible and adaptable as they simultaneously participate in multiple locales and enact their roles in various relationships." (p. 522). My analysis complements and extends this body of research by theoretically explicating the ways to get involved with and get attached to digital experiences consumed in virtual realms.

Drawing attention to the vast number of consumption-like experiences in digital virtual spaces, Denegri-Knott and Molesworth (2010) define the existing research on such experiences as being limited to their potential as market economies, and acknowledge the need to expand the inquiries to account for consumers' easy access to digital experiences and their desire to do so as well as to portray the interplay between digital and non-virtual experiences. Accordingly, I have documented digital empowerment, social interactions, psychological ownership, and experience-specific reflectors that are inherent in digital experiences as deviations from non-virtual experiences, leading to varying attachment levels that are later reflected upon non-virtual experiences. I focus my subsequent discussions on digital empowerment and social interactions as I have found them to be the fundamental aspects of digital experiences that are influential on other deviations as well as on psychological attachment, consequently initiating the interplay between digital and non-virtual experiences.

First, I have defined digital empowerment of consumers as a broader concept encompassing the availability of experiences in addition to that of consumer information and participation through the use of digital technologies. When it comes to experiences, consumers are especially limited in their availability (Van Boven and Gilovich 2003):

One can order an object that is not physically available at a store to be purchased in a future visit; however, one cannot play beach volleyball if there are no beaches, enjoy a date if there are no places to socialize and meet others, re-create Westeros if there is not a vast amount of empty land to start with, drive a Formula 1 car if there are no purpose-built circuits, and have an NFL team to manage if there is no huge financial investment. In that regard, Shields (2003) discusses that digital technologies provide virtual platforms that can integrate the ideal nature of imagination with the actualizing potential of the non-virtual world, and emphasizes "the simulation of possible events" (p. 79) in digital environments. My findings reveal that consumers are attracted to expanding their action range with experiences that they are limited to execute and/or control in real life situations. Even though this digital empowerment does not yield the same experience as their non-virtual counterparts, consumers adopt these experiences quickly and dominantly enough to have some level of impact on non-virtual experiences. An interesting future area of inquiry, in that regard, may be to explore the missing pieces when a non-virtual activity is transferred into digital platforms. Belk (2013) notes the tactile characteristics of material possessions that are lost when they are dematerialized in virtual worlds. How does this dynamic play out with experiences? Do experiences in real life only miss out on their tactile characteristics when consumers are empowered to engage in their simulated counterparts? How would the real-life availability and possibility of the digital experience affect the appeal of the digital empowerment?

Second, my findings highlight the social interactions associated with digital experiences, resulting both from the social value of experiences compared to possessions and from the enhanced connectivity enabled by digital technologies. Thus, I argue that

digital experiences gain a substantial portion of their appeal from the fact that the consumption of these experiences can easily be shared with others in virtual realms. As I have previously outlined, digital experiences can fulfill fantasies beyond what material goods and non-virtual experiences can offer, and previously fantasies in consumption have been associated with providing an escape from reality (Belk and Costa 1998; Kozinets 2001; Kozinets et al. 2004). However, I have illustrated that sharing the actualization of consumer fantasies creates "social life memories" that connect the digital consumption to our everyday realities (unless we live in the world of Total Recall where we need to determine which of our experiences are real and which are merely computer-generated fantasies implanted in our brains). Similarly, Fleck et al. (2013) acknowledge that "once the [online] game becomes a social experience, this experience is transposed beyond the playing moment" (p. 305). My findings also demonstrate the distinction between online and offline interactions among digital experience participants as well as the varying level of attachment to these experiences depending on the familiarity of other participants. Future research can focus on these variations, and explore influential factors such as generation effects since teenagers do not for the most part differentiate between online and offline socialization (Belk 2013).

Finally, the interaction of digital empowerment with social interactions provides a fruitful area for theoretical advancement. In a health education and behavior study, results indicate that community participation positively influences psychological empowerment (Christens, Peterson, and Speer 2011). Another study on community psychology views empowerment in general terms as a process enabling individuals, through participation with others, to achieve their primary personal goals (Maton and Salem 1995). What

would these findings reflect on digital platforms? Does digital empowerment create psychological empowerment in consumers? If so, how do social interactions associated with digital experiences play into this dynamic? It is here that much is to be gained from a consumer research theory that focuses on the relationship between digital empowerment and social interactions that are inherent in consumption experiences. To provide insights into this relationship, I outline a classification of consumption experiences based on the concept of sociotechnical that is studied in management and sociology literature. I subsequently propose a theory of sociotechnical consumption.

2.5.1 Towards a Theory of Sociotechnical Consumption

"The potentialities of technological connectivity and the possibility for new ways of being together raise the question of appropriate concepts, languages and theories that can be used to describe, analyze and engage with these social forms and practices" (Willson 2010, p. 748). In my essay, I have explored a social experience that not only digitally connects and provides new ways of being together (and doing things together), but also empowers consumers to engage in actions that are difficult or impossible to experience in their daily lives. Taking these two aspects as my basis, I have developed a model with a binary continuum that depicts a classification of consumption experiences in relation to their digital empowerment and social interaction levels (Figure 2.4).

When the experience is consumed with no social interaction and no digital empowerment, it takes the form of *monobasic consumption*. In this context, the experience is consumed neither digitally nor socially. Examples include jogging in the woods alone or reading a print book. However, the same activities can easily shift to further locations in my binary continuum: jogging with a group of people or with a

mobile phone application that tracks user's activity and shares it in a running community such as RunKeeper community in Facebook, and reading a book from Kindle.

When consumers utilize empowerment through digital technologies with no social interaction involved, the experience is classified as *monotechnical consumption*. This sort of consumption may be associated with enhanced psychological attachment to the experience when compared to monobasic consumption, especially when the outcome is consistent with expected (Bendapudi and Leone 2003; Fuchs et al 2010). Shopping online by oneself is representative of this consumption experience. Such a monotechnical consumer is empowered by the online choice set she is offered, eliminating the temporal and the spatial effort associated with non-virtual shopping experiences. Again, shifting through the continuum is quite possible, for instance, by exchanging consumer evaluations on the object of online shopping as a simple way of social interaction.

When the experience is consumed along with a certain amount of social interactions but with no digital control that provides the consumers with an empowered experience, it represents *sociobasic consumption*. For instance, people attending a sports event may be defined as sociobasic consumers since they have the opportunity to socially interact with the crowd and yet have no digital empowerment associated with the sports game. However, the availability of the jumbotrons may shift the stadium experience further along the continuum by empowering consumers to choose between actual performance on court and close up shots and replays of the event, and thus expanding their control to shape their spectatorship experiences.

When consumers engage in a socially interactive consumption experience with certain levels of digital empowerment, the experience corresponds to *sociotechnical*

consumption. There is a plethora of contemporary experiences that can be classified with sociotechnical characteristics ranging from the context of this study—fantasy football participation—to using Instagram, which empowers consumers to apply digital filters to the pictures they take via mobile devices and enables a social sharing of these pictures in a digital environment. I introduce sociotechnical consumption theory to theorize and explore consumption experiences that are digitally and socially consumed. Sociotechnical theory in organizational studies focuses on the restructuring of work via sociotechnical systems to enhance the productivity of the workplace through the joint optimization of the social (workers and their relationships) and the technological (equipment and processes) components (Manz and Stewart 1997). Accordingly, sociotechnical consumption theory should address the construction of consumer experiences with respect to sociotechnical characteristics to enhance the consumer benefit and/or enjoyment associated with the experience through the joint optimization of the social and the digital elements.

I propose that sociotechnical consumption theory may be an insightful tool to delve deeper into digital consumption by focusing on the interaction between digital empowerment and social interactions. Further development of this theory requires an extensive and comprehensive investigation into consumer empowerment that would address the conceptual disarray surrounding the term. Many questions can follow this investigation: Do varying digital empowerment applications have an impact on psychological empowerment? Do social interactions enhance the psychological empowerment obtained from consuming digital experiences? I also acknowledge that social interactions associated with digital experiences take a number of forms. Future

studies can focus on the differentiation between online and offline social interactions, addressing further questions on the distinctions between sharing information on experiences and sharing the consumption of experiences in digital spaces. Finally, concentrating on the optimization of the social and digital components in consumption experiences may yield public policy implications as sociotechnical consumption theory is developed further to take notice of the social cost of using digital technologies in consumption experiences.

In 1818, John Keats, the famous English Romantic poet, wrote in his letter to George and Georgiana Keats, “nothing ever becomes real till it is experienced; even a proverb is no proverb to you till your life has illustrated it.” After about two centuries, we are expanding our realities as digital technologies help our lives illustrate new experiences for us, rather than giving us passages to exit reality.

Table 2.1
Participant List

Interviewee	Age	Gender	Years Played	Average Leagues	NFL team	Interview medium
Adam	33	Male	15	2.5	Green Bay Packers	Telephone
Olivia	54	Female	3	1	New England Patriots	Face-to-face
Gary	22	Male	4	2	New York Jets	Face-to-face
Carl	61	Male	1	1	New England Patriots	Face-to-face
James	34	Male	3	1	Buffalo Bills	Face-to-face
Liam	25	Male	6	2	Dallas Cowboys	Face-to-face
Douglas	55	Male	1	1	Philadelphia Eagles	Face-to-face
Jeff	28	Male	7	2	Chicago Bears	Face-to-face
Charles	29	Male	10	1	New England Patriots	Face-to-face
Frank	63	Male	1	1	New York Jets	Face-to-face
Brian	32	Male	7	3	Baltimore Ravens	Telephone
Dennis	31	Male	5	3	New England Patriots	Skype
William	21	Male	5	2	New York Giants	Face-to-face
Jerry	31	Male	21	2	Kansas City Chiefs	Face-to-face
Mason	30	Male	8	3	New Orleans Saints	Skype
Joshua	26	Male	5	3	New England Patriots	Face-to-face
Kenneth	20	Male	6	2	New York Giants	Face-to-face
Steven	30	Male	8	3	New England Patriots	Skype
Scott	27	Male	6	2	New York Giants	Face-to-face
Eric	46	Male	21	2	Dallas Cowboys	Face-to-face
Richard	41	Male	20	10-14	Chicago Bears	Skype
Nick	33	Male	10	3	San Francisco 49ers	Telephone
Noah	43	Male	15	2	Dallas Cowboys	Skype
Thomas	43	Male	20ish	3	New England Patriots	Face-to-face
Tyler	29	Male	9	2	Chicago Bears	Skype
Sophia	33	Female	8	2	San Francisco 49ers	Telephone

Table 2.2
Fantasy Football Participation as a Community

Core Characteristics of Communities	Representative Fantasy Football Theme	Illustrative Excerpt
Shared consciousness	"Conversation starter"	Scott: So in general, if I have mixed company, I don't talk about [fantasy football] a whole lot. But if it is with a group, people that play or whatever, we might discuss, "so did you see the crazy game that Michael Vick had last night? He put up 60 fantasy points in one game," or whatever. Something like that…
Rituals and traditions	"Smack (trash) talking"	Jerry: It is very interactive with our friends; it keeps us guys closer too. On the website we get to talk smack, so, like, we make a blog and then everyone that wants to talk writes on the blog. And then everyone talks smack to each other.
A sense of moral responsibility	"Time commitment"	Liam: When your team is winning, you tend to put a whole lot of effort into it. And you are kind of checking it all the time, and really putting a whole lot of thought into it. But when your team is losing, you are like, "I do not really want to check my team; I'm probably just going to lose anyway." So yeah, it's definitely different. Because I like all the guys, and I want the league to stay competitive, I try to stay as interested as possible, even though I knew I was losing.

Table 2.3
Emerging Deviation Themes

Context Theme	General Theme	Illustrative Excerpt
Control	Digital empowerment	Thomas: It strikes me that the rooting for the NFL team is a little bit more childlike, is a little bit broader. And childlike pleasures can be awesome, so it is not to minimize it at all but it feels like you just want something to happen, like you want a Christmas present. Like you want the right present at Christmas, or you want—I don't know. You want things just to happen, to fall upon you; you do not have any control over it. You just sort of want it to fall from heaven. "Come on. Do what I want you to do!" Whereas rooting for fantasy team feels a little bit more adult, a little bit more complicated, a little bit more like you're in control. So, the pleasure while—it is just a different—I think it's a different gradient of pleasure.
Camaraderie	Social interactions	Eric: The reason I played has not changed for 20 years. I grew up with a group of guys through pretty much kindergarten and grade school. And most of us were in Dallas at the time, but we were starting to move in different directions. And I felt it was a perfect way to keep us together; and so once a year, we get together for the draft. And it is our community. And that's how I keep in touch with these guys. Something that is more fresh than keeping talking about high school…
Customization	Psychological ownership	Douglas: It's great to be a fan. I'm a fan of the Eagles. I love to see them win. But what did I have to do with that? I am just a fan. I didn't influence the outcome in any possible way. At the end of the day, like this week against the Giants, I feel really good. But what did I do? Nothing. I grew up in Philadelphia. That's all I did. But in fantasy, it's different, because if you win, you almost puff your chest out and you say, "I won; these were my decisions." (...) My players! And that is huge—I gotta tell you—that's huge.
Competition	Experience-specific reflector(s)	Sophia: Instead of watching games and not having any tie to it, your competitive side can be kind of exchanged in the same way as it would be when you are playing. Now it's a way of playing when you are not playing if that makes sense.

Table 2.4
Psychological Attachment to Fantasy Football Experience

Indication of Attachment	Illustrative Excerpt
Frustration about the long waiting period between consecutive experiences	Jeff: The season is too short. It would be fun if it just kept going. It is seventeen weeks and then you have thirty weeks until you have to draft again. So you spend all this time doing it and you get really involved and they take the chair out from under you and you are just kind of sitting there like, "what do I do now?" And you just have to wait, and wait, and wait.
Spending excessive time on the experience	Mason: [Playing fantasy football] is a simple repetitive task that you can get fairly advanced at pretty quickly so, I mean, it would not take you more than 30-45 minutes a week to be a pretty confident player in who you are picking up, who you are trading down, and everything like that. But nobody spends only 30 minutes on it, they spend hours looking at every variable and that's nonsense.
Determination to keep on experiencing	Brian: (on what would make him stop playing fantasy football) The NFL labor agreement thing not coming together and not having football. That is pretty much it. They would have to not be playing. Either that or I would have to—it will never go to the point where I never have Internet again or access to having it. I mean, I don't see myself stopping playing fantasy football.

Table 2.5
Effects of Fantasy Football on the NFL Experience

Effect	Illustrative Excerpt
Complement	Richard: I think almost anyone would say – it used to be that people thought of fantasy as some niche thing, oh it is a geeky little thing. As soon as you try it, you realize you are so much more aware of players on other teams and it makes you a better informed fan. Why don't you continue to do it? It enhances your own experience as a fan. I am sure it has made me a more knowledgeable sports fan; I am a better sports fan. I think almost everyone that plays it feels the same way. As soon as you do it you no longer think of it as the geeky little game within a game, you think of it as a really helpful tool. Even if you don't win, it still makes the fan experience quite a bit better.
Substitute	Jerry: You cannot have a favorite team with fantasy football. You could just have favorite players. I am a Kansas City Chiefs fan and last year I didn't even care that they were in the playoffs. I just cared that my fantasy team won the Super Bowl! So I am a Kansas City Chiefs fan but I was rooting for the other team because of fantasy football.
Transform	Scott: And in fact, what I did this year, was I paid extra to watch the NFL Red Zone Network. So that is kind of cool, because it's a single channel, but it just jumps from game to game the entire time. And it is a little bit disorienting the first time you watch it. But it is kind of cool because it just literally is the scoring place from every single game that is going on at once, which I enjoyed. And it made it more fun to follow my fantasy team, while I was trying to keep track of who was doing what on the various teams.

Figure 2.1

Fantasy Football Illustration with Connections to Everyday Reality

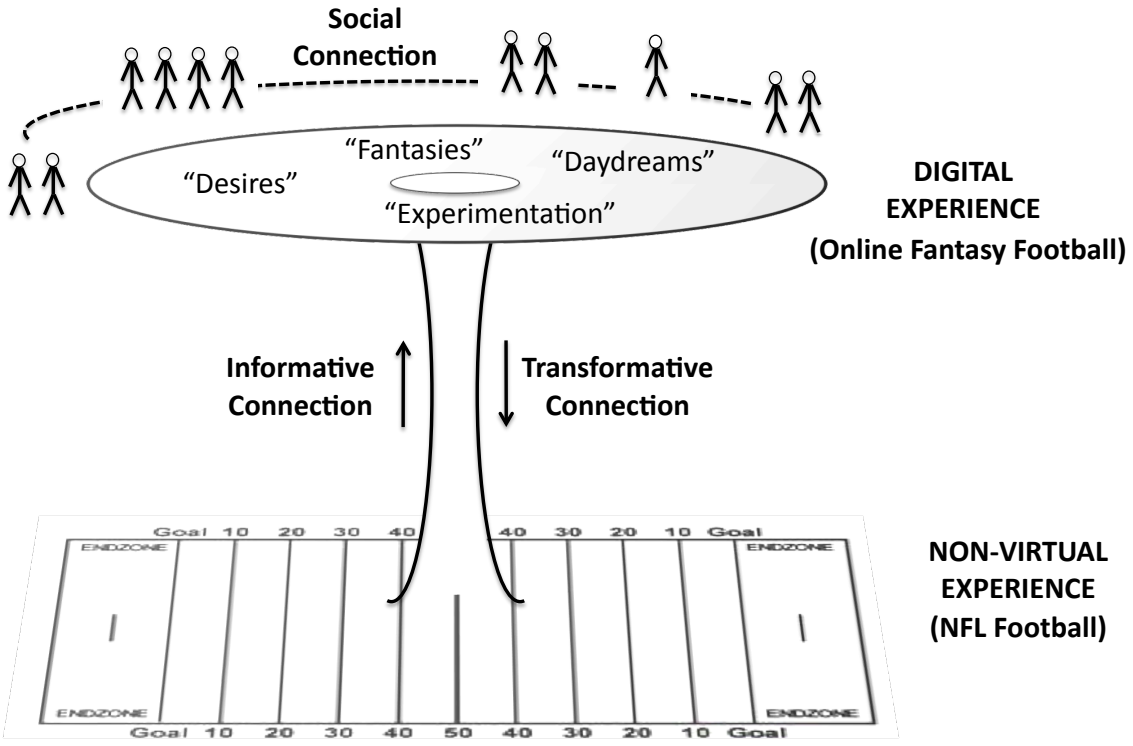


Figure 2.2
The Deviations of Fantasy Football from the NFL Experience

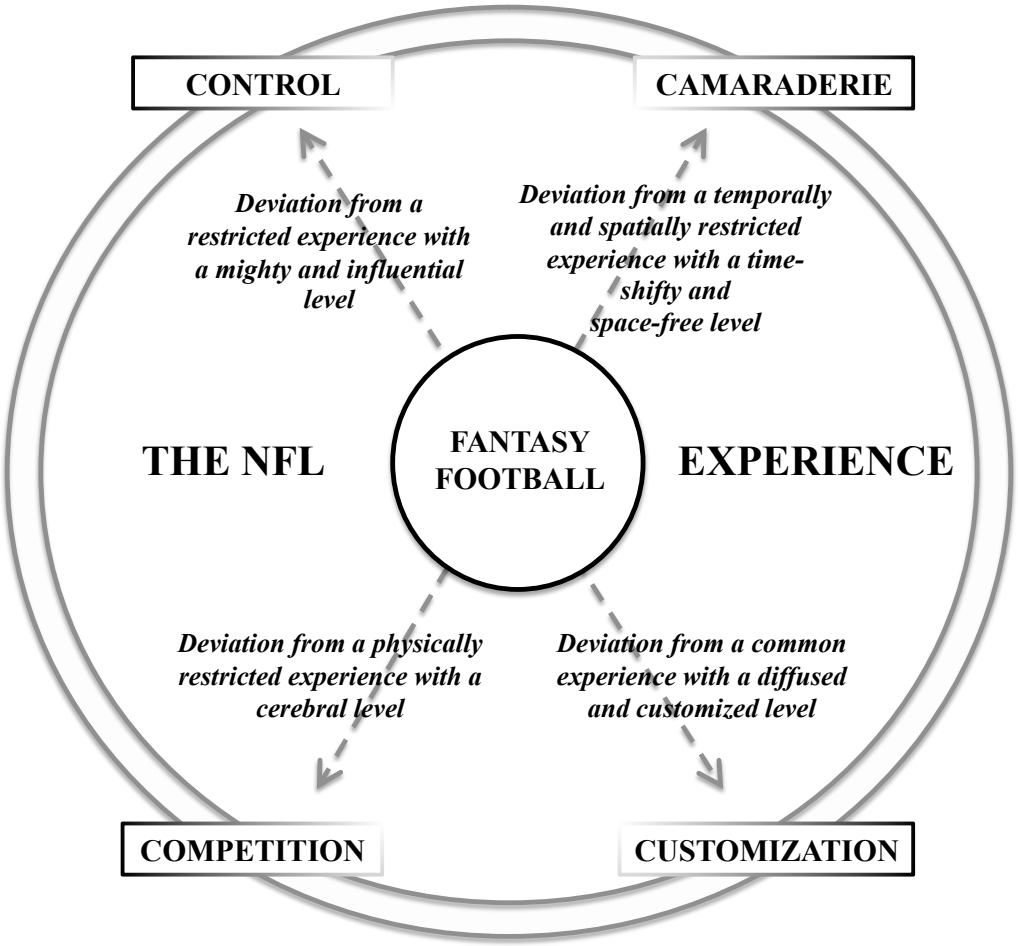


Figure 2.3
The Dynamics Between Digital and Non-Virtual Consumption Experience

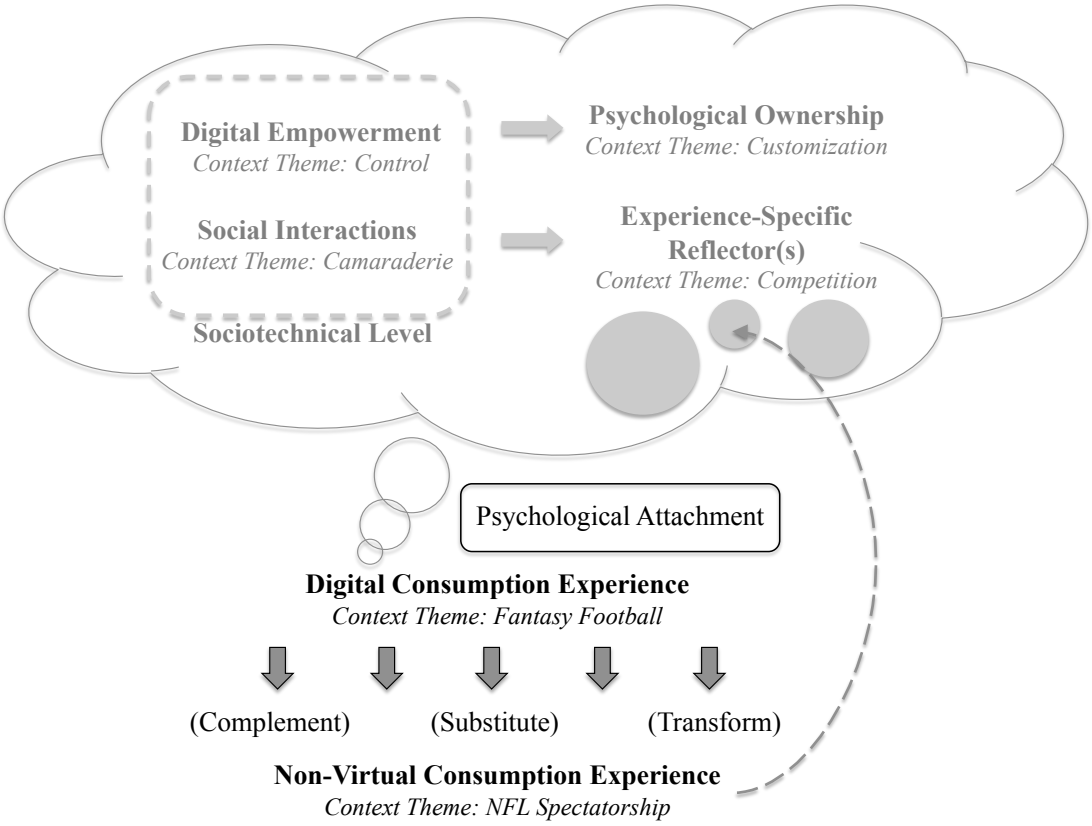
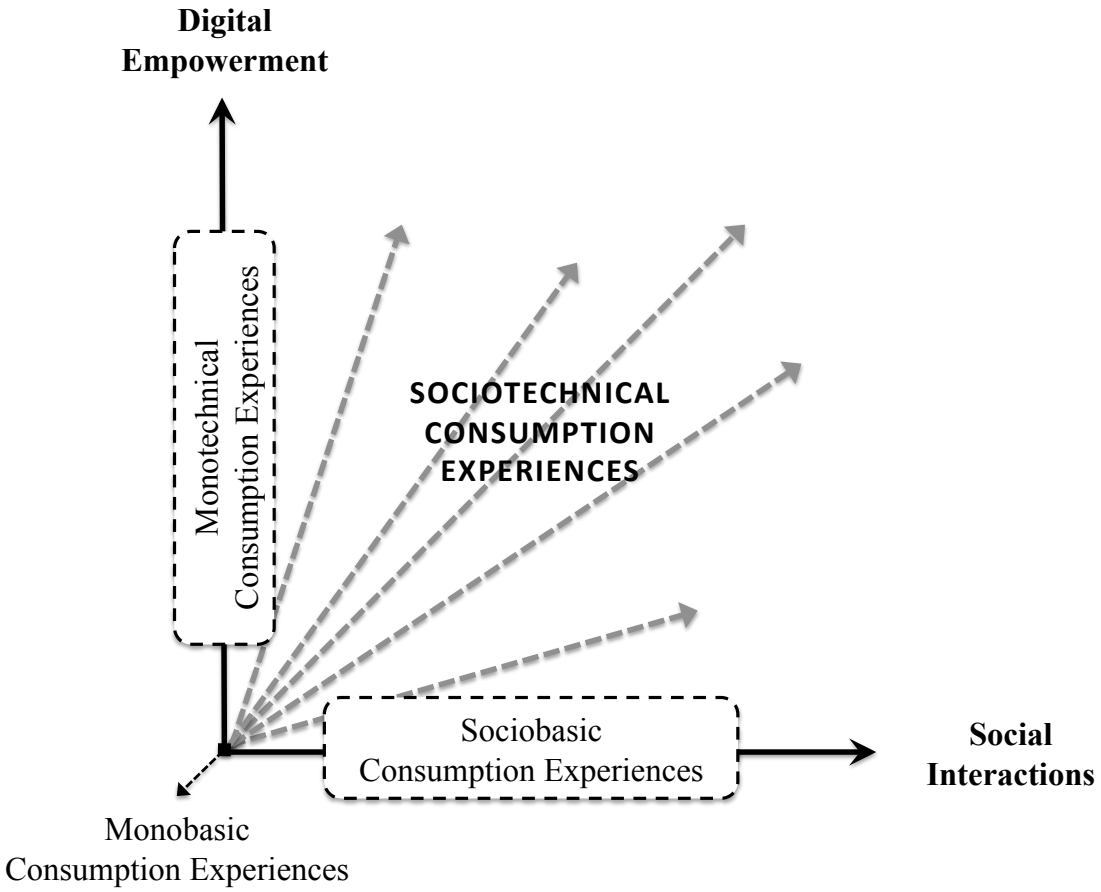


Figure 2.4
A Classification of Consumption Experiences Regarding their Social and Technical Components



CHAPTER 3

A SOCIOTECHNICAL PERSPECTIVE ON CONSUMER EMPOWERMENT

3.1 Introduction

In marketing and consumer research it is widely acknowledged that digital technologies have empowered consumers (Berthon et al. 2000; Day 2011; Labrecque et al. 2013; Ramani and Kumar 2008; Wathieu et al. 2002). Today, consumers can access Yelp via their mobile phones to read consumer reviews before deciding on a restaurant to dine while on vacation in Miami, customize their workout styles online with NikeID before ordering their shoes and gears, name their own prices for sports memorabilia on eBay with online auctions, download software from Lego's website to edit and update it as they wish to create their Mindstroms robotics, and play virtual pianos on their iPads to name a few. Parallel to this variety of empowering consumer practices, marketing researchers have referred to empowerment in diverse schemes ranging from gaining power against suppliers through communication opportunities among consumers (Berthon et al. 2000; Deighton and Kornfeld 2009; Jayanti and Singh 2010) to the online power of co-creation with suppliers (Fuchs et al. 2010; Ramani and Kumar 2010; Sawhney, Verona, and Prandelli 2005).

In this essay, I introduce an individual-level perspective on consumer empowerment that goes beyond the predominant view that focuses on empowerment as an antagonistic power struggle between consumers and suppliers. In doing so, I acknowledge the wide range of empowering digital products, services, and practices as strategic marketing tools. In this digital age, marketers will be empowered by giving

power to consumers with such digital tools. Thus, conceptualizing consumer empowerment through certain digital empowerment processes (DEPs) and how the use of such external processes result in an internal feeling of empowerment in individual consumers differentiates this essay from previous approaches to consumer empowerment. This approach sets the ground for the main contribution of this essay, which utilizes a sociotechnical perspective (i.e., the simultaneous study of social and technical components of entities) to theorize consumer empowerment in integrative digital platforms with a special focus on the multitude of social interaction opportunities in such platforms. Accordingly, the architectural plan used for this essay adopts an integration goal, bringing together the literature on empowerment with that on social impact and bridging them in the domain of digital consumption.

In sum, this essay develops an integrative theory of sociotechnical empowerment that accounts for the effectiveness of digital empowerment processes with a special focus on their social components. According to Yadav (2010) and MacInnis (2011), fundamental to the execution of a conceptual work is the conceptual clarity that requires precise definitions and descriptions of constructs provided. Following their guidance on making conceptual contributions, I will start with a revision goal to shift to an inclusive individual-level perspective on consumer empowerment that encompasses extant research schemes on the concept. This revised definition is then followed by a typological effort to organize different DEPs in a way that would encompass previous research and current managerial practices on consumer empowerment. Next, building on this revised perspective, I draw on literature from multiple disciplines, and leverage research on empowerment and social impact for an integrative framework of sociotechnical

empowerment in the domain of digital consumption. The main objective of this framework is to present a systematic interplay with considerable research opportunities for marketing and consumer researchers, and provide constructive insights for managers who want to explore and optimize the technical and social components of their digital marketing applications.

3.2 Sociotechnical Empowerment

A sociotechnical perspective requires the study of interrelations between the social and the technological components of entities (Kling and Courtright 2003). Accordingly, the concept of sociotechnical first originated in the field of management to stress the reciprocal interrelationship between workforce and technical equipments and to study the arrangement of both the technical and the social conditions of work (Pasmore and Sherwood 1978), in such a way that efficiency and sociability would complement each other to result in the optimum productivity for organizations (Ropohl 1999). Since then it has been widely acknowledged as a substantial theoretical lens with a strong explanatory power (Van Eijnatten 1992). The concept of sociotechnical has also been established in the field of sociology as a theoretical lens to study the simultaneous shaping of technology and society (Bijker and Law 1997). Taken together, this perspective suggests that it is insufficient to study the use of technology without considering the social dynamics in play.

Science and technology policy research characterizes digital technologies as empowerment in that "technology is identified with tools and techniques by which we use the world to extend our powers" (Johnstone 2007, p. 79). The consumer empowerment literature has also focused on the empowering effects of digital

technologies on consumers. Such digital empowerment has dominantly been defined through the enhanced communication among consumers resulting in a power shift from suppliers to consumers (Berthon et al. 2000; Day 2011; Deighton and Kornfeld 2009; Labrecque et al. 2013). Within this literature, social interactions play an influential role in the formation of such consumer power. For instance, Jayanti and Singh (2010) examine social learning in online consumer communities as a tool for empowered decision making. Similarly, the community psychology literature refers to participation with others as a substantial antecedent for empowerment (Christens et al. 2011; Perkins and Zimmerman 1995). Considering the plethora of social interaction opportunities in digital platforms, the sociotechnical perspective is also an appropriate theoretical lens to investigate consumer empowerment in reference to the use of digital technologies and the interactions with others during digital consumption. Furthermore, given the diverse variety of digital products, services, and practices, the research on the interplay between digital empowerment and social interactions should not be limited to online information sharing among consumers—as most of the extant research on consumer empowerment is. Thus, I introduce *sociotechnical empowerment* as an overarching framework to study the effectiveness of different empowerment processes that are available to consumers with certain social components through digital platforms.

The architectural plan used for this essay adopts an integration goal, bringing together the literature on empowerment with that on social impact and bridging them in the domain of digital consumption. It is through this plan that this conceptual essay makes its contribution. Accordingly, in order to illustrate an architectural plan for

sociotechnical empowerment in a sufficiently precise manner, it is first necessary to address the conceptual disarray surrounding the concept of consumer empowerment.

3.3 Revising and Differentiating the Concept of Digital Consumer Empowerment

Empowerment is a concept that has been adopted and studied in many fields ranging from psychology and health care to political science and marketing with a multitude of different definitions and conceptualizations. From a multidisciplinary perspective, among the many approaches to empowerment, the economic conceptualization has been the most studied (Narayan 2005). This conceptualization of empowerment deriving from economic leverage has also been adopted in marketing and consumer research studies (e.g., Henry 2005). However, there is a "contextual determinism" attached to the concept of empowerment, which advocates its exploration in relation to different contexts, populations, and developmental stages (Zimmerman 1995). Thus, in this conceptual contribution, I frame consumers and their use of digital technologies as a unique context for empowerment.

Fueled by the widespread integration of digital technologies into consumers' everyday lives as an empowering mechanism, there has been a growing, yet unfocused, literature on consumer empowerment, which reflects the lack of consistency in approaches to empowerment in other fields. In order to illustrate the conceptual disarray on consumer empowerment, I conducted a thorough literature review spanning publications in marketing and consumer research journals. Table 3.1 presents how consumer empowerment has been defined varyingly in different articles, ranging from the freedom of consumers to give the final decision on buying to a strategy of suppliers that gives consumers the power to select the final products to be marketed. Of particular note,

Denegri-Knott et al. (2006) refer to the many facets of consumer empowerment in relation to the many ways power can be theorized. Indeed, most extant research points out and focuses on a power shift from suppliers to consumers as a consequence of the empowering digital technologies, whether this is through information sharing (e.g., Deighton and Kornfeld 2009) or participation in production (e.g., Chan et al. 2010). This perspective of consumer empowerment that is based on the power struggle between suppliers and consumers has provided the field with a valuable approach for exploring whether the predicted power shift actually has occurred and for examining its origins and nature, and presents a substantial construct clearly in need of further research given the opposing views on the direction of the empowerment (see Zwick, Bonsu, and Darmody 2008 for an argument on consumer participation through digital technologies as a notion of modern supplier power). However, it is not the only approach nor is it a panacea.

On the consumer-level, there is more to digital empowerment processes than them being a tool for consumers to gain power against suppliers. As Denegri-Knott et al. (2006) suggests, the field will benefit from "a more inclusive, boundary-spanning, and multi-dimensional view of power [that] may generate a view of consumer empowerment as complementary to marketer power, rather than as antagonistic forces as often the case" (p. 965). Similarly, in the domain of macromarketing, Martin and Schouten (*forthcoming*) have illustrated that, contrary to prevailing consumer research assumptions, new market formation by active participation of consumers does not require their resistance to existing market logics. Following this, shifting the focus from an antagonistic power struggle to the multi-dimensional processes and outcomes of consumer empowerment, I will propose a revised individual-level definition that is flexible enough to be applied

across research on consumer empowerment and a differentiating typology that is precise enough to synthesize across different digital empowerment applications.

3.3.1 An Individual-Level Perspective on Digital Consumer Empowerment

Empowerment at the individual level refers to a psychological construct that is related to the feeling of perceived control (Cattaneo and Chapman 2010; Christens et al. 2011; Zimmerman 1995). This feeling of perceived control is different than power that suggests authority (Gruber and Trickett 1987; Zimmerman 1995). Accordingly, authoritative power may be a sufficient element but not a necessary one for psychological empowerment. Consistent with this notion, empowerment, as an interdisciplinary concept, "refers broadly to the expansion of freedom of choice and action to shape one's life" (Narayan 2005, p. 4). Based on this broad definition and relating to the feeling of control, I define *consumer empowerment* as a subjective experience of consumers that results from products, services, and practices that expand the freedom of and the control over choice and action to shape consumption experiences.

This definition can be leveraged in several compelling ways. According to a prevailing perspective, theories of empowerment should include both processes and outcomes (Cattaneo and Chapman 2010; Perkins and Zimmerman 1995; Swift and Levin 1987). Accordingly, the definition of consumer empowerment provided in this essay encompasses both the process (i.e., empowering products, services, and practices) and the outcome (i.e., a level of being empowered through the expansion of freedom and control), providing a clear distinction between them. This distinction also brings about a precise description of *digital consumer empowerment* as a construct associated with

digital processes that expand the freedom of and the control over choice and action to shape consumption experiences.

Furthermore, studying consumer empowerment as a subjective consumer experience may provide fruitful insights for marketing and consumer research. For instance, power as a psychological state varies even within the same consumer depending on different conditions (Rucker and Galinsky 2008) and influences several consumer behaviors such as spending on others (Rucker et al 2011), healthy eating (Patrick and Hagtvedt 2012) and perceptions of price unfairness (Jin, He, and Zhang 2014). In the domain of digital consumption, there are many conditions and processes available for consumers that emerge as or are designed to be empowering. However, an important aspect of empowerment is a personally meaningful increase in control and power for the individual (Catteneo and Chapman 2011). Thus, an individual-level focus on digital consumer empowerment will illuminate the effectiveness of these empowering processes and their reflections on consumer behaviors while at the same time exploring their interplay with distinct constructs such as psychological ownership (Fuchs et al. 2010) and consumer innovativeness (Parasuraman 2000).

Moreover, just as individual empowerment influences and is influenced by organizational or community empowerment (Zimmerman 1995), the definition of consumer empowerment presented here has a close relationship with macro-level consumer empowerment as market trends are determined by the shaping of consumption experiences. Finally, this definition takes digital consumer empowerment beyond the predominant perspective of information sharing opportunities to be inclusive of other digital practices that have been the subject of a number of scholarly articles on

empowerment such as new forms of creativity (Collins 2010) and empowerment-to-select strategies (Fuchs et al. 2010).

3.3.2 A Typology of Digital Empowerment Processes (DEPs) for Consumers

Consumer empowerment at this revised individual level refers to a psychological construct both with a process and an outcome. Accordingly, from a broad perspective, empowerment processes are "those where people create or are given opportunities to control their own destiny and influence the decisions that affect their lives" (Zimmerman 1995, p. 583) and the outcome of such processes result in a level of being empowered. Similarly, many other researchers define empowerment through processes that allow people to gain increased control over their lives to achieve their life goals (Maton and Salem 1995; Christens et al. 2011). In the marketing and consumer research field, Patrick and Hagtvedt (2012) employ this psychological perspective to empowerment, studying self-talk strategies (i.e., "I don't" vs. "I can't") as an empowerment process that accounts for considerable variance in consumer intentions and actions.

In the domain of digital consumption, the subjective empowerment experience of consumers are shaped through various digital products, services, and practices such as opportunities to bid online for products and barcode scanner apps on mobile phones that can compare prices. I define such consumer technologies as digital empowerment processes (DEPs). The variety in DEPs is also present in the marketing and consumer research through the choice of several different digital spaces as study contexts (e.g., personal web spaces, virtual worlds, online shopping sites). The differentiation goal of this conceptual contribution focuses on the underlying dimensions, along which DEPs can be classified and compared (see MacInnis 2011); thus, I have created a typology that

organizes a variety of DEPs that expand the freedom of and the control over choice and action to shape consumption experiences. Table 3.2 displays this typology with six underlying dimensions (i.e., digital platform usage, power expansion area, outcome, consumer-generated component, representative marketing construct, and possible shortcomings) along with respective selected academic articles and illustrative examples.

In the following sections, each DEP is introduced with its definition and illustrative examples. Accordingly, the definitions are constructed through the underlying dimensions of digital platform usage and power expansion area. Digital platform usage refers to how and why consumers use the specific DEP. Deighton and Kornfeld (2009) have used this dimension to distinguish between interactive marketing paradigms that acknowledge consumers' use of digital technologies in a variety of purposeful and assertive ways. Similarly, I define different DEPs through the ways consumers benefit from them. In addition, a power expansion area is incorporated within the definitions to include the object of control for consumers that expand their freedom of choice and action to shape their consumption experiences. Following this, each DEP is discussed through its outcomes and consumer-generated components. Here, it is important to note that consumer-generated components include but are not limited to user-generated content (UGC), which refers to any digital media content created and publicized by users that are not associated with traditional commercial outlets (Ertimur and Gilly 2012; Hautz et al. 2013). Although UGC is not limited to text, most research on the concept focuses on online consumer reviews (e.g., Ho-Dac, Carson, and Moore 2013; Van Noort and Willemsen 2011). Consumer-generated components in this typology, on the other hand, go beyond not only textual online reviews but all digital content since consumers use

digital technologies to generate material goods as well (e.g., online customization of products to buy). Finally, upon reviewing their representative marketing constructs, possible shortcomings associated with each DEP are considered.

3.3.2.1 Informative Empowerment

3.3.2.1.1 Definition and Illustrative Examples

Informative empowerment refers to any digital process that allows consumers to access, share, and/or exchange consumption-related information, expanding the freedom of choice and action to shape consumption experiences through the control of information on consumer goods and services. Examples include digital platforms where consumers can compare hotel prices (e.g., Trivago), get tips about things to do and places to see in a given destination (e.g., Yelp), learn about a book by simply taking its picture (e.g., SnapTell), and get unbiased advice about a digital camera (e.g., Epinions).

3.3.2.1.2 Outcome and Consumer-Generated Component

Labrecque et al. (2013) differentiates between content production and content consumption in relation to informative empowerment. Accordingly, informative DEPs empower consumers both to produce and share information based on their personal experiences on products and services and to obtain consumption-related information from available resources. Based on the empowerment to produce content, the consumer-generated component of this DEP is information. However, in addition to consumer-generated information in virtual peer-to-peer communities, consumers can also be empowered through information available through technical applications such as SnapTell (see Table 3.2). Another technical application of informative empowerment is

the algorithm-induced recommendations that, upon the purchase of a product or service, display information on what other consumers, who already purchased that product or service, have further purchased. Even though this is known as a manipulative marketing strategy, consumers may benefit from these recommendations as a helpful guide for future purchases (Berthon et al. 2000). This multitude of informative DEPs in digital platforms results in more knowledgeable consumers that are individually empowered to make better educated and more sophisticated consumption decisions (Day 2011; Deighton and Kornfeld 2009; Labrecque et al. 2013).

3.3.2.1.3 Representative Marketing Construct

From a marketing perspective, most of the research that is representative of informative empowerment explores electronic word of mouth (eWOM), which refers to "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau et al. 2004, p. 39). Studies on online consumer reviews (e.g., Ho-Dac et al. 2013) and brand-related user-generated content (e.g., Smith, Fischer, and Yongjian 2012) also contribute to this body of knowledge on informative DEPs. In addition to their effects on sales (Ho-Dac et al. 2013; Sonier, McAlister, and Rutz 2011; Zhu and Zhang 2010), eWOM studies have also generated consumer-focused insights regarding consumers' motives (e.g., Hennig-Thurau et al. 2004), learning processes (e.g., Jayanti and Singh 2010; Zhao et al. 2013), social benefits (e.g., Mathwick et al. 2008), choice of specific linguistic content (e.g., Kronrod and Danziger 2013; Moore 2012), and intentions for negative word of mouth (Ward and Ostrom 2006).

3.3.2.1.4 Possible Shortcomings

Although informative empowerment generally leads to more informed consumers, information abundance and privacy concerns represent possible shortcomings of this type of DEP. First, for the individual consumer, the vast amount of information available in digital platforms may be overwhelming and impede the feeling of control. For instance, Lee and Lee (2004) demonstrate that online information abundance depletes satisfaction and confidence, and creates confusion in consumers. Furthermore, the validity of information available in virtual peer-to-peer communities may be problematic (Jayanti and Singh 2010). Second, easy access to information through digital technologies accompanies privacy concerns for consumers (Peltier, Milne, and Phelps 2009). Thus, a consumer may not be psychologically empowered by these DEPs that enable her to obtain and share information while at the same time allowing marketers to gain insights into her search patterns or consumption experiences.

3.3.2.2 Participative Empowerment

3.3.2.2.1 Definition and Illustrative Examples

Participative empowerment refers to any digital process that allows consumers to participate in supplier processes, expanding the freedom of choice and action to shape consumption experiences through the control of choice set composition. Examples include digital platforms where consumers can engage in new product innovations (e.g., DEWmocracy), score and critique designs to determine what to be marketed next (e.g., Threadless), customize their online purchased products and services from athletic shoes (e.g., NIKEiD) to chocolate (e.g., my M&M's), and bid on airline tickets or vacations to collaboratively determine their prices (e.g., SkyAuction.com).

3.3.2.2.2 Outcome and Consumer-Generated Component

Participation in traditional supplier roles through a variety of digital platforms is the underlying mechanism of participative empowerment. Accordingly, consumers now have the means to be a part of the innovation, design, pricing, and/or promotion processes. In relation to participation in design, Fuchs et al. (2010) differentiate between mass customization, "in which every single customer is empowered to design his or her own product online, which the manufacturer then produces to order" (p. 67), and empowerment-to-select, which is defined as "a strategy firms use to give customers a sense of control over a company's product selection process, allowing them to collectively select the final products the company will later sell to the broader market" (p. 65). Thus, participative DEPs can result in a personalized (i.e., through customization / co-creating with the supplier) or a common (i.e., through collaborative selection / co-creating with the supplier and other consumers) product or service. Nevertheless, a consumer-generated component refers to a specific supplier process, which in return expands the control of choice set composition from the consumer's perspective. Here, it is important to note Wathieu et al.'s (2002) suggestion that "the perception of empowerment will be driven less by the size of the provided choice set than by the consumer's ability to specify and adjust the choice context " (p. 299). Indeed, too much choice does not always lead to freedom and consumer wellbeing (Markus and Schwartz 2010).

3.3.2.2.3 Representative Marketing Construct

Marketing and consumer research on participative empowerment in the domain of digital consumption centers around the construct of co-creation. From a broader

marketing perspective, Vargo and Lusch (2004) recognize the role of the consumer as a coproducer, and set the goal for suppliers to customize their offerings by getting consumers involved to be able to better satisfy their needs. Prahalad and Ramaswamy (2004) emphasize the relevance of this customization goal especially in the era of digital consumer empowerment, while referring to digital platforms as the main opportunity for suppliers in the pursuit of consumer involvement and value creation. Similarly, Ramani and Kumar (2008) focus on "interaction orientation" as a necessary survival tool, and define it as an ability to interact individually with consumers to form on-going lucrative relationships on a customized level. In addition to these customization opportunities, suppliers should also benefit from digital platforms to engage consumers in multiple ways for diverse purposes (Sawhney et al. 2005). For instance, communal design by users is found to have a positive effect on how consumers perceive suppliers regarding their innovation abilities (Schreier, Fuchs, and Dahl 2012).

3.3.2.2.4 Possible Shortcomings

From an individual-level focus in reference to how consumers are psychologically empowered through participative processes, extant research shows that psychological ownership (Fuchs et al. 2010) and participation enjoyment (Yim, Chan, and Lam 2012) are among the individual constructs that are positively associated with co-creation. Contrary to this, perceived lack of competence regarding the performing of the specific supplier process has negative effects on consumers (Chan et al. 2010; Fuchs et al. 2010; Yim et al. 2012). Perceived competence is associated with feelings of self-efficacy pertaining to an activity or to a person's perception of her own capacity to perform the activity (Bandura 1989). Accordingly, Fuchs et al. (2010) have found that the relationship

between participative empowerment (i.e., the empowerment-to-select) and the consumer's individual demand of the co-created product is subject to her perceived competence in the specific supplier process (i.e., selection) such that the positive relationship subsides when the consumer does not believe she has the necessary competence to perform the process. Similarly, studying consumer's participation enjoyment in co-creation, Yim et al. (2012) illustrate its dependence on perceived self-efficacy.

3.3.2.3 Creative (Productive) Empowerment

3.3.2.3.1 Definition and Illustrative Examples

Creative empowerment refers to any digital process that allows consumers to produce and/or display their creations for consumption, expanding the freedom of choice and action to shape consumption experiences through the control of production and ownership. Examples include digital platforms where consumers can post self-created videos (e.g., YouTube), individually or collaboratively write short stories and publish them online to receive feedback (e.g., WikiStory), apply digital filters to their pictures and videos to create artsy visuals (e.g., Instagram), and teach their kids to code in a fun and playful way, allowing them to be able to make digital goods just as easily as they make tangible material goods (e.g., Hopskotch).

3.3.2.3.2 Outcome and Consumer-Generated Component

Creative DEPs provide opportunities for consumers to access digital platforms with digital tools to create, produce, and/or display self creations so that they (and the other consumers) do not have to be dependent on suppliers. For instance, YouTube is a

digital content platform where consumers are empowered to create videos in addition to professionally created supplier videos (Smith, Fischer, and Yongjian 2012). In this case, consumer-generated videos (i.e., product to be consumed by other consumers) bring about consumers as brands that supply digital content. This concept of consumer-as-brand can be traced to self-representation studies in the context of digital consumption (Labrecque et al. 2011; McQuarrie et al. 2013; Schau and Gilly 2003). This empowerment type may result in high levels of psychological ownership as the created digital content represents the consumer herself. Additionally, creative empowerment also allows consumers to produce collaboratively (e.g., WikiStory, Linux, CNN's iReport). Accordingly, user-generated open source products such as software consist of developer communities as well as user communities, and provide an alternative to traditional supplier-provided products (Mallapragada, Grewal, and Lilien 2012).

3.3.2.3.3 Representative Marketing Construct

In addition to being classified into individual and collaborative consumer creations in digital platforms, creative empowerment can be differentiated in reference to the digitally displayed product. Namely, creative empowerment is not limited to digital products in that consumers can also use digital platforms to display (and to sell) their own productions. The online shopping bazaar Etsy is representative of such platforms that empower consumers digitally as producers by giving them the opportunity to set a virtual place "to buy and sell all things handmade" (Walker 2007). Whether the consumer-generated content is a digitally produced or a materially produced and digitally displayed product, the blurring of the roles between the consumers and producers creates a prosumer culture, which is the representative marketing concept of creative DEPs.

Prosumer is not a concept specific to digital consumption; it was first coined by Toffler (1980) referring to consumers that produce their own products and services. Defining four distinct characteristics of prosumption activities (i.e., high cost saving, requiring minimal skill, consuming little time and effort, and resulting in high personal satisfaction), Kottler (1986) advocates that marketers should create opportunities to facilitate such activities instead of battling against them. Digital platforms, that serve to empower consumers in their creative and productive efforts, are therefore outlets of prosumption activities as they facilitate high cost saving (e.g., open source software), require minimal skill (e.g., photo editing apps), consume little time and effort (e.g., display of handmade products in virtual shops), and result in high personal satisfaction (e.g., self-representation opportunities). In reference to digital consumption, Woermann (2012) refers to prosumption as creative consumption, which, for instance, can be observed in "the effort … to create and then share, comment, rate, and reedit social media representations of freeskiing" (p. 621). Similarly, the high potential of digital technologies providing opportunities for prosumption activities has been acknowledged in a number of studies (e.g., Collins 2010; Denegri-Knott and Zwick 2012; Ritzer and Jurgenson 2010).

3.3.2.3.4 Possible Shortcomings

Although digital technologies enable consumers to have a mass audience for their creations (McQuarrie et al. 2013), a possible shortcoming of this empowerment type may be the difficulty to attract attention to their creations. In addition to using traditional keyword search, consumers also explore user-generated or professionally produced digital creations with no clearly defined targets as a means to hedonic browsing

(Goldenberg, Oestreicher-Singer, and Reichman 2012). How do consumers market their self-generated creations? Do they need to be displayed for mass audiences in order to create value for its creator? Regarding these types of questions, some researchers emphasize the social ties of the prosumer to explore the consumption of the consumer-generated creations by other consumers (Goldenberg et al 2012; Mallapragada et al. 2012; Ransbotham, Kane, and Lurie 2012).

3.3.2.4 Experiential Empowerment

3.3.2.4.1 Definition and Illustrative Examples

Experiential empowerment refers to any digital process that allows consumers to engage in activities that actualize their consumption fantasies—and may not be available or easily accessed through material goods and services—expanding the freedom of choice and action to shape consumption experiences through the control of available experiences. Examples include digital platforms where consumers can play the piano without the necessity of an actual piano (e.g., Virtualpiano.net), participate in a beach volleyball game at their homes (e.g., Kinect), own a virtual pet to raise, feed, clean, and train (e.g. Hatch), and manage a virtual football team that consists of actual NFL players to compete with their friends (e.g., fantasy football).

3.3.2.4.2 Outcome and Consumer-Generated Component

This type of digital empowerment results in "consumption-like experiences" (Denegri-Knott and Molesworth 2010) that are digitally simulated and/or altered reflections of real world activities. Digital simulations, that enable such consumption-like experiences, empower consumers by creating new realities to observe, enter, and actually

experience (Aukstalnis and Blatner 1992; Firat and Venkatesh 1995). Thus, the consumer-generated component of this DEP refers to the experiences themselves. Kozinets and Kedzior (2009) coin the concept of re-worlding to refer to such alternative digital realities that offer new worlds to be experienced with flexible rules such as "the ability to affect the forces of nature and to choose the position of the virtual sun or the stimulated weather conditions at any particular point in time" (p. 12). Consequently, an important aspect of experiential DEPs is the availability of experiences beyond what the material world can offer (Denegri-Knott and Molesworth 2010).

In addition to expanding consumer experiences beyond the limit of material goods and services, experiential empowerment is also representative through easy access to experiences that are virtual imitations of their material counterparts. For instance, in reference to shopping experiences, Berthon et al. (2000) draw attention to the widespread availability of virtual reality and predict its increasing substitution with exposure to real products: "If you can spin it around on the PC monitor and get a good look in stereo 3-D you might be willing to pass up the opportunity to kick the tires" (p. 64). Lowe's Canada's virtual product experience app powered by the Vuforia™ platform is representative of such experiential DEPs. This app enables appliance images to come out virtually into the real world and allows consumers to actively engage and interact with the products such as turning on a dryer to see how it spins and opening a refrigerator to check out its compartments.

3.3.2.4.3 Representative Marketing Construct

In the marketing and consumer literature, this empowerment type can be represented with the concept of digital virtual consumption (DVC), which is in between

virtual or imaginary consumption and material consumption as "the object of consumption does not only reside in the consumer's mind, but is experienced as owned and used within the parameters of specific digital virtual spaces … while lack[ing] material substance" (Denegri-Knott and Molesworth, pp. 109-110). Although there are many digital platforms with DVC experiences, consumer empowerment has not been studied in reference to the availability of such digital experiences. Nevertheless, experiential digital platforms have been the context of a number of studies. For instance, Kozinets et al. (2004), exploring consumer experiences in ESPN Zone Chicago, have illustrated "the creation of new worlds that consumers interpreted as different realities: from escaping home to being transported to the ballpark, being caught up in simulations of fly-fishing and horse racing, hang gliding and impossible bowling simulations, or male fantasies that one is the master of a perfect domestic moment" (p. 669). Furthermore, Second Life—an online virtual world game with several consumer experiences— has been a popular research context among researchers (Boellstorff 2008; Bonsu and Darmody 2008; Guo and Barnes 2011).

3.3.2.4.4 Possible Shortcomings

Digital technologies have empowered consumers to engage in new forms of experience for consumers; however, this expansion is not without problems. DVC experiences have been subject to controversy with their potential for alienation and passivity (Denegri-Knott and Molesworth 2010). The ease with which consumers can access these digital experiences and satisfy their various needs through experiential empowerment processes may result in consumers continuously seeking comfort in the

actualization of their fantasies in virtual worlds and retreating from real world activities that do not offer the same ease and range with the control of experiences.

3.4 An Integrative Framework of Sociotechnical Empowerment

As previously discussed, a sociotechnical perspective on digital empowerment of consumers calls for its exploration in reference to the social interactions embedded in the empowering processes of digital consumption. Figure 3.1 presents such an exploration with an integrative framework on how the interplay between the social and technical elements during digital consumption should be investigated in terms of their simultaneous impacts on individual consumers. Accordingly, an individual focus on empowerment requires the distinction between empowerment processes (i.e., external) and psychological empowerment (i.e., internal) as an outcome of such processes. In Figure 3.1 external empowerment is represented by DEPs, which, along with social interactions, construct sociotechnical empowerment processes and affect psychological empowerment of individual consumers. This internal feeling of empowerment has the potential to alter various consumer responses toward a wide range of products, services, and practices—whether they are digital or not. These relationships are likely to be moderated and/or mediated with many concepts such as the feeling of crowding, perceived competence, the need for uniqueness, and psychological ownership.

In the following sections, first, I discuss the distinction between external and internal consumer empowerment. Second, I adopt Latané's (1981) social impact theory and evaluate its fundamental characteristics in relation to the social interactions during digital consumption. Finally, I articulate the main aspects of this framework in more detail in the last sections, in which I discuss each specific DEP in the typology from a

sociotechnical perspective that bridges them with these fundamental characteristics of the social impact theory. Along these subsections, I identify research gaps and opportunities to present further research directions along with potential managerial implications.

3.4.1 External versus Internal Consumer Empowerment

In order to present a solid base for the sociotechnical empowerment framework, thus far, I have emphasized an individual-level perspective on consumer empowerment and a typology that differentiates across four DEPs (i.e., informative, participative, creative, and experiential). Accordingly, an individual focus on empowerment requires the distinction between empowerment processes and psychological empowerment as an outcome of such processes. From a broad interdisciplinary perspective, Diener and Biswas-Diener (2005) differentiate between external and internal empowerment, recognizing the situational conditions that allows the person to act effectively as external and the person's psychological belief in this action to be effective as internal empowerment. Respectively, whether an external process is empowering on a personal basis can only be determined by the person's perceptions of the situation. In other words, external empowering processes are necessary but not always sufficient for the person to feel empowered.

In relation to consumer empowerment in the domain of digital consumption, this assumption generates the fact that just because consumers are exposed to DEPs (i.e., external empowerment) does not necessarily mean that they will individually perceive to be empowered (i.e., internal empowerment). There are two important aspects of this distinction. First, this is analogous to an influential role of perceived empowerment on the relationship between DEPs and consumer responses. Second, it allows for a more

systemized investigation of digital consumer empowerment by conceptualizing external DEPs as potential marketing tools for managers, catering to the subjective feeling of empowerment in consumers that may result in more favorable consumer responses.

In order to benefit from these leverages, research is needed to develop a distinct construct to measure consumers' psychological empowerment through digital technologies. Previous marketing and consumer research has utilized a generic two-item (i.e., "empowered" and "in control") scale for psychological empowerment (Patrick and Hagtvedt 2012). However, given the various ways consumers are empowered through digital technologies, a more specific scale may be developed to evaluate the degree to which consumers perceive such digital empowerment. The contributions of such a scale would be twofold. First, both researchers and managers would be able to assess the effectiveness of DEPs in terms of consumers' subjective empowerment feelings upon using such processes. Second, it would be a practical tool to investigate how this internal empowerment, resulting from digital consumption, influences consumer behavior on a wide range of thoughts, feelings, intentions, and actions toward both digital and material consumer offerings. From a theoretical perspective, this would contribute not only to the digital consumption literature but also to the literature on how power affects consumers (Rucker et al. 2011; Rucker and Galinsky 2008; Jin et al. 2014). From a managerial perspective, this would have implications regarding how marketers can benefit from DEPs as strategic marketing tools and evaluate the effectiveness of such empowerment strategies.

3.4.2 Social Interactions during Digital Consumption

In order to account for the ways consumers are simultaneously influenced by social interactions during digital consumption, the framework adopts Latané's (1981) social impact theory, which has been established with a broad definition to provide an encompassing theoretical tool for a variety of disciplines. Accordingly, the theory defines social impact as "any of the great variety of changes in physiological states and subjective feelings, motives and emotions, cognitions and beliefs, values and behavior, that occur in an individual, human or animal, as a result of the real, implied, or imagined presence or actions of other individuals" (p. 343). Synthesizing this definition with digital consumer offerings emphasizes the impact that the social components of such offerings may have on consumers regarding their feelings, motives, emotions, cognitions, beliefs, values, and behavior. In this regard, Latané describes three fundamental characteristics that determine such impact of social sources: size, immediacy, and strength.

3.4.2.1 Social Size

A growth in the number of people in a social presence has an increasing impact on an individual's feelings, thoughts, intentions, and actions (Latané 1981). This assumption (along with immediacy and strength assumptions) has been demonstrated in various settings (e.g., tipping in restaurants [Lynn and Latané 1984], language learning [Nettle 1999], visiting a zoo [Sedikides and Jackson 1990]) with diverse outcome variables ranging from behavioral contagion and conformity to embarrassment and vicarious conditioning. Exploring the impact of social size on consumers' emotions and self-presentation behaviors in a noninteractive retail setting, Argo, Dahl, and Manchanda (2005) illustrate an interesting bi-directional effect: "when social size increased from no

one to one person, negative emotions decreased (positive emotions increased) and then inverted when the social size increased from one to three people" (p. 209). This result is important to provide more comprehensive insights regarding social size impact on consumers. Accordingly, the inclusion of a social source in the consumption setting is mostly associated with positive feelings; however, the increase in the social size may have varying effects in different contexts depending on the existence of a negative crowding feeling. This feeling of crowding arises from perceived restriction and invasion (Hui and Bateson 1991; Stokols 1972).

In the domain of digital consumption, I define social size as the number of available social interactions during a consumer's use of the digital process. Before proceeding, it is important to reiterate two points to clarify what is meant by 'available social interactions'. First, recall that the social impact theory includes not only real but also implied or imagined presence or action of others as an influential source on individuals. For instance, Wang et al. (2007) demonstrate the effect of virtual social presence on consumers in an online retail setting. Accordingly, the inclusion of social cues (i.e., humanlike characteristics) in the website creates enhanced socialness perceptions with a positive impact on consumers' likelihood to shop, willingness to buy, and willingness to recommend to friends. Second, the availability of social interactions may be investigated regarding the inclusion of and/or the increase in social sources as these two perspectives may result in different outcomes depending on the negative feeling of crowding, which is associated with "the negative subjective experience of certain density levels" (Rapoport 1975, p. 134).

Social size presents a thought-provoking concept in the domain of digital consumption given the fact that digital technologies free their users from the constraints of space, and, thus, allow for a vast amount of social interactions that are not limited to geographical restrictions that cause density levels. This poses interesting theoretical and practical questions regarding social size in digital empowering settings: Do consumers experience crowding in digital settings? Does the inclusion of available social interactions always result in enhanced positive consumer outcomes? At what point does the positive effect of social size subside or invert? How do the inclusion of and/or the increase in available social interactions affect perceived empowerment? Is there an interaction between empowering and social components of digital consumer offerings in relation to social size? Should marketers control the size of the members in their customer community programs?

3.4.2.2 Social Immediacy

Immediacy is an individual's closeness in space or time to the social source (Latané 1981). Accordingly, an individual will experience more impact when the social source is close in space or time. In a noninteractive retail setting, Argo et al. (2005) have demonstrated this effect of social immediacy in reference to its interaction with social size. Accordingly, social immediacy moderates the impact of social size on emotions and brand selection in that an increase in social size has an impact on consumer outcomes only when a noninteractive social presence is close in space. Here, it is necessary to note that although the individual effects of each social impact characteristics have been acknowledged and demonstrated in different settings, their predicted interactions (i.e., the total social impact is a multiplicative function of these characteristics) were not supported

in a number studies (e.g., Sedikides and Jackson 1990). This suggests a contextual perspective on the interactions among social impact characteristics.

In the context of digital consumption, the phenomenon of immediacy requires a conceptual alteration given the space-free and time-shifting nature of digital platforms that allows consumers to access each other anytime and virtually anywhere (Belk 2013). Oxford Dictionaries define immediate in terms of being nearest in relationship and rank in addition to being nearest in space. Thus, in the domain of digital consumption, social immediacy refers to being close to the social sources in relationship and rank rather than in space or time. This perspective has two important aspects. First, social immediacy in digital platforms can be attributed to a continuum between familiar others (i.e., consumer's personal social environment) and unknown or anonymous others. Conforming to this attribution, Yadav et al. (2013) defines familiar others with relationships "stem[ming] from meaningful, sustained social interactions and personal connections" (p. 313), and emphasize that in digital environments comments from such familiar others may be more influential than those from unfamiliar others. Second, consumers may perceive a closeness with social sources due to similar ranks such as peer groups. Hoffman, Novak, and Stein (2013) draw attention to the influential effects of consumption cues of similar others that are displayed in digital platforms on a consumer's own consumption patterns.

In addition, I propose several theoretical and practical questions: How does social proximity impact the effectiveness of sociotechnical empowerment processes? Does social proximity moderate the impact of social size on the relationship between empowerment processes and consumer responses? Does social proximity in

sociotechnical empowerment processes have an influence on perceived empowerment? Should marketers apply strategies to enhance social proximity among their customer communities?

3.4.2.3 Social Strength

The power and importance of a social source has a positive relationship with its impact on an individual's feelings, thoughts, intentions, and actions (Latané 1981). This proposition brings about a broad spectrum of strength that can be contextually determined. In reference to the context of digital consumption, basically, the closeness of the source in relationship and rank (i.e., social immediacy in digital consumption) may also be attributed to an importance of the social source. However, for conceptual clarity, I will leave relational importance out of the definition of social strength in digital consumption since I have defined social immediacy in reference to closeness in relationship. Accordingly, in this framework, social strength is attributed to the social source's status pertaining to the specific DEP. For instance, online travel agencies sometimes display the best deal obtained among consumers with similar itineraries and/or travel periods. According to Wathieu et al. (2002), this may provide a tool for consumers to evaluate their own empowerment progress. It can also have substantial impacts on one's perceived competence.

This brings about compelling theoretical and practical questions: How do the presence and action of consumers, who are higher in status regarding the specific empowerment process, influence consumer's own psychological empowerment? Does perceived competence have any role in this relationship? How does close proximity to

more powerful social sources affect consumers? Should marketers promote or avoid variety in social strength in their customer community programs?

3.4.3 Sociotechnical Empowerment Processes

From a sociotechnical perspective, the interplay between social and technical elements during digital consumption should be explored in terms of their simultaneous impacts on consumer outcomes by bridging DEPs with social interaction characteristics. Thus, sociotechnical empowerment processes incorporate both technical (i.e., DEPs) and social (i.e., social interaction characteristics) components in their offerings. For instance, Nike+ running app does not only provide technical features that allow its users to track their runs in various informative ways but also includes tools to interact with others: Consumers can use the app to post on Facebook that they are on a run, and every time one of their friends 'likes' the post, they hear applause during the run. Applying a sociotechnical perspective on such empowerment processes provides a means to study the best match of technical and social components in digital consumer offerings for the optimum consumer satisfaction.

3.4.3.1 A Sociotechnical Perspective on Informative Empowerment

Recall that informative DEPs include virtual peer-to-peer communities and technical applications that provide consumers with control over information on various consumption topics. Among the four DEPs, informative empowerment has been the most studied in consumer and marketing research under such concepts as eWOM, user-generated content, and consumer reviews. There has been a substantial body of research on how these peer-to-peer interactions impact consumers (e.g., Jayanti and Singh 2010; Mathwick et al. 2008) and suppliers (e.g., Ho-Dac et al. 2013; Zhu and Zhang 2010).

When it comes to such peer-to-peer digital settings, the integration of social interactions and empowerment is imminent as the consumer is empowered through the information generated by social sources. Furthermore, community participation is an empirically demonstrated antecedent of psychological empowerment (Christens et al. 2011; Maton and Salem 1995); thus, a feeling of perceived empowerment may be associated with just participating in digital peer-to-peer communities. In the field of marketing and consumer research, Jayanti and Singh (2010) provide an interpretative inquiry on the relationship between social learning and empowered action in the context of health-related online communities. However, in general, existing research has failed to capture the complete picture of this relationship. As peer-to-peer communities continue to evolve and expand into various consumption contexts, it is necessary to understand how different social interaction characteristics of this type of DEP may influence various consumer responses through making them feel psychologically empowered.

First, to address this gap, social size can be considered. Regarding the social size impact on informative empowerment, research needs to focus more closely on concepts such as the feeling of crowding (see Hui and Bateson 1991; Stokols 1972) in peer-to-peer communities. The increasing number of consumers in such communities is likely to generate an information abundance, which may present a negative effect on consumers. Thus, social size represents an influential factor that is likely to affect how consumers perceive crowding while using informative DEPs. This perspective requires a careful conceptualization of perceived crowding in digital settings. Furthermore, it represents a fruitful avenue to expand research on peer-to-peer marketing communications (i.e., WOM Marketing in online communities; see Kozinets et al. 2010) as well as providing

implications for managers who design and operate customer community programs that "offer online and/or offline venues for consumers to meet and interact with one another, and by orchestrating, moderating, or facilitating consumer-to-consumer social interactions" (Algesheimer et al. 2010, p. 766). In this regard, an important yet unexplored question is whether firms should manage the social size of such community programs.

Second, peer-to-peer informative DEPs may also benefit from perspectives on social immediacy and social strength. Given that consumers may put more value on information provided by familiar others (Yadav et al. 2013), similar others (Hoffman et al. 2013), and powerful others (Labrecque et al. 2013), both social immediacy and social strength represent possible factors explaining consumers' psychological empowerment resulting from informative DEPs. In recent years, online peer-to-peer communities have increasingly incorporated information on social sources regarding their immediacy and strength. For instance, in relation to social immediacy, Murad provides information on consumers who review products on their website regarding their location, gender, and age range, whereas in respect to social strength, Rotten Tomatoes—a website that provides reviews, information, and news of films—assigns a 'top critic' role on some of its community members. Thus, theoretical work related to such social impact on how consumers perceive informative DEPs may contribute to eWOM literature as well as providing valuable insights for managers on whether they should strive for more sources of social immediacy and strength in their informative DEP strategies.

In addition to making consumer-generated information accessible, digital technologies empower consumers by providing technical applications that generate

information. Marketplace trends and practices of such technical sources of informative empowerment have advanced much more rapidly than corresponding research efforts. Examples include online shopping websites providing detailed product information, shopping apps displaying nearby store locations with available products, and activity-specific apps such as running apps collecting and organizing information on the user's running performance. Thus, consumers have the means to be informatively empowered without depending on other consumers for knowledge. Nevertheless, social components can be (and in practice mostly are) integrated into such digital offerings, providing an adequate manipulation venue to investigate the relationship between informative DEPs and social interactions.

Given the fact that having power accompanies a decrease in the relevance of others in many studies (e.g., Galinsky et al. 2006; Jin et al 2014; Rucker et al. 2011), the inclusion of social components into these technical applications—where consumers are empowered with information by technological means—also provides another interesting perspective on the effectiveness of digital consumer offerings in reference to social size, immediacy, and strength. An area for further research is identifying whether social impact diminishes as consumers perceive to be more empowered through digital technologies. This negative impact of empowerment on social dependence should be considered in future studies regarding informative DEPs.

Finally, in relation to technical applications, existing marketing tools such as algorithm-induced recommendations in online shopping sites can be investigated to study social size, social immediacy—in terms of similarity—, and social strength impact on the effectiveness of informative DEPs. Such recommendations accompany information on a

specific product by displaying alternative products bought by other consumers who bought that specific product. According to Latané (1981), it is not only the presence but also the actions of others that have an influence on individuals. Given that the decisions made by others are likely to assist consumers with their consumption decisions (Goldenberg et al. 2012; Wathieu et al. 2000), providing information on social size (i.e., how many consumers bought both the alternative and the specific product), social immediacy (i.e., what kind of consumers bought both the alternative and the specific product), and social strength (i.e., whether consumers with status bought both the alternative and the specific product) associated with algorithm-induced recommendations may produce new insights into the effectiveness of digital consumer offerings from both theoretical and managerial perspectives.

3.4.3.2 A Sociotechnical Perspective on Participative Empowerment

Recall that participative DEPs empower consumers to participate in specific supplier practices through customization (e.g., NIKEiD) or collaborative selection (e.g., Threadless, DEWmocracy). Given the difference between individually customized and collaboratively selected products, and the variety of supplier practices that allow consumers to interact with the firm, there are a number of perspectives to investigate the relationship between participative DEPs and social interactions. However, extant research on participative empowerment has failed to capture the role of social interactions on such practices.

First, to address this gap, collaboratively selected products, which have recently been an important topic of study (e.g., Fuchs et al. 2010; Schreier et al 2012; Syam and Pazgal 2013), can be studied with reference to collaborating consumers as source for

social impact. For instance, Threadless provides an online community where users submit, score, and critique designs to determine what to be marketed next worldwide through the online store and at their retail store in Chicago. From an individual-level perspective, Fuchs et al. (2010) provide empirical evidence of the positive effect of such participative DEPs on the consumer's demand (i.e., purchase intention and willingness to pay) for the co-created product through psychological ownership, and suggest that this psychological ownership is associated with the feeling of having an impact. The theoretical work related to such co-created products can be enhanced by adopting a sociotechnical perspective and developing a theoretical relationship between such participative DEPs and social interactions. For instance, a growth in the social size of the collaborating consumers may reduce the individual impact that the consumer perceives to have on the resulting product. This represents a second direction for studying the feeling of crowding in digital settings (in addition to information abundance in informative DEPs).

Another possible factor affecting the dynamics between participative DEPs and social interactions is perceived competence. Extant research has demonstrated the influential role of perceived competence in altering the relationship between co-creation and positive consumer responses (Fuchs et al. 2010; Yim et al. 2012). Accordingly, if consumers believe they are not competent to participate in the specific supplier process, the positive relationship between empowerment and consumer response diminishes; however, when they believe they have the competence, it increases the strength of the relationship. This provides a valuable insight to study the relationship between consumers' collaborative participation in production and social strength, since the status

of other collaborators may be associated with a decrease in one's own perceived competence. An example can be found in the participative DEP of Threadless: Each collaborator in the Threadless community has a profile that presents the numbers of following users, followers, design ideas scored, t-shirts helped get made, average score given, designs submitted, and designs printed. These numbers may establish a status for each collaborator that may be a reference point for another's own perceived competence, having a possible impact on the effectiveness of such participative DEPs.

Theoretical work related to collaboratively selected products can also be enhanced by the interaction between participative DEPs and social immediacy. Accordingly, social immediacy may have a positive impact on the effectiveness of DEPs that allow consumers to participate collaboratively in the production process. Bendapudi and Leone (2003) suggest that co-creation may benefit from the relationship between co-creation partners. Although they focus on the firm-consumer relationship, consumer-consumer relationships in collaborative participation in production should benefit from the same point of view.

A second perspective on participative empowerment refers to customization. During this kind of DEP, the consumer interacts online with the supplier to co-create a personal product. Thus, social source does not refer to other consumers as collaborators. Nevertheless, in practice, there are numerous ways to incorporate social components into digital customization processes. For instance, Shoes of Pray is a multi-channel retail brand that empowers consumers to design their own shoes online. In addition to creating and ordering custom shoe designs using online tools, consumers can display their creations on their Shoes of Pray or Facebook profiles whether they order them or not,

making them available for others' evaluations. Integration of such social interactions into participative DEPs may have important effects on the co-creator's emotions, thoughts, intentions, and actions regarding the co-created product. The use of others' evaluations in consumption decisions has been studied expansively in marketing and consumer research (e.g., Bearden and Etzel 1982; Witt and Bruce 1972), demonstrating a positive effect of social approval. Accordingly, the more the number (i.e., social size), the closeness (i.e., social immediacy), and the status (i.e., social strength) of other consumers, who evaluate the customized product positively, the more positive the consumer may respond to the customized product. Another important direction for studying customization-related participative DEPs involves examining consumers' need for uniqueness, which may reduce consumers' willingness and desire to display the customized product online if other consumers have the means to order it through certain social commerce tools.

From a theoretical perspective, these research directions extend the recently growing literature on participative empowerment by accounting for its integration with social influence on consumption. However, this integration is not just a fertile ground for research; it also provides insights for managers on how to include and optimize their social commerce tools while providing a digital means for consumers to participate in traditional supplier roles.

3.4.3.3 A Sociotechnical Perspective on Creative Empowerment

Creative empowerment differentiates from participation in production in a number of aspects such as the branding and the propriety rights of the created product. While participative processes allow consumers to be a part of the supplier processes,

creative processes designate consumers as suppliers. In spite of these distinctive differences, from an individual-level perspective, the social impact during creative processes should be analogous to that during co-creation with suppliers. Thus, research directions proposed for participative empowerment should hold for both collaborative and individual creative empowerment, but they may be associated with stronger effects. This expectation of stronger effects can be explained through another assumption of the social impact theory (Latané 1981), which states that if there are other targets of social impact other than the individual, there will be a division of impact, reducing it for the individual. Accordingly, in participative processes the suppliers—traditional producers—represent an important target given their association with the co-created or customized products, whereas in creative processes consumers become the prosumers as the main target of social impact.

Understanding the dynamics and relevance of creative empowerment processes is of great relevance for managers. For instance, Kottler (1986) advocates that marketers should create opportunities to facilitate prosumption instead of battling against it. For instance, Lipton created a digital platform for consumers with tools to create their personal greeting cards to celebrate Chinese New Year 2010. Although the created product included the branding of Lipton, the control of production and ownership of the greeting card belonged to consumers with no charge. Within five weeks of its launch, this campaign engaged over 100 million users, who sent over 45 million warm greetings (AKQA 2013). Thus, creative empowerment processes, that are facilitated by suppliers but are not part of their product portfolio, may increase consumer engagement with the brand. Taken together, studying in further detail how the technical and social components

of such processes should be arranged for optimum consumer satisfaction and engagement may provide important implications for managers as well as scholars.

3.4.3.4 A Sociotechnical Perspective on Experiential Empowerment

Consumers engage in a variety of digital experiences that empower them to actualize their consumption fantasies such as being the general manager of a virtual football team or participating in a virtual triathlon. Surprisingly, little scholarship on consuming experiences in digital spaces exists in marketing and consumer research, despite their everyday applications (Denegri-Knott and Molesworth 2010). Thus, experiential empowerment is the least studied and explored among DEPs, representing a fertile ground for research with much to be gained through a sociotechnical perspective.

When it comes to experiences in general, many consumption activities such as beach clubs, skiing, watching TV, or taking cooking lessons involve the presence of others. Digital experiences are no different in that regard—maybe even more so given the space-free characteristics of digital technologies that allow people to connect without necessarily being in the same place. This enhanced sociability of digital platforms allows people to do things together even when they are geographically apart. Van Boven and Gilovich (2003) acknowledge that the reason why people put more value in experiences may be their strong social associations. Thus, integrating social interactions into experiential DEPs should provide valuable insights on consumer responses regarding the experience. For instance, online games empower consumers to experience many activities that the material world cannot offer but "once the game becomes a social experience, this experience is transposed beyond the playing moment" (Fleck et al. 2013), making the experience a more real part of their lives beyond actualizing their fantasies.

Regarding social impact characteristics, social immediacy is likely to play a positive role on consumer responses to the experience. However, the impacts of social size and social strength may vary on an experience-specific level. For instance, consumers may have more positive feelings towards massive multiplayer online games as the social size of the experience grows; however, participating in a chat screen while watching an event online may become more difficult with an increase in social size and may cause a feeling of crowding in consumers. In particular, another area for further research is conceptualizing digital experiences in relation to certain characteristics (e.g., competition, exploration, entertainment) to be investigated more thoroughly with a sociotechnical perspective.

From a managerial perspective, experiential empowerment represents another influential tool for consumer engagement. From a psychological perspective, experiences generate more positive feelings in people than material goods do (Nicolao et al. 2009; Van Boven and Gilovich 2003). Creating digital experiences for consumers that can be easily accessible should then create more positive feelings for consumers, which may lead to more positive brand associations. For instance, Heineken created a game—both online and mobile—that makes watching live soccer on TV a social experience through anticipating the outcome of game moments in real time while competing with friends or other spectators from around the world. Thus, Heineken has empowered consumers with the availability of a new digital experience that complements a real-life activity while at the same time delivering a full 90 minutes of brand engagement every game. A sociotechnical perspective on such experiential empowerment processes should then seem particularly attractive to fully comprehend the dynamics and provide the best digital

offering with tools that manage social size, immediacy, and strength for optimum consumer satisfaction. Thus, there is a relevant need to investigate and theorize experiential DEPs in relation to their interaction with social impact characteristics.

3.5 Conclusion

This essay is a conceptual exploration that delves into consumer empowerment in digital platforms with a specific focus on available social interactions impacting the effectiveness of such processes that empower consumers. The goal is to push the field to think more clearly and broadly about consumer empowerment in this digital age while at the same time acknowledging its inevitable relationship with social interactions. This goal also provides valuable insights for managers who want to optimize the social and technical components of their digital offerings for the most desirable consumer responses.

Through this conceptual exploration, the essay contributes to the marketing and consumer research literature in a number of ways. First, it provides a revised individual-level perspective on consumer empowerment that includes different approaches to empowerment without limiting its scope to a power struggle between suppliers and consumers. This perspective is important as it allows managers to empower themselves while at the same time providing DEPs for consumers that can expand consumer control over consumption practices. Second, it organizes an expansive typology that categorizes DEPs that provide opportunities for information, participation, creation, and experiences in digital platforms. This typology illustrates differentiating characteristics among empowerment processes that are available in digital platforms, and summarizes previous studies on empowerment respectively, while at the same time introducing experiential empowerment as a fertile research ground for scholars and an influential marketing tool

for managers. Third, it expands the consumer empowerment literature by accounting for its dynamics with available social interactions during DEPs. This expansion is explored through an integrative framework that bridges social impact theory (Latané 1981) with the typology on consumer empowerment in the domain of digital consumption, identifying literature gaps and providing research directions and managerial implications.

Table 3.1
Consumer Empowerment Definitions

Author(s)	Year	Journal	Definition / Explanation
Berthon, Holbrook, and Hulbert	2000	Journal of Interactive Marketing	"… customer empowerment that has accompanied the growth of the World Wide Web. Consumers now have the ability to talk back in public and to talk to each other. …. many or most customers do not belong to any one institution nor does any particular authority control them (p. 60)."
Wathieu et al.	2002	Marketing Letters	"[T]he ability to shape (i.e., to expand as well as to constrain) the composition of one's choice set is a key determinant of the experience of empowerment. Progress cues and information about other consumers are also likely to enhance that same experience, as choice processes becomes more flexible and sophisticated." (p. 303)
Denegri-Knott, Zwick, and Schroeder	2006	European Journal of Marketing (Consumer empowerment special issue)	"Consumer empowerment takes on many different guises depending on the intellectual tradition and conceptual lens used to identify, delimit and measure power " (p. 963). "Instead of quantifying levels of power and pondering how the seduced are oppressed, marketing and consumer research should attempt to conceptualize consumer empowerment as generated via the iterative interplay between consumers and producers. …. the new logic of marketing implies that the success of a new product may no longer be determined by its value-added, but rather by the range of manipulations it allows the customer to make. It is a transition from a definition of value as enclosed in the product or service to one where value in fact means empowering the customer to customize" (p. 965).
Pires, Stanton, and Rita	2006	European Journal of Marketing (Consumer empowerment special issue)	"… consumer empowerment is about increasing consumer value by providing additional access, content, education and commerce to wherever the consumer is located. It involves helping consumers choose what they want, when they want it, on their own terms" (p. 939).
Wright, Newman, and Dennis	2006	European Journal of Marketing (Consumer empowerment special issue)	"Marketing textbooks tend to portray the marketplace as a battlefield between competing suppliers and between suppliers and consumers. In these contexts the ultimate decision are made by consumers through their various abilities to exercise their choices of whether to buy or not to buy in the last resort. These are consumer empowerments." (p. 926).

Consumer Empowerment Definitions (Cont'd)

Author(s)	Year	Journal	Definition / Explanation
Ramani and Kumar	2008	Journal of Marketing	"Customer empowerment reflects the extent to which a firm provides its customers avenues to (1) connect with the firm and actively shape the nature of transactions and (2) connect and collaborate with each other by sharing information; praise; criticism; suggestions; and ideas about its products, services, and policies" (pp. 28-29).
Deighton and Kornfeld	2009	Journal of Interactive Marketing	"The really surprising and interesting events of the last decade have not been those that gave power to the marketer. Rather they were those that empowered consumers. …. The digital innovations of the last decade made it effortless, indeed second nature, for audiences to talk back and to talk to each other " (p. 4).
Chan, Yin, and Lam	2010	Journal of Marketing	"A shift of power to customers through [customer participation]" (p. 51).
Collins	2010	Journal of Consumer Culture	"Taglines such as YouTube's 'broadcast yourself ', Apple's 'rip, mix and burn' and Lulu's 'publish your words, your art – for fun or profit' echo the creative empowerment that has accompanied the mass adoption of digital technologies and the rise of Web 2.0 applications" (p. 39). "Digital technologies have empowered consumers in unprecedented ways and the promises of new forms of creativity have led to mass prosumerism" (p. 42).
Fuchs, Prandelli, and Schreier	2010	Journal of Marketing	"For the purposes of this research, we define empowerment as a strategy firms use to give customers a sense of control over a company's product selection process, allowing them to collectively select the final products the company will later sell to the broader market" (p. 65).
Patrick and Hagtvedt	2012	Journal of Consumer Research	"… we conceptualize empowerment as a feeling of strength and control that in turn may help motivate goal pursuit" (p. 373)
Labrecque et al.	2013	Journal of Interactive Marketing	"In the context of this research, we define power as the asymmetric ability to control people or valued resources in online social relations. …. Finally, the term empowerment is very common with respect to developments in the Internet and social media. It refers to the dynamic process of gaining power through action by changing the status quo in current power balances" (p. 258).

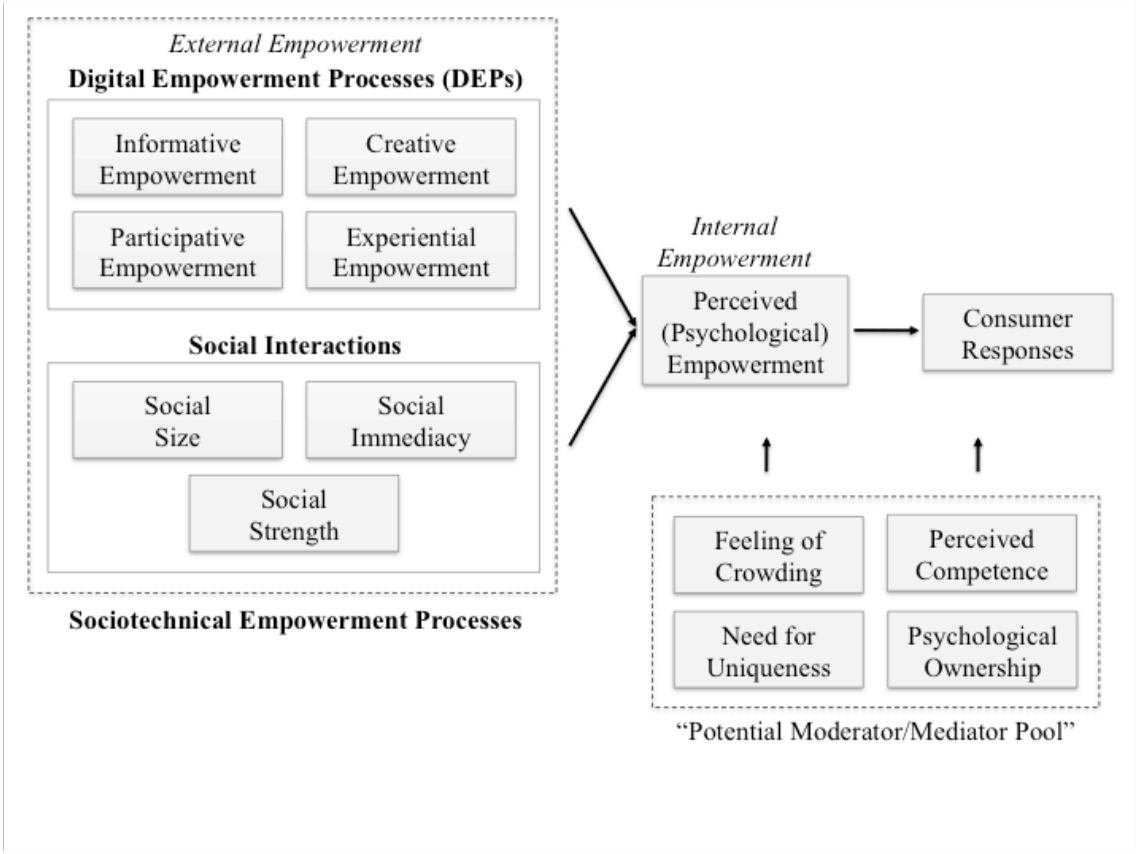
Table 3.2

A Typology of Digital Consumer Empowerment Processes

	Informative Empowerment	**Participative Empowerment**	**Creative (Productive) Empowerment**	**Experiential Empowerment**
Digital Platform Usage	To access, share, and/or exchange information	To participate in supplier processes	To create and display for consumption	To actualize consumption fantasies
Power Expansion Area	Control of information on consumption	Control of choice set composition	Control of production and ownership	Control of available experiences
Outcome	Consumer knowledge	Product Customization / Selection	Consumer as the brand	Consumption-like experiences (Virtual imitations)
Consumer-Generated Component	Information	A specific supplier process (e.g., design, price)	Product	Experience
Representative Marketing Construct	eWOM	Co-creation	Prosumption	Digital virtual consumption (DVC)
Possible Shortcoming	Information abundance / Privacy concerns	(Perceived) competence	Lack of attention	Alienation / Passivity
Selected Academic Article(s)	Mathwick et al. (2008) Kozinets et al. (2010)	Sawhney et al. (2005) Fuchs et al. (2010)	Collins (2010) Goldenberg et al. (2012)	Denegri-Knott and Molesworth (2010)
Illustrative Example(s)	*Epinions*: a digital platform for valuable consumer insight, unbiased advice, in-depth product evaluations and personalized recommendations *SnapTell*: a smart phone application that pulls up prices, user reviews, and nearby stores upon simply taking a picture of any book, CD, DVD, or video game	*NIKEiD*: an online shopping option for Nike consumers to customize their shoes and gear to represent their personalized style *SkyAuction.com*: an online travel auction site where the pricing of airline tickets and vacations is determined by bidding consumers	*WikiStory*: a digital writing platform where consumers can write a short story together with or alone sharing it with and receiving feedback from other users *Instagram*: a digital photo and video sharing service that enables its consumers to take pictures and videos and customize them with digital filters	*Virtualpiano.net*: an online web space that enables its consumers to play the piano on their computers *Online fantasy football*: an interactive digital competition, in which consumers compete against each other managing virtual football teams built from real NFL players

Figure 3.1

An Integrative Framework of Sociotechnical Empowerment



CHAPTER 4

A SOCIOTECHNICAL PERSPECTIVE ON COMPLEMENTARY CONSUMPTION

4.1 Introduction

Digital technologies are increasingly becoming an integral part of consumers' daily lives. For instance, consider the many ways people use their smart phones to accompany their consumption experiences: comparing alternative prices during in-store shopping, calculating calories of their meals during a dine-out, chatting with random other viewers while watching a TV show, tracking their performances during running, and checking their fantasy teams' progress while attending an NFL game, to name a few. Given the fact that a majority of American adults are now smart phone owners, going up from 35% in 2011 to 56% in 2013 (Smith 2013), the connection between digital technologies and consumers daily activities seems to be getting stronger each day. This essay focuses on this companionship, exploring digital activities as complements to actual real-world activities, which, taken together, form consumption episodes.

Prior research identifies consumption episodes as groups of consumer activities associated with the same event and the same period of time (Dhar and Simonson 1999). In this regard, complementarity and substitution represent well-established economic concepts (see Deaton and Muellbaue 1980; Kaufman 2007) that are influential in shaping the dynamics among the activities of consumption episodes. Marketing and consumer research on these concepts mostly focuses on brand extensions (e.g., Aaker and Keller 1990; Bottomley and Holden 2001). However, Stewart and Pavlou (2002) draw attention

to these concepts regarding digital technologies in that every online marketing application represents a complement or a substitute for consumers in relation to existing real-world applications. I employ this perspective to explore the dynamics between digital and non-virtual consumer experiences in relation to consumption episodes. Given the fact that digital consumption is dominantly acknowledged as an integral reality rather than a divergent virtuality of everyday life (Castells 2010; Denegri-Knott and Molesworth 2010; Llamas and Belk 2013; Shields 2003), I address the complementary role of such consumption experiences. Accordingly, consumption episodes that consist of digital complementary activities and non-virtual actual activities are the focal point of this essay.

What elements influence these complementary consumption activities? How do people respond to such activities? Does the focus of the consumer (goal-directed vs. experiential) have an impact on these responses? How are actual activities in such consumption episodes affected? This essay provides answers to these questions by bridging together research streams on digital empowerment and social interaction with a sociotechnical perspective. In doing so, it extends previous consumer research by exploring the integration of digital consumption into traditional real-world activities through its complementary role on the consumption of such activities. Furthermore, the essay provides empirical support for sociotechnical consumption theory by illustrating the influential role of its core elements (i.e., digital empowerment and social interaction) on the dynamics between digital and non-virtual consumption in relation to consumption episodes.

4.2 Theoretical Background and Hypothesis Development

4.2.1 Complementary Digital Consumption

Many researchers have considered how digital technologies change the way people consume products and services. Yet, the incorporation of digital consumption into consumers' everyday lives and the ways it reflects upon and integrates into non-virtual consumption activities have not been explored extensively (Denegri-Knott and Molesworth 2010; Llamas and Belk 2013). The role of social network use on consumers' self-control in actual buying behavior (Wilcox and Stephen 2013) and the role of observing self-avatars in virtual environments on the actual exercising behavior (Fox and Bailenson 2009) are representative of the little research existing on this subject. An interesting area of research in this regard is how digital consumption complements and/or substitutes non-virtual consumption. This topic has previously been registered, but has not attracted much attention to be further detailed and investigated. Accordingly, complementarity and substitution are of great relevance in online experiences of consumers in that any digital application provided by the marketers may be a complement or a substitute of a non-virtual consumption activity (Stewart and Pavlou 2002). For instance, for younger consumers, online newspapers seem to be a substitute for printed newspapers, whereas, for older consumers, they seem to have a complementary effect on the use of other media (De Waal, Schönbach, and Lauf 2005). Regarding complementary consumption, Dhar and Simonson (1999) use the term "consumption episode" to refer to "the set of items belonging to the same event and occurring in temporal proximity" (p. 30). Thus, a digital activity represents a consumption episode when taken together with the non-virtual activity it complements as

much as they belong to the same event. For example, in the case of newspapers, a consumption episode refers to reading printed newspapers and then checking for more details through online newspapers. This essay focuses on different aspects of such consumption episodes in relation to the sociotechnical elements of complementary activities.

4.2.2 Sociotechnical Elements of Complementary Consumption

Complementary digital activities serve as an instrument to demonstrate how digital technologies integrate into and transform the ways people consume products and services. Marketing and consumer research on digital technologies has been expanding rapidly to keep up with such transformations. In this stream of research, consumer empowerment has been a popular subject area, focusing on the ways digital technologies empower consumers through increased control over information (e.g., Deighton and Kornfeld 2009), participation (e.g., Ramani and Kumar 2008), creation (e.g., Collins 2010), and experiences (e.g., Denegri-Knott and Molesworth 2010). At the same time, researchers have examined many aspects of social interaction in digital spaces such as community participation (e.g., Algesheimer et al. 2010), social commerce (e.g., Yadav et al. 2013), and the use of social cues (e.g., Wang et al. 2007). Research, that has brought these two streams together, merely focuses on consumer empowerment as an information-related consequence of enhanced social interaction among consumers through the use of digital technologies. However, digitally empowered consumers are not limited to those who exchange information in peer-to-peer platforms. Consumers experience empowerment through a wide variety of digital products and services that increase the freedom of choice and action to shape their consumption experiences while

at the same time complementing their non-virtual activities (e.g., smart phone apps, algorithm-induced recommendations on online shopping sites, online customization applications of producers, digital creative tools, and virtual worlds). What needs to be investigated is how these two streams of digital consumption (i.e., consumer empowerment and social interaction) come together in relation to these complementary digital products and services. It is here that much is to be gained from a sociotechnical perspective that requires the collective investigation of the social and technical components that make up an entity in a way that acknowledges their interrelationships (Kling and Courtright 2003). Specifically, in this essay, this perspective accounts for the individual and joint effects of digital empowerment and social interaction (i.e., sociotechnical elements of consumption) on consumer responses toward both complementary and actual consumption activities.

4.2.3 Sociotechnical Effects on Complementary Activity

Sociotechnical consumption theory accounts for the exploration and the optimization of the relationship between social and technological elements of consumer offerings. First, given the fact that digital technologies are acknowledged through their empowering capabilities (Johnstone 2007), the theory focuses on the empowerment associated with digital consumption platforms. Interdisciplinary research on empowerment emphasizes its harmonious relationship with well-being and positive emotions through people's enhanced control over decisions that affect their lives (Diener and Biswas-Diener 2005). Zimmerman (1995) defines settings that provide such control as empowering processes. Accordingly, digital technologies offer empowering processes for consumers, providing opportunities to have control over information, participation in

production, creation, and experiences. In a consumption episode, a complementary activity may encompass this digital empowerment element that allows consumers to expand their freedom of choice and action to shape their consumption decisions. For instance, in study 1 of this essay, the consumption episode consists of the actual activity of running and the complementary activity of keeping track, whereas in study 2, it consists of the actual activity of NFL spectatorship and the complementary activity of fantasy football. Accordingly, the digital empowerment elements of these complementary activities refer to a running app that empowers consumers to have control over the information on their running performances and a live draft system that empowers consumers to have control over the creation of their fantasy teams, respectively. I predict that when consumers are given the opportunity to have such control through digital technologies, they will respond more positively toward these complementary activities. The reason for this is that empowerment is generally associated with an individual's well-being and positive emotions (Diener and Biswas Diener 2005), and more specifically, when consumers perceive increased control, they show more positive emotional and behavioral responses (Hui and Bateson 1991). Formally,

> H1: The digital empowerment element of a complementary activity is positively associated with (a) evaluations and (b) behavioral intentions of that activity.

Second, sociotechnical consumption theory focuses on the opportunities for social interaction in a given consumption setting that may result in enhanced consumer satisfaction. From a broader perspective, any real, implied, or imagined presence or actions of others have an impact on the thoughts, emotions, and behaviors of individuals (Social Impact Theory [SIT]; Latané 1981). This perspective has generated numerous

consumer research studies investigating social influence in a broad variety of consumption settings (Dahl 2013). This essay contributes to this variety by accounting for the social impact of a complementary activity in a consumption episode across two different settings (i.e., keeping track of running as goal-directed consumption setting in study 1 and fantasy football as experiential consumption setting in study 2). Accordingly, the social interaction element of these complementary activities refers to online running communities in study 1 and fantasy leagues with friends in study 2.

Latané (1981) introduces three social forces in relation to social interactions that define their impact: size, immediacy, and strength. Accordingly, in the domain of digital consumption, these forces may reflect on the number of available social interactions during digital activities (i.e., social size), being close to the social sources in relationship and/or rank (i.e., social immediacy), and the social sources' status pertaining to the specific digital activity (i.e., social strength). Any individual or joint change in these forces has an established social impact on individuals' emotions, thoughts, and/or behaviors. Similarly, in relation to consumption episodes, the social interaction element of a complementary activity may be altered through these forces. Furthermore, the need to belong is a strong fundamental driver of human behavior (Leary et al. 1995), and consumer research has demonstrated its influential role on consumption in various social settings through consumers' attempts to maintain interactions and relationships with others (e.g., Argo et al. 2005; Berger and Heath 2007; Loveland, Smeesters, and Mandel 2010). Taken together, I predict the following:

> H2: The social interaction element of a complementary activity is positively associated with (a) evaluations and (b) behavioral intentions of that activity.

4.2.3.1 Goal-Directed versus Experiential Complementary Activity

A sociotechnical perspective requires the investigation of not only the individual effects of digital empowerment and social interaction but also their joint effects on consumer behavior. I propose that the interaction between sociotechnical elements depend on the consumer behavior being goal-directed versus experiential. For instance, consumers may use digital empowerment for goal-directed information on specific products and services or for general information in more experiential means to navigate through knowledge (Novak, Hoffman, and Duhachek 2003; Peterson and Merino 2003) to complement various consumption decisions. According to Hoffman and Novak (1996), opinion leaders in peer-to-peer communities engage in experiential information searches while opinion seekers (for a specific task) engage in goal-directed behavior. Thus, in a goal-directed consumption setting such social interaction in peer-to-peer communities should be influential in shaping consumer responses. However, previous research has demonstrated an interesting relationship between social influence and empowerment in that empowered consumers lose focus on others and develop an ability to resist social influence during consumption (Jin et al. 2014; Rucker et al. 2011; Rucker and Galinsky 2008). This line of research is based on the notion that power is a psychological state that increases consumers' confidence in themselves to achieve their consumption goals and decreases their reliance on others. Thus, when a complementary activity empowers consumers through digital technologies to achieve their goals, the social interaction element of that activity should become less influential. I therefore hypothesize the following:

H3: When the complementary activity is goal-directed, the level of digital empowerment will moderate the effects of social interaction such that social interaction will only have a positive effect on (a) evaluations and (b) behavioral intentions of that activity when digital empowerment is low or nonexistent.

In an experiential consumption setting, "consumption is transformed into an entertainment opportunity and into a hedonic experience" (Carú and Cova 2007, p. 6). Accordingly, digital technologies empower consumers by providing leisure-oriented simulations that complement (or substitute) non-virtual consumption activities. Such complementary activities represent consumption as play, which is associated with communing and socializing (Holt 1995). Furthermore experiences have high levels of social value (Van Boven and Gilovich 2003). Taken together, it is no surprise that the social interaction element of an experiential complementary activity provides value for consumers. However, a key reason for consumers to engage in such virtual activities is that they have greater control over experiences that are not readily available through material goods and services (Denegri-Knott and Molesworth 2010). Thus, experiencing the digital complement with each other creates social value for consumers insofar as consumers experience having an impact that goes beyond the control provided by the actual non-virtual activity. Formally,

H4: When the complementary activity is experiential, the level of digital empowerment will moderate the effects of social interaction such that social interaction will only have a positive effect on (a) evaluations and (b) behavioral intentions of that activity when digital empowerment is high.

4.2.4 Sociotechnical Effects on Actual Activity

Regarding the dynamics between activities in a consumption episode, Dhar and Simonson (1999) focus "on the relations between goal-consistent attribute levels of items that are consumed in the same episode" (p. 39). In a consumption episode, where a digital activity complements a non-virtual activity with the same goal orientation, it results in a high degree of episode commonality. Even so, consumers may evaluate the complementary and the actual activity separately, and have utility maximizing behavioral intentions toward each activity (Dhar and Simonson 1999). Thus, in a goal-directed consumption setting, consumer response toward the complementary and the actual activity should be investigated separately. Taken together with the theoretical background on sociotechnical elements' impact on complementary activity, I predict that the same positive influence will be observed. However, I propose psychological empowerment as an essential subjective factor that will mediate this relationship in a goal-directed consumption setting.

According to Diener and Biswas-Diener (2005), although external empowering processes are necessary for empowerment, they are not sufficient to illustrate the complete effect of empowerment on action without the internal feeling of empowerment they cause in individuals; thus, psychological empowerment refers to an individual's assessment about the empowering process in reference to specific goals. In a goal-directed consumption setting, Patrick and Hagtvedt (2012) demonstrate linguistic framing as an empowering process, leading to a favorable influence on feelings of empowerment, as well as on actual goal-directed behavior. Similarly, in relation to a consumption episode, where the complementary activity represents an empowering process,

psychological empowerment will mediate the positive relationship between sociotechnical elements of the complementary activity and consumer responses toward the actual activity. For the sake of clarity, I refer to these concepts in reference to their contextual counterparts of study 1 in the following hypotheses:

> H5: Psychological empowerment will mediate the positive effect of digital empowerment (*using a running app to keep track of running*) on (a) evaluations and (b) behavioral intentions of the actual activity (*running*).
>
> H6: Psychological empowerment will mediate the positive effect of social interaction (*participating in an online running community to keep track of running*) on (a) evaluations and (b) behavioral intentions of the actual activity (*running*).

4.3 Overview of Studies

I test these sociotechnical effects on consumption episodes in a series of three studies. The goal-directed consumption episode in study 1 consists of the actual activity of running and the complementary activity of keeping track, whereas the experiential consumption episode in study 2A and 2B consists of the actual activity of NFL spectatorship and the complementary activity of fantasy football. Both study 1 and the second set of studies examine the individual and joint effects of sociotechnical elements on complementary activities (H1, H2, H3, and H4). In testing the joint effects, goal-directed versus experiential consumption contexts plays a moderating role on the direction of the interaction. Specifically, study 1 provides support for the positive effects of sociotechnical elements on goal-directed complementary activities; study 2A and 2B broaden this relationship to account for experiential complementary activities; and, taken

together, the studies demonstrate a three-way interaction of digital empowerment, social interaction, and consumption context on this relationship. Furthermore, study 1 illustrates the mediating effect of psychological empowerment on the positive effects of sociotechnical elements on the actual activity (H5 and H6).

4.3.1 Study 1: Sociotechnical Effects in a Goal-Directed Consumption Setting

The primary goal of study 1 is to demonstrate the impact of sociotechnical elements in a goal-directed consumption setting that is designed around keeping track of running activities. In this context, I manipulate the digital empowerment element through the ownership of a running app and the social interaction element through the membership in an online running community (i.e., social size and social strength). My respective investigations were twofold. First, I investigate the individual and joint effects of sociotechnical elements on the complementary activity of keeping track (H1, H2, and H3); and second, I focus on their effects on the actual running activity mediated through the psychological empowerment of the consumer (H5 and H6).

4.3.1.1 Participants and Design

Four hundred and thirty-one participants (62% male, with two respondents failing to report gender) were recruited through Mechanical Turk and randomly assigned to conditions in a 2 (digital empowerment: no running app [NRA] vs. running app [RA]) × 2 (social interaction: no online running community [NORC] vs. online running community [ORC]) between-subjects design.

4.3.1.2 Method and Procedure

Respondents were told to imagine that they decided to start running by themselves on a regular basis. In order to strengthen the goal-directed aspect of the activity, they were given the information that they wanted to be able to look at themselves a month from now and feel happy about how good they looked and felt (Patrick and Hagtvedt 2012), and they wanted to keep track of their running activities in order to achieve this goal. For all respondents, this included one of the 2 × 2 scenarios that can be viewed in Table 4.1.

Furthermore, in order to maintain consistency with the details on how to keep track of running among the conditions, seven or eight bullet points were provided for each, describing a similar scope of activities. In order to assess this consistency, the respondents were asked to report their perception on how involved it would be to participate in the activities listed in their respective scenarios. An ANOVA on this involvement variable resulted in no significant effects of digital empowerment ($F(1, 428) = 1.61$, $p = .21$), social interaction ($F(1, 428) = .68$, $p = .41$), or their interaction ($F(1, 428) = .35$, $p = .55$), ruling out involvement as an alternative explanation for the differences among conditions.

Following the introduction of the scenarios, respondents were asked to evaluate the keeping track activity on a four-item utilitarian evaluation index adapted from prior research (Voss, Spangenberg, and Grohmann 2003). Specifically, respondents were asked to rate on 7-point scales (1 = Not at all, 7 = Very much) how effective, helpful, functional, and practical the keeping track activity would be as described in the scenario. These four items formed an *evaluations index regarding the complementary activity* (α =

.92). In addition, respondents were asked to report using a 7-point scale (1 = Very unlikely, 7 = Very likely) how likely they would be to keep track of their running activities this way if they actually decided to start running on a regular basis, which established the *behavioral intentions toward the complementary activity*. In relation to the actual activity of running, respondents were asked to rate on 7-point scales (1 = Not at all, 7 = Very much) how motivated and determined they would feel about the running experience described in the scenario, which formed a *goal-directed evaluations index regarding the actual activity* (α = .91), and on a 7-point scale (1 = Very unlikely, 7 = Very likely) how likely they would be to engage in a running experience similar to that described in the scenario, which established the *behavioral intentions toward the actual activity*. Furthermore, respondents were instructed to evaluate this running experience on a two-item empowerment index adapted from prior research (Patrick and Hagtvedt 2012). Specifically, respondents were asked to rate on 7-point scales (1 = Not at all, 7 = Very much) how empowered and in control they would feel about this running experience to achieve their goals. These two items were averaged to form a *psychological empowerment index* (α = .82).

To assess the digital empowerment and social interaction manipulations, respondents were asked to rate on 7-point scales (1 = Not at all, 7 = Very much) how much technological control was available during running in the scenario and how much interaction with other people was possible, respectively. To control for possible confounding factors, respondents also completed the innovativeness dimension of the Technology Readiness Index (Parasuraman 2000) to assess their consumer innovativeness levels, and reported their smart phone ownership, running app ownership,

online running community membership, and running experience (i.e., like for running, frequency of running) as well as their gender, race, educational level, and income level. According to a series of regression analyses on the dependent variables of the study with these control variables as predictors, there were no effects of race, educational level, income level, smart phone ownership, running app ownership, online running community membership, and frequency for running; thus, these variables are not discussed further. However, the analysis controls for differences in gender, consumer innovativeness, and like for running.

4.3.1.3 Results

4.3.1.3.1 Manipulation Checks

Both the digital empowerment and the social interaction manipulation had the intended effects. Respondents in the RA condition reported higher availability of technological control than those in the NRA condition (M_{RA} = 5.83 vs. M_{NRA} = 4.11; $F(1, 430) = 125.22$, $p < .001$), whereas respondents in the ORC condition reported higher possibility of interaction with other people than those in the NORC condition (M_{ORC} = 5.66 vs. M_{NORC} = 3.10; $F(1, 430) = 332.16$, $p < .001$).

4.3.1.3.2 Consumer Responses toward the Complementary Activity (H1-3)

Evaluations and behavioral intentions regarding the complementary activity of keeping track were submitted to a 2 (digital empowerment: NRA vs. RA) × 2 (social interaction: NORC vs. ORC) MANOVA. As predicted, results revealed a significant main effect of digital empowerment (estimates for *evaluations*: 95% CI = -1.126, -.498; and estimates for *behavioral intentions*: 95% CI = -1.648, -.842), a significant main effect

of social interaction (estimates for *evaluations*: 95% CI = -.948, -.320; and estimates for *behavioral intentions*: 95% CI = -.945, -.139), and a significant interaction effect (estimates for *evaluations*: 95% CI = -1.977, -.722; and estimates for *behavioral intentions*: 95% CI = -2.524, -.913), as indicated by zero falling outside the 95% confidence interval.

In support of hypotheses 1a and 1b, respondents in the RA condition evaluated the complementary activity higher than those in the NRA condition (M_{RA} = 5.77 vs. M_{NRA} = 5.04; $F(1, 426) = 40.08$, $p < .001$), and reported higher likelihood to implement the activity (M_{RA} = 5.69 vs. M_{NRA} = 4.58; $F(1, 429) = 57.59$, $p < .001$). Similarly, in support of hypotheses 2a and 2b, respondents in the ORC condition evaluated the complementary activity higher than those in the NORC condition (M_{ORC} = 5.71 vs. M_{NORC} = 5.13; $F(1, 426) = 24.36$, $p < .001$), and reported higher likelihood to implement the activity (M_{ORC} = 5.45 vs. M_{NORC} = 4.95; $F(1, 429) = 11.05$, $p = .001$).

The interaction effect is depicted in Figure 4.1A. Accordingly, when respondents did not have digital empowerment, they evaluated the complementary activity with social interaction more favorably than that with no social interaction (M_{ORC} = 5.62 vs. M_{NORC} = 4.31; $F(1, 164) = 34.69$, $p < .001$) and reported higher likelihood to implement the activity (M_{ORC} = 5.20 vs. M_{NORC} = 3.79; $F(1, 164) = 26.291$, $p < .001$). In contrast, there was no significant difference between the conditions when respondents had digital empowerment (evaluations: M_{ORC} = 5.75 vs. M_{NORC} = 5.79; $F(1, 262) = .11$, $p = .74$; and behavioral intentions: M_{ORC} = 5.57 vs. M_{NORC} = 5.90; $F(1, 262) = 2.78$, $p = .10$). These results support hypotheses 3a and 3b.

4.3.1.3.3 Consumer Responses toward the Actual Activity through Psychological Empowerment (H5-6)

I predicted that psychological empowerment would mediate the impact of sociotechnical elements on consumer responses toward the actual activity. The significance of these effects is tested through the bootstrapping method, using Hayes and Preacher's (2013) MEDIATION macro. A 95% confidence interval of the parameter estimates was obtained by running resampling 5,000 times. The final estimation results are summarized in Figure 4.2. Analysis revealed that the indirect effects of digital empowerment and social interaction on evaluations through the psychological empowerment were significant, as indicated by zero falling outside the 95% confidence interval (digital empowerment: 95% CI = .231 to .880; and social interaction: 95% CI = .089 to .733). These results support hypotheses 5a and 6a. This pattern was replicated with the analysis on behavioral intentions (digital empowerment: 95% CI = .145 to .703; and social interaction: 95% CI = .056 to .601), in support of 5b and 6b.

Moreover, the direct effect of sociotechnical elements on evaluations were no longer significant in the full model (digital empowerment: $B = .209$, $SE = .115$, $p = .068$; and social interaction: $B = .076$, $SE = .112$, $p = .495$; see Figure 4.2A), suggesting indirect-only mediation that indicates the unlikelihood of omitted mediators (Zhao, Lynch, and Chen 2010). However, the analysis on behavioral intentions revealed a persisting but decreased significant effect of digital empowerment (digital empowerment: $B = .423$, $SE = .174$, $p = .016$; and social interaction: $B = .256$, $SE = .171$, $p = .135$; see Figure 4.2B), suggesting complementary mediation (Zhao et al. 2010).

4.3.1.4 Discussion

The results of study 1 lend support to my theorizing showing the positive effects of sociotechnical elements on consumer responses toward both complementary and actual consumption activities. Consistent with hypotheses 1a and 1b, the digital empowerment element of a complementary activity was positively associated with evaluations and behavioral intentions regarding that activity. Thus, consumers evaluated the keeping track activity more favorably and were more likely to implement it with the ownership of a running app. Consistent with hypotheses 2a and 2b, the social interaction element of a complementary activity was also positively associated with evaluations and behavioral intentions regarding that activity. Thus, consumers evaluated the keeping track activity more favorably and were more likely to implement it with membership in an online running community. However, consistent with hypotheses 3a and 3b, in a goal-directed consumption activity setting, this positive effect of social interaction diminished with digital empowerment. Thus, only when respondents did not own a running app, did the membership in online running community improve the evaluations and behavioral intentions regarding the keeping track activity.

The results of study 1 also demonstrated the strong mediating role of psychological empowerment in the relationship between sociotechnical elements of the complementary activity and the consumer responses toward the actual activity in the consumption episode. These findings are consistent with hypotheses 5a and 5b. Accordingly, the positive effects of running app ownership and online running community membership on the evaluations and behavioral intentions regarding running are mediated by the degree they make consumers feel empowered.

4.3.2 Study 2A and 2B: Sociotechnical Effects in an Experiential Consumption Setting

The primary goal of study 2A and 2B is to demonstrate the impact of sociotechnical elements in an experiential consumption setting that is designed around fantasy football participation. In this context, I manipulate the digital empowerment element through the setting of the draft system and the social interaction element through the familiarity of other participants (i.e., social immediacy). I investigate the individual effects of sociotechnical elements on the experience of fantasy football, extending the findings of study 1 to an experiential setting (H1a, H1b, H2a, and H2b). However, an opposite interaction effect is expected between the goal-directed and experiential settings (H4a and H4b).

4.3.2.1 Participants and Design

Although the recruitment of the respondents differs in study 2A and 2B (i.e., undergraduate students and NFL.com users, respectively), in both studies, they were randomly assigned to conditions in the same 2 (digital empowerment: auto-pick draft vs. live draft) × 2 (social interaction: public league vs. league with familiar others) between-subjects design. One hundred and twenty-nine undergraduate students (96% male) were recruited to participate in study 2A in exchange for course credit, and 1,000 NFL.com users (90% male, with 14 respondents failing to report gender) were recruited to participate in study 2B with an email invitation from the NFL in a collaborative research project.

4.3.2.2 Method and Procedure

Respondents were told to imagine that they were participating in an online fantasy football league. For all respondents, this scenario included one of four scenarios: respondents in the low digital empowerment condition were told that they ended up using an auto-pick draft where they did not select their own players personally, while those in the high digital empowerment condition were told that they used a live draft where they selected their own players personally. Participants in the low social interaction condition were told that it was a public league where they did not know any of the other participants, while those in the high social interaction condition were told that it was a league with friends where they knew each of the other participants.

Following the introduction of the scenarios, respondents were asked to evaluate the fantasy football experience from hedonic perspectives (see Holbrook and Hirschman 1982). Specifically, respondents were instructed to rate on 7-point scales (1 = Not at all, 7 = Very much) how likeable, appealing, joyful, and satisfactory this fantasy football experience would be. These four items formed an *evaluations index regarding the complementary activity* ($\alpha_{\text{study 2A}} = .97$; $\alpha_{\text{study 2B}} = .97$). In addition, respondents were asked to report using a 7-point scale (1 = Very unwilling, 7 = Very willing) how willing they would be to participate in this experience, which established the *behavioral intentions toward the complementary activity*.

To assess the digital empowerment manipulation, respondents were instructed to report on 7-point scales (1 = Strongly disagree, 7 = Strongly agree) their agreement with the statements from perceived impact index (modified from Fuchs et al 2010; see also Spreitzer 1995): "I see that I have control in determining which players to have in my

fantasy team" and "I have influence in determining which players to have in my fantasy team" ($\alpha_{\text{study 2A}} = .95$; $\alpha_{\text{study 2B}} = .92$). To assess the social interaction manipulation, respondents were asked to rate using a 7-point scale (1 = Very unlikely, 7 = Very likely) how likely they would be to interact socially with the other people participating in this experience. To control for possible confounding factors, respondents also completed the Psychological Commitment to Team Scale (Mahony, Madrigal, and Howard 2000) in study 2A and the Attitudinal Loyalty to Team Scale (Heere and Dickson 2008) in study 2B to assess their fandom levels, and reported their fantasy football experience (i.e., the number of NFL seasons experienced participating in fantasy football, the average number of fantasy football leagues participated in one NFL season, and the average number of hours spend weekly on fantasy football) as well as their gender, educational level, and income level. According to a series of regression analyses on the dependent variables of the study with these control variables as predictors, there were no effects of gender, educational level, income level, and fantasy football experience; thus, these variables are not discussed further. However, the analysis controls for differences in fandom.

4.3.2.3 Results: Study 2A

4.3.2.3.1 Manipulation Checks

Both the digital empowerment and the social interaction manipulation had the intended effects. Respondents in the live draft condition reported higher availability of technological control than those in the auto-pick draft condition ($M_{live} = 5.52$ vs. $M_{auto\text{-}pick} = 3.21$; $F(1, 121) = 61.85$, $p < .001$), whereas respondents in the league with friends condition reported higher possibility of interaction with other people than those in the public league condition ($M_{friends} = 5.30$ vs. $M_{public} = 3.93$; $F(1, 120) = 20.20$, $p < .001$).

4.3.2.3.2 Consumer Responses toward the Complementary Activity (H1-2, H4)

Evaluations and behavioral intentions regarding the complementary activity of fantasy football were planned to be submitted to a 2 (digital empowerment: auto-pick draft vs. live draft) × 2 (social interaction: public league vs. league with familiar others) MANOVA. However, given that the correlation between dependent variables was moderately high ($r = .93$, $p < .001$), univariate Bonferroni tests were employed (Ramsey 1982). First, in relation to *evaluations regarding the complementary activity*, results revealed a significant main effect of digital empowerment ($M_{live} = 5.43$ vs. $M_{auto\text{-}pick} = 2.48$; $F(1, 120) = 137.75$, $p < .001$), social interaction ($M_{friends} = 4.32$ vs. $M_{public} = 3.59$; $F(1, 120) = 8.21$, $p < .005$), and a significant interaction effect ($F(1, 120) = 7.65$, $p < .01$). These results support hypotheses 1a and 2a. Second, in relation to *behavioral intentions toward the complementary activity*, results also revealed a significant main effect of digital empowerment ($M_{live} = 5.80$ vs. $M_{auto\text{-}pick} = 2.77$; $F(1, 121) = 105.44$, $p < .001$), social interaction ($M_{friends} = 4.72$ vs. $M_{public} = 3.85$; $F(1, 121) = 7.95$, $p < .01$), and a significant interaction effect ($F(1, 120) = 7.43$, $p < .01$). These results support hypotheses 1b and 2b.

The interaction effects are depicted in Figure 4.1B. Accordingly, when respondents had high digital empowerment, they evaluated the experience of fantasy football with high social interaction more favorably than that with low social interaction ($M_{friends} = 6.13$ vs. $M_{public} = 4.71$; $F(1, 60) = 21.60$, $p < .001$) and reported higher likelihood to participate in the experience ($M_{friends} = 6.61$ vs. $M_{public} = 5.00$; $F(1, 60) = 24.04$, $p < .001$). In contrast, there was no significant difference between the conditions when respondents had low digital empowerment (evaluations: $M_{friends} = 2.49$ vs. $M_{public} =$

2.47; $F(1, 59) = .00$, $p = .95$; behavioral intentions: $M_{friends} = 2.83$ vs. $M_{public} = 2.81$; $F(1, 60) = .00$, $p = .96$). These results support hypotheses 4a and 4b.

4.3.2.4 Results: Study 2B

4.3.2.4.1 Manipulation Checks

Both the digital empowerment and the social interaction manipulation had the intended effects. Respondents in the live draft condition reported higher availability of technological control than those in the auto-pick draft condition ($M_{live} = 5.68$ vs. $M_{auto\text{-}pick} = 3.58$; $F(1, 977) = 345.82$, $p < .001$), whereas respondents in the league with friends condition reported higher possibility of interaction with other people than those in the public league condition ($M_{friends} = 5.08$ vs. $M_{public} = 3.95$; $F(1, 987) = 79.74$, $p < .001$).

4.3.2.4.2 Consumer Responses toward the Complementary Activity (H1-2, H4)

Just as in Study 2A, the correlation between dependent variables was moderately high ($r = .84$, $p < .001$); thus, univariate Bonferroni tests were employed (Ramsey 1982). As predicted in hypothesis 1a and 1b, results revealed a significant main effect of digital empowerment on evaluations ($M_{live} = 5.60$ vs. $M_{auto\text{-}pick} = 3.90$; $F(1, 999) = 249.62$, $p < .001$) and on behavioral intentions ($M_{live} = 5.94$ vs. $M_{auto\text{-}pick} = 3.95$; $F(1, 995) = 262.73$, $p < .001$). In contrast, the main effect of social interaction was not significant on evaluations ($M_{friends} = 4.72$ vs. $M_{public} = 4.68$; $F(1, 999) = .484$, $p = .487$) and on behavioral intentions: $M_{friends} = 4.90$ vs. $M_{public} = 4.87$; $F(1, 995) = .749$, $p = .387$). Thus, in this study hypotheses 2a and 2b are not supported.

The interaction effect of digital empowerment and social interaction was significant on both evaluations ($F(1, 999) = 5.43$, $p < .05$) and behavioral intentions ($F(1,$

995) = 4.17, $p < .05$). This interaction effect is depicted in Figure 4.1C. Accordingly, when respondents had high digital empowerment, they evaluated the experience of fantasy football with high social interaction more favorably than that with low social interaction ($M_{friends}$ = 5.82 vs. M_{public} = 5.48; $F(1, 473) = 6.17$, $p < .05$) and reported higher likelihood to participate in the experience ($M_{friends}$ = 6.16 vs. M_{public} = 5.79; $F(1, 472) = 6.04$, $p < .05$). In contrast, there was no significant difference between the conditions when respondents had low digital empowerment (evaluations: $M_{friends}$ = 3.80 vs. M_{public} = 3.98; $F(1, 523) = 1.11$, $p = .29$; behavioral intentions: $M_{friends}$ = 3.85 vs. M_{public} = 4.00; $F(1, 520) = .56$, $p = .46$). These results support hypotheses 4a and 4b.

4.3.2.5 Discussion

The results of study 2A and 2B provided partial support for the positive effects of sociotechnical elements on consumer responses toward complementary consumption activities (see Table 4.2 for a summary on the findings of all studies). This extended the goal-directed findings of study 1 to be replicated in an experiential consumption setting. Specifically, consistent with hypotheses 1a and 1b, the digital empowerment element of a complementary activity was positively associated with evaluations and behavioral intentions regarding that activity. Consistent with hypotheses 2a and 2b, the social interaction element of a complementary activity was also positively associated with evaluations and behavioral intentions regarding that activity. However, this positive association was supported partially given that the main effect of social interaction was significant in Study 2A, but not significant in Study 2B.

Furthermore, the predicted opposite interaction effect between goal-directed and experiential consumption settings was established in that both in Study 2A and 2B the

positive effect of social interaction was present with high digital empowerment (hypotheses 4a and 4b), whereas in Study 1 this effect diminished with digital empowerment. Specifically, in the experiential context of Study 2A and 2B, only when respondents were empowered to select the players for their fantasy football team, did they evaluate the league with friends more favorably than the public league and reported higher willingness to participate in the former than in the latter.

4.4 General Discussion

This essay presented three studies that reveal the effects of sociotechnical elements (i.e., digital empowerment and social interaction) on consumers' responses toward consumption episodes (i.e., complementary and actual activities). Study 1 showed that, in a goal-directed consumption setting, both the digital empowerment and social interaction elements of complementary activities increase positive consumer responses toward these activities. Study 1 also provided initial support for a three-way interaction between sociotechnical elements and the consumer behavior focus in that, when consumers have a goal-directed focus, the effect of the social interaction element on consumer responses toward complementary activities attenuates with increased digital empowerment. Finally, study 1 demonstrated the effects of sociotechnical elements on the actual behavior through its mediating effect on psychological empowerment.

The second set of studies (study 2A and 2B) provided further support for the positive effects of sociotechnical elements on how consumers evaluate and have behavioral intentions toward complementary activities, extending this relationship to account for the experiential in addition to goal-directed consumer focus. However, the positive effect of the social interaction element on consumer responses was only partially

supported in these studies, with it being effective in the student sample (study 2A) but not replicating this effect in the broader population of NFL.com users (study 2B). A possible explanation for this disparity may be generational effects. Accordingly, Belk (2013) emphasizes how younger generations make little distinction between online and offline communication, making digital social interactions an extension of their everyday interpersonal relationships. Thus, providing social interaction opportunities in digital consumption offerings may provide more value for younger consumers. Sample characteristics may also provide another explanation. NFL.com users may perceive a sense of community through this distinct online platform even though they are not familiar with each other. Thus, the manipulation of unfamiliarity might have been stronger in the undergraduate sample than in the NFL.com sample.

These studies, along with the interaction effect in study 1, supported the aforementioned three-way interaction by demonstrating an adverse relationship between digital empowerment and social interaction with experiential consumer focus. Accordingly, when consumers have an experiential focus, the effect of the social interaction element on consumer responses toward complementary activities attenuates with decreased digital empowerment.

From a theoretical standpoint, my research contributes to the literature on digital consumption by demonstrating its complementary role on non-virtual consumption through sociotechnical elements. In doing so, it bridges research on consumer empowerment and social interaction in a way that reveals their interaction beyond the extant definitions of empowerment resulting from enhanced communication among consumers. This is especially important for understanding consumer behavior in a world

where consumers are constantly empowered and interact with others through the immense integration of digital technologies into their everyday lives. Consumer empowerment through digital technologies has been an increasingly popular concept in marketing and consumer research literature (Kozinets et al. 2010; Labrecque et al. 2013; Ramani and Kumar 2008; Wathieu et al. 2003). Thus, adopting a sociotechnical perspective and accounting for its interaction with social elements of digital consumer offerings may provide fruitful insights for future research possibilities. An important insight gained in this study is that including social interaction elements along with digital empowerment elements does not always end up with enhanced consumer evaluations and behavioral intentions. Furthermore, providing digital power to consumers with a specific goal focus may be accompanied with social costs in that they may eliminate potential social interactions associated with their goals.

From another perspective, both social and technical elements of digital products and services have important far-reaching effects on the real life activities that they complement. These elements are shown to make consumers feel more empowered and thus, perceive more control, which is associated with optimism about future outcomes (Hamerman and Johar 2013). This illustration provides valuable insights into the ways consumers incorporate digital consumption into their everyday lives, answering Denegri-Knott and Molesworth's (2010) and Llamas and Belk's (2013) calls for more research on this subject. Taken together, these insights represent sociotechnical consumption theory as a potent tool to study consumption in digital platforms and how they affect traditional ways of consuming. In this essay, I show the influence of consumer behavior focus on the interaction between digital empowerment and social impact. Future research can identify

more factors that play into this relationship and test for their effects in various contexts as the application of digital technologies continues to expand in every aspect of consumer behavior.

Although this essay focused on scenarios in which consumers could participate in the respective activities without necessarily purchasing goods or services, its theorizing also has implications for marketers seeking to optimize the technological and social components of their market offerings. Accordingly, they can complement their market offerings with experiential (rather than goal-directed) digital services if they want to benefit from marketing strategies that provide both empowerment and social interaction. For example, Heineken has launched a digital social game—online and on mobile—that is based on anticipating the outcome of UEFA Champions League game moments in real time. Although this experiential service complements live viewership of soccer games rather than being a direct complement to drinking beer, it delivers a full 90 minutes of brand engagement with every UEFA Champions League game. Thus, a sociotechnical consumption perspective may provide valuable insights into optimizing the digital and social elements of brand campaigns if not the branded product itself. Furthermore, peer-to-peer consumption communities and electronic word of mouth have been increasingly important topics for marketers who plan, target, and leverage digital marketing techniques. Accordingly, providing consumers with digital applications that would increase their psychological empowerment in relation to their goal-directed behavior may reduce the reliance of their customers on other consumers and thus, the influence of potential negative word of mouth.

Of course, the work presented has several limitations that can seed future research. First, only the complementary role of digital consumption has been addressed in relation to consumption episodes. How would the sociotechnical elements play into the relationship between a digital activity and the non-virtual activity that it substitutes? Second, psychological empowerment has only been theorized in relation to goal-directed consumer behavior. How would the subjective feeling of empowerment be enacted in an experiential consumption setting? Third, the three-way interaction was tested among different studies. Thus, future studies should find ways to manipulate the consumer behavior focus (goal-directed vs. experiential) within the same consumer activity. Finally, this study focuses on digital empowerment and social interaction elements from a broader perspective, encompassing all digital consumption processes that empower and socialize consumers. Would different digital empowerment processes (e.g., information access vs. participation in production) result in differing consumer outcomes? How would these processes interact with social interaction elements? How would the variety of social interaction elements (e.g., "share" in social media vs. direct chat options) affect these dynamics?

Table 4.1

Experimental Scenarios

Scenario	Condition	Explanation
Imagine that you decided to start running by yourself on a regular basis. You want to be able to look at yourself a month from now and feel happy about how good you look and feel. In order to achieve this goal, you want to keep track of your running activities.		
1	NRA/NORC	You decide to record details about your running in a notebook on your own to complement your individual running experience: You make a rough estimate of your time without using a watch or any mechanical or digital device. You make a rough estimate of your distance without using a watch or any mechanical or digital device. You make a rough estimate of your pace without using a watch or any mechanical or digital device. You view the history of your activities to see how you are doing. You set personal bests and milestones. You measure your progress against your goals and targets. You write down your running and race stories.
2	NRA/ORC	You decide to join an online running community to complement your individual running experience: You connect with other runners online. You communicate online about running and share running resources. You create your own profile. You post your activities and achievements on your profile. You post your plans on your profile. You form groups, and share your running and race stories. You pick up some tips and leave some advice and encouragement for other runners.
3	RA/NORC	You have a smart phone and you decide to download a running app to complement your individual running experience: You see detailed stats around your pace. You see detailed stats around your distance. You see detailed stats around your time. You view a detailed history of your activities to see how you are doing. You get notified when you hit new personal bests. You get notified when you hit milestones. You measure your progress against your goals and targets.

Experimental Scenarios (Cont'd)

Scenario	Condition	Explanation
Imagine that you decided to start running by yourself on a regular basis. You want to be able to look at yourself a month from now and feel happy about how good you look and feel. In order to achieve this goal, you want to keep track of your running activities.		
4a	RA/ORC	You decide to sign up for an online community for runners to complement your individual running experience. You have a smart phone and once you sign up for the online community, you are additionally given free access to a running app: You connect with other runners, talk about running, and share running resources. You create your own profile and post your activities, achievements, and plans through live maps. You form groups, and share your running and race stories. You pick up some tips and leave some advice and encouragement for other runners. You see detailed stats around your pace, distance, and time. You view a detailed history of your activities to see how you are doing. You get notified when you hit new personal bests and milestones. You measure your progress against your goals and targets.
4b	RA/ORC	You have a smart phone and you decide to download a running app to complement your individual running experience. Once you download the app, you are additionally given free access to the app's online community: You see detailed stats around your pace, distance, and time. You view a detailed history of your activities to see how you are doing. You get notified when you hit new personal bests and milestones. You measure your progress against your goals and targets. You connect with other runners, talk about running, and share running resources. You create your own profile and post your activities, achievements, and plans through live maps. You form groups, and share your running and race stories. You pick up some tips and leave some advice and encouragement for other runners.

The RA/ORC condition is designed with two scenarios to counterbalance any order effects: one with respondents being told that they decided to download a running app where they were additionally given free access to an online running community, and another one with respondents being told that they decided to sign up for an online running community where they were additionally given free access to a running app. However, when consumer responses were subjected to a MANOVA with these two designs of the RA/ORC condition as the predictor variable, there were no significant differences referring to evaluations and behavioral intentions regarding both the complementary activity of keeping track and the actual activity of running. Thus, the two designs were combined for the respective condition in the subsequent data analysis.

Table 4.2

Summary of Hypotheses Testing

Hypotheses	Study 1 (goal-oriented)		Study 2A (experiential)		Study 2B (experiential)	
	(a)	(b)	(a)	(b)	(a)	(b)
H1 (DE → Comp. Act.)	✔	✔	✔	✔	✔	✔
H2 (SI → Comp. Act.)	✔	✔	✔	✔	✖	✖
H3 (DExSI → Comp. Act.)	✔	✔	NA	NA	NA	NA
H4 (DExSI → Comp. Act.)	NA	NA	✔	✔	✔	✔
H5 (SI & DE → PE → A. Act.)	✔	✔	NA	NA	NA	NA
H6 (SI & DE → PE → A. Ect.)	✔	✔	NA	NA	NA	NA

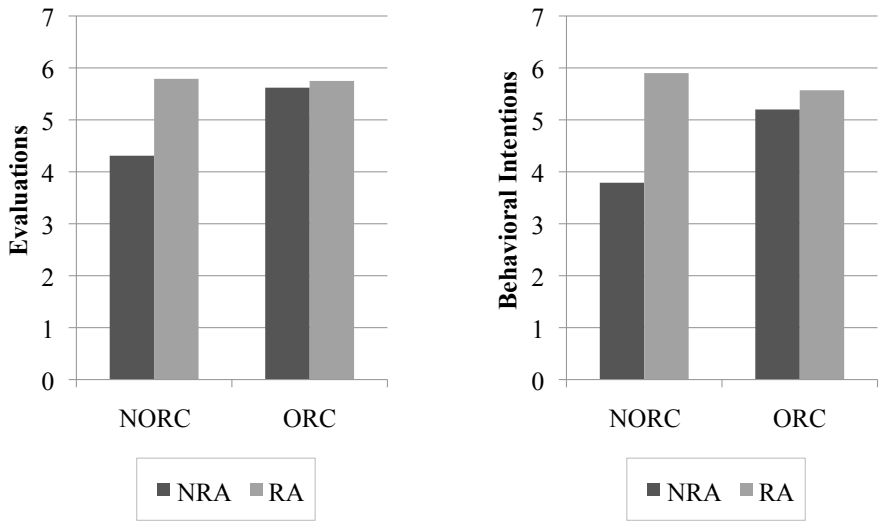
DE = Digital empowerment, SI = Social Interaction, PE = Psychological Empowerment, Comp. Act. = Complementary activity, A. Act = Actual Activity
(a) Evaluations
(b) Behavioral intensions

Figure 4.1

Interaction Effects

Goal-Directed Consumption Setting:
Evaluations and Behavioral Intentions Regarding
the Complementary Activity of Keeping Track of Running
(Study 1)

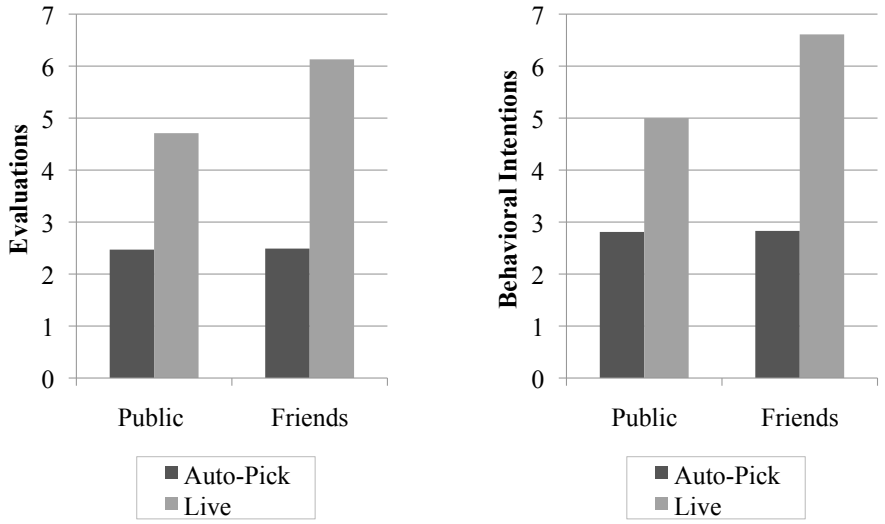
A



NORC = No online running community; ORC = Online running community; NRA = No running app; RA = Running app

Experiential Consumption Setting:
Evaluations and Behavioral Intentions Regarding
the Complementary Activity of Fantasy Football
(Study 2A)

B



Interaction Effects (Cont'd)

Experiential Consumption Setting:
Evaluations and Behavioral Intentions Regarding the Complementary Activity of Fantasy Football
(Study 2B)

C

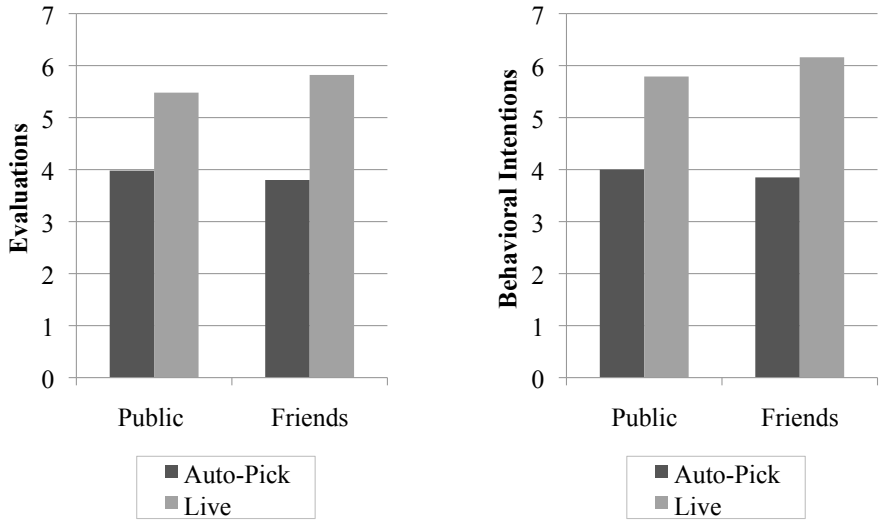
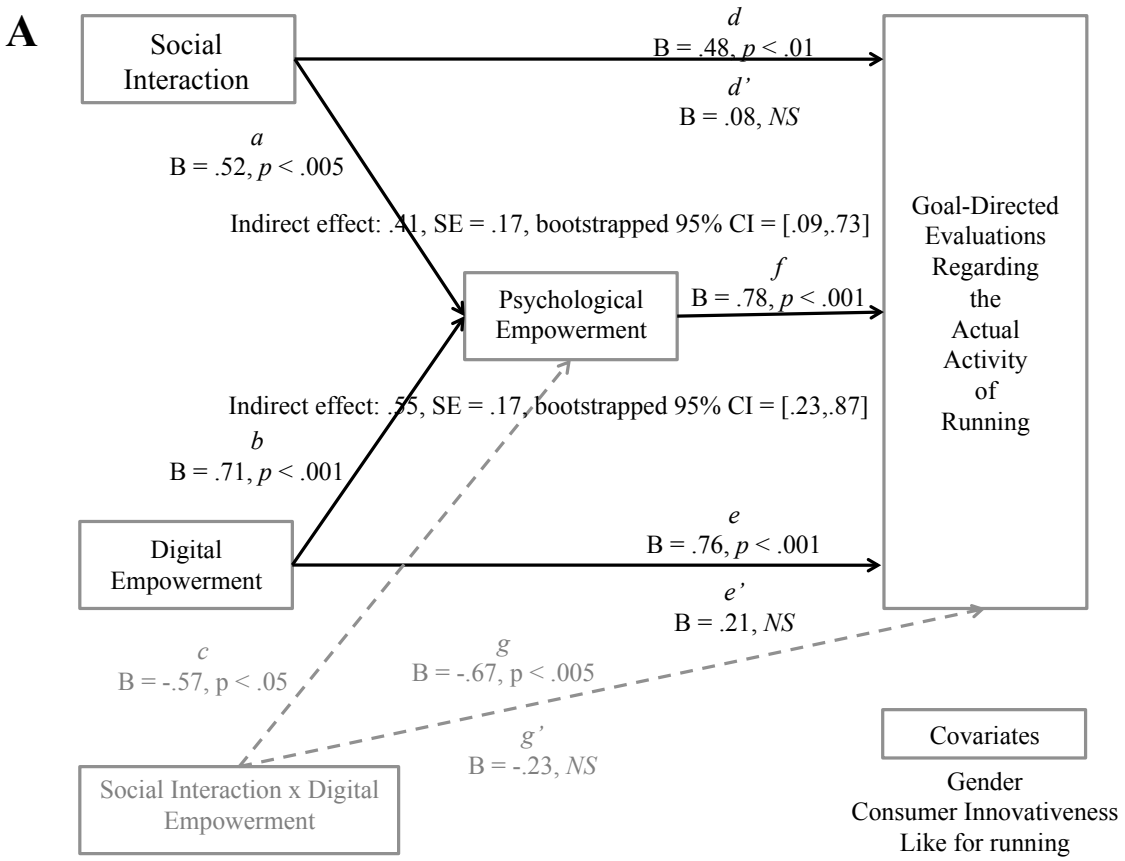


Figure 4.2

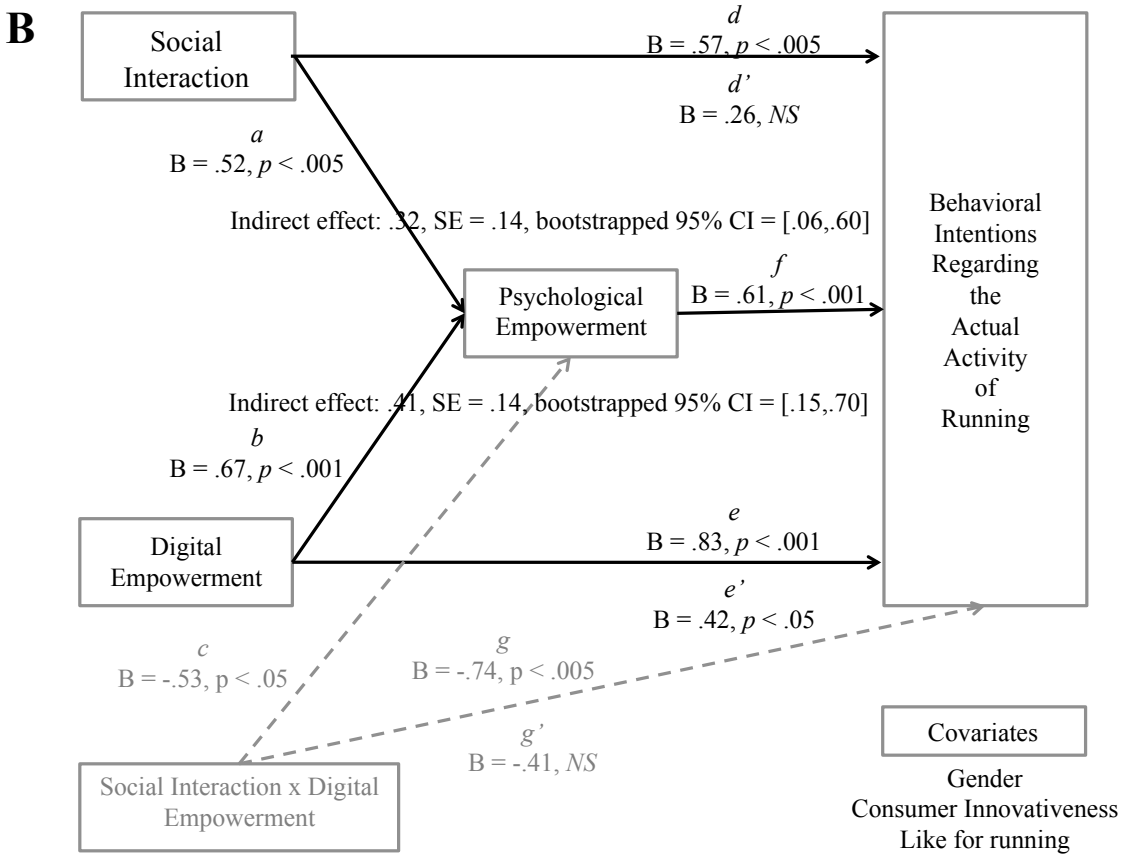
Mediation Effects

Goal-Directed Consumption Setting:
Evaluations and Behavioral Intentions Regarding
the Actual Activity of Running
(Study 1)



Mediation Effects (Cont'd)

Goal-Directed Consumption Setting:
Evaluations and Behavioral Intentions Regarding
the Actual Activity of Running
(Study 1)



CHAPTER 5

CONTRIBUTIONS, LIMITATIONS, AND FUTURE RESEARCH

5.1 Theoretical Contributions

This dissertation introduces sociotechnical consumption as a theoretical tool to explore the interaction and the optimization of the social and technical elements of consumer offerings. More specifically, it provides a sociotechnical perspective for marketing and consumer research to simultaneously study the digital empowerment of consumers along with the many social interaction opportunities available during digital consumption.

Previous research on this relationship has solely focused on consumer empowerment resulting from the enhanced social interactivity among consumers (Berthon et al. 2000; Deighton and Kornfeld 2009; Jayanti and Singh 2010). This focus is associated with an antagonistic perspective that emphasizes the power struggle between suppliers and consumers (Day 2011; Labrecque et al. 2013; Wright et al. 2006). However, there is more to consumer empowerment through digital technologies than just gaining the upper hand by interacting in peer-to-peer communities to be better informed and more knowledgeable. It is through the expansion of this focus and the wide-ranging examination of the relationship between consumer empowerment and social interactions that this dissertation makes its overall contribution. This is especially important in this digital age where consumers are continuously empowered and social in numerous ways through the immense diffusion of digital technologies into their everyday lives. In this regard, this dissertation also answers the call by Denegri-Knott and Molesworth (2010)

and Llamas and Belk (2013) to fill a gap in the digital consumption literature by examining the ways digital consumption integrate into and reflect upon non-virtual consumption experiences.

This dissertation consists of three essays, each of which advocates the sociotechnical perspective on consumption, suggesting that the study of consumer empowerment through digital technologies is incomplete without considering its simultaneous relationship with social components of digital consumer offerings. In addition to this overall perspective, each essay makes its own unique contributions to marketing and consumer research.

Essay one (chapter two) grounds the sociotechnical consumption theory on a qualitative exploration of consuming experiences in digital spaces in the context of online fantasy football. Of particular note, it contributes to the recent discussions on consumer attachment with digital consumer offerings (see Belk 2013; Lehdonvirta 2010) by broadening them to include digital experiences in addition to digital goods (i.e., attachment with "doing things" in addition to "having things" in digital platforms). Accordingly, the lived experiences of the participants illustrate that consumers adopt and get attached to digital experiences through different (or at least deviated) dynamics. Furthermore, the essay portrays the interplay between digital and non-virtual consumption experiences. This interplay, along with the deviated dynamics, highlights consumer empowerment and social interactions as being fundamental to the diffusion of digital consumption. Consequently, at the end of this essay, I propose a new classification of consumption experiences based on these two characteristics, and introduce

sociotechnical consumption as a theoretical contribution to study the social and the technological elements of digital consumer offerings.

From a more specific perspective, essay one also broadens Kozinet's (1999) definition on virtual communities of consumption and previous approaches to consumer empowerment. First, Kozinets (1999) describes virtual communities of consumption as online platforms where consumers interact to share the interest in a particular consumption object. In this essay, following Muniz and O'Guinn's (2001) directions, I illustrate fantasy football leagues as virtual communities to expand this definition to account for digital platforms where consumers share not only the interest but also the experience of the consumption object. This broader focus highlights the distinction and relevance of the social interaction element in digital spaces since it allows for an easy way for consumers to co-experience during consumption. Second, consumer empowerment broadly refers to the expansion of freedom and control over consumption experiences. However, the enhanced freedom and control of consumers in digital spaces that allows them to shape their consumption experiences in a way that material products and services cannot offer has previously not been explored as empowerment. Thus, this essay broadens the previous approaches to consumer empowerment through digital technologies. This digital empowerment element plays an influential role in the deviation of digital experiences as it decreases the limited availability of experiences even though it does so in a virtual way.

Essay two (chapter three) follows up on the contributions of essay one. Since the theory of sociotechnical consumption is based on consumer empowerment and social interactions in digital spaces, it addresses the conceptual disarray surrounding consumer

empowerment providing a more comprehensive perspective with a coherent typology and presents an integrative framework to systematically study the simultaneous effects of consumer empowerment and social interactions available through digital products, services, and practices. Thus, it contributes to marketing and consumer research in several ways.

First, it advocates for an individual-level perspective on consumer empowerment that differentiates between digital empowerment processes (DEPs) as external and psychological empowerment as internal empowerment, shifting the focus from the predominant view that defines empowerment through an antagonistic power struggle between consumers and suppliers. This perspective applies to the multitude of digital products, services, and practices that are available for consumers to expand their freedom and control over their consumption, and provides a theoretical tool for researchers to study these DEPs as a marketing strategy through the feelings of empowerment they generate in consumers impacting their consumption-related feelings, thoughts, intentions, and actions. Second, through the typology of DEPs, it brings together different approaches to consumer empowerment, organizing them in an all-embracing scheme. Finally, it contributes to the literature by introducing a framework that bridges this individual-level perspective on consumer empowerment with the social impact theory (Latané 1981) to account for their joint effects on consumer behavior. More specifically, it presents literature gaps and future research opportunities on the ways DEPs (i.e., informative, participative, creative, and experiential empowerment) interact with the characteristics of social elements (i.e., social size, immediacy, and strength) embedded in these digital processes.

Essay three (chapter four) supports the perspective grounded in essay one and detailed in essay two by bringing the concept of sociotechnical consumption into experimental designs. In doing so, it contributes to the literature by empirically demonstrating the individual and joint effects of sociotechnical elements on both digital and non-virtual consumption experiences. For this contribution, this essay focuses on the complementary roles of digital consumption on actual real-world activities. Thus, it addresses an important gap in the literature exploring consumption episodes as a specific way that digital consumption integrates into non-virtual consumer experiences.

Particularly, in three studies, this essay illustrates how digital empowerment and social interaction elements of complimentary activities affect such activities along with the non-virtual activities they complement in consumption episodes. The consumption episode of study one consists of running as the actual activity and keeping track of running as the complementary activity, whereas the second set of studies incorporates the NFL spectatorship as the actual activity and the fantasy football participation as the complementary activity. This differentiation of the context across the studies allows for an exploration of the influential role of consumer behavior type (i.e., goal-directed vs. experimental) on the interaction between social and technical elements. Additionally, these studies represent the first experimental research that investigates digital empowerment of consumers in relation to their joint effects with social interactions across different contexts.

Taken together, all three essays present sociotechnical consumption as a potent theoretical tool to study the wide variety of digital products, services, and practices through their digital empowerment and social interaction elements that are available for

consumers. Furthermore, they demonstrate the far-reaching effects of sociotechnicality beyond digital consumption encompassing consumer responses toward non-virtual consumer activities. Thus, the dissertation also contributes to the literature on sociotechnical studies by extending its reach to consumer research and advocating the perspective that studying the technological aspects of entities is incomplete without considering their relationships with the associated social aspects.

5.2 Managerial Contributions

The theorization of sociotechnical consumption throughout this dissertation has valuable insights for managers who want to optimize the social and technical elements of their digital market offerings in a way that would contribute to more positive consumer responses. Overall, the study of sociotechnical consumption provides a more complete picture of consumer empowerment and how managers can benefit from empowering their customers through their digital products, services, and practices. In addition to this overall perspective, each essay presents its own unique implications for managers.

Although essay one explores a specific consumption experience—online fantasy football participation—its managerial implications are not limited to this context. First, it highlights the influential role of sharing experiences in digital spaces. Thus, providing digital activities that consumers can co-experience with others may be an effective marketing strategy for brand engagement. For instance, dual screening has emerged as a recent consumer trend during media consumption, and brands like Heineken, Disney, and Target have utilized this trend to provide consumers with shared social experiences such as Heineken Star Player, Disney's Second Screen Live: The Little Mermaid, and Target's CBS Interactive's GRAMMY Live app. Second, this essay illuminates the influential role

of digital empowerment which allows consumers to control experiences in a way that real products and services cannot readily offer. This expansion of experiential control may be an effective marketing tool for managers to obtain the attention and engagement of consumers with their brands. For instance, in 2010 General Motors (GM) partnered with Microsoft to develop the Kinect Joy Ride, which allowed consumers to virtually test-drive the electric car—the Volt—via their TV screens. Simultaneously, this technology allowed GM to bring the excitement of their showrooms to the consumers' living spaces. Thus, empowering consumers with the digital availability of new experiences may at the same time empower managers.

Essay two provides additional managerial contributions. First, it provides a systemized typology for DEPs, which managers can utilize as strategic marketing tools to incorporate into their products, services, or marketing campaigns. Second, it illustrates an integrative framework to simultaneously explore the effects of digital empowerment processes and social interaction characteristics on various consumer responses. I hope this framework will be helpful for managers, and will also spark more academic research on this integration, which represents an understudied yet important area to have a more comprehensive understanding of digital consumer offerings. More specifically, academic research on the integration of technological (i.e., informative, participative, creative, and experiential DEPs) and social (i.e., social size, immediacy, and strength) elements may provide valuable insights for managers who want to optimize such elements for the effectiveness of their digital products, services, and practices.

Essay three focuses on experimental scenarios in which consumers could participate in the respective activities without necessarily purchasing goods or services;

however, its theorizing also has implications for marketers seeking to optimize the technological and social components of their market offerings. Of particular note is the opposite interaction effects of digital empowerment and social interactions in goal-directed and experiential consumption contexts. Accordingly, marketers can complement their market offerings with experiential (rather than goal-directed) digital activities if they want to benefit from digital strategies that provide both empowerment and social interaction. Furthermore, for goal-directed consumer behavior, providing consumers with digital applications that would increase their psychological empowerment may reduce the reliance of their customers on other consumers and thus, the influence of potential negative word of mouth.

5.3 Limitations and Future Research Avenues

This dissertation has a number of limitations that can seed future research avenues. First, essay one focuses on a digital consumption experience that has strong ties to its respective non-virtual consumption experience. This may result in a more integrative diffusion of the digital consumption into consumers' traditional real-world activities. Future research can explore digital experiences that do not necessarily necessitate the consumption of non-virtual experiences. For instance, digital motion games (e.g., Kinect Sports) allow consumers to engage in virtual sport activities. How do such activities affect actual engagement in sport? Do these digital experiences have an impact on consumers' feelings, thoughts, intentions, and actions regarding their non-virtual counterparts? Second, this essay considers the dynamics through which consumers get attached to digital experiences, integrating them into their non-virtual consumption experiences in ways that complement, substitute, or transform them. Thus, it mostly

emphasizes the influential strong aspects of digital consumption experiences. Studying the shortcomings of digital experiences compared to their non-virtual counterparts may provide an interesting future research avenue for marketing and consumer researchers.

Given that essay two is a conceptual work, few limitations can be addressed for this essay. Additionally, I have discussed future research opportunities associated with this essay in detail along with the integrative framework provided for sociotechnical empowerment. Thus, their repetition is impractical given the multitude of research directions resulting from the integration of DEPs with social impact characteristics. As such, the remaining discussion in this section focuses on essay three.

One limitation of essay three is that its studies manipulate digital empowerment and social interaction elements of digital experiences in broad general terms rather than focusing on the individual DEPs and social impact characteristics introduced in essay two. However, given that essay three is among the first empirical studies to explore the joint effects of social and the technological elements of consumption activities, this broader perspective is appropriate to set the ground for more specific further investigations. Accordingly, the sociotechnical elements can be hypothesized and investigated in relation to different digital empowerment processes and social impact characteristics in future studies. The wide range of interactions among these sociotechnical elements presents a fruitful avenue for further research.

Another limitation of essay three is that it investigates digital consumption as a complement to non-virtual consumer activities. Future studies can address the substituting role of digital products, services, and practices in different consumption episodes. Furthermore, the experimental studies of this essay are limited to hypothetical

scenarios. Thus, another important direction in studying sociotechnical consumption may involve field experiments with actual consumer behavior rather than reported behavioral intentions. Finally, the moderating effect of consumer behavior type (goal-directed vs. experiential) is tested across different studies. Future research can address this limitation by manipulating the consumer behavior type within the same context.

Denegri-Knott and Molesworth (2010) emphasize the empowering role of digital technologies through easy access to new experiences that are not readily available in the material world, but warn against "[their] potential for further alienation and passivity in isolated individual consumers versus [their] potential for new liberatory experiences beyond the normal roles of a consumer" (p. 114). This brings about important policy implications for sociotechnical consumption theory in that these digitally empowering consumer offerings should be optimized with social interaction opportunities in a way that would prevent the social cost of using technologies. For instance, video games may have alienating effects on participants potentially taking away from their time in social activities. Providing more game incentives for connecting with real-life friends in the digital platform of the game may decrease this alienation. Thus, the theory introduced in this dissertation also provides an insightful theoretical perspective for marketing and public policy research.

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