BEYOND VIRTUALITY: FROM ENGAGEMENT PLATFORMS TO ENGAGEMENT ECOSYSTEMS

“The more high technology is around us, the more the need for human touch.”
Naisbitt (1982, p. 52)

1. Introduction

Understanding the role and implications of Information and Communication Technologies (ICTs) in service has been identified as the top research priority for the progression of service science (Chesbrough and Spohrer, 2006; Ostrom et al., 2010). Correspondingly, Information Systems (IS) scholars call for the undertaking of further research at the ICT/service interface in order to establish cross-fertilization between these two rapidly evolving fields (Raj and Sambamurthy, 2006). Consequently, a recent *Journal of Service Research* Special Issue addresses this topic, and Huang and Rust (2013) draw attention to the information-intensive nature of IT-related service:

“As distinct from service in its traditional sense, IT-related service is information-intensive. The ability to communicate (firm-to-customer, firm-to-firm, and customer-to-customer) anytime, anywhere, and to anyone, is significantly facilitated by the advance of IT” (p. 1).

Huang and Rust also suggest that the emerging area of IT-related service needs to explore the nature and dynamics pertaining to specific firm-to-customer, firm-to-firm, and customer-to-customer interactions. In the last decade traditional’ services ranging from financial services to retail services, have been shifting their physical service delivery into virtual realms, resulting in the development of new online self-service
environments (Bitner, Ostrom, and Meuter, 2002; Campbell, Maglio and Davis, 2011). However recently there has been a reverse trend where a number IT organizations expanded their portfolio from entirely virtual into the realm of additional physical experience. For example, Microsoft and, according to some analysts, Google, are in the process of introducing retail outlets complementing these organizations’ traditionally exclusively virtual presence. Thus while IT-related service plays an important role in creating a virtual experience there can also be an important complementary physical experience.

The purpose of this paper is to explore the shift from a purely virtual customer experience to a holistic virtual and physical experience. We investigate this issue by introducing and exploring the concept of ‘engagement platforms’ (EPs) in the context of the emerging service literature. As such, this paper addresses the generic ICT/service interface, and the key issue of IT-enabled interactions in service more specifically, which extends from virtual to virtual/real experiences and interactions.

Engagement platforms have been described as focal touch points that permit actors in service systems to integrate resources and to co-create value with and amongst one another (Sawhney, Verona and Prandelli, 2005; Ramaswamy, 2009; Brodie, Hollebeek, Juric and Ilic, 2011). Specifically, the technological advances in the last two decades have been instrumental in the development of EPs, with a focus on facilitating specific actor-to-actor interactions in virtual environments, including company websites and social media. Of particular interest are the specific physical (‘real’ world, e.g. face-to-face customer service) interactions, which may be viewed as complementary to focal consumers’ virtual experiences (Davis, Buchanan, Oliver and Brodie, 1999).
Research addressing multiple focal virtual and physical actor-to-actor interfaces (including IT-related service) has been limited. We highlight the importance of generating further insights into the nature and dynamics pertaining to the collective use of multiple virtual and physical EPs, their respective interactions, as well as the ensuing implications of the physical-virtual-physical shift, which may be observed in the current business landscape. Specifically, we propose that the concepts of ‘engagement’ and ‘EPs’ serve to further extend our ability to theorize and derive further insights related to value co-creation.

Despite Brodie et al.’s (2011) call for further research into this emerging area, EPs remain relatively ill-defined and nebulous in the literature to-date. We propose a conceptual framework that examines the different roles of EPs, their key characteristics, and ensuing implications for the performance of particular service systems. Specifically, we posit that the employment of a multiplicity of EPs designed to facilitate co-creation between focal actors using both physical and virtual touch points, calls for a holistic understanding of engagement ecosystems that provide a structured outline of relevant touch points, interaction opportunities and/or types of actor conduct and roles.

The paper proceeds as follows: we initially review relevant literature addressing the ‘engagement’ and EP’ concepts, followed by an analysis of the nature of interactivity and co-creation between focal actors in specific real/virtual environments. Next, we investigate the nature of engagement ecosystems by presenting two illustrative cases set within the ICT industry. We then proceed to develop a conceptual framework and the paper concludes with an overview of key research limitations and implications.
2. Literature Review

Engagement in Service Systems

The ‘engagement’ concept has been the subject of academic scrutiny across a wide range of disciplines, including organizational behavior (Saks, 2006), sociology (Jennings and Zeitner, 2003), and marketing (Heath, 2007; Bowden, 2009). However, despite the undertaking of pioneering research, which suggests the existence of a variety of specific engagement types, engagement remains subject to a lack of clear definition in marketing and service research (Leeflang, 2011; Mollen and Wilson, 2010; Van Doorn et al., 2010; Brodie et al., 2011).

Some authors have referred to the engagement concept as reflecting an individual’s focal psychological state (Patterson, Yu and De Ruyter, 2006; Mollen and Wilson, 2010; Vivek, 2009), or particular outcomes, including commitment, loyalty or purchase intent (Resnick, 2001; Bowden, 2009; Brodie et al., 2011; Hollebeek, 2011a; Van Doorn et al., 2010). Table 1 provides an overview of selected ‘customer engagement’ definitions and their respective core elements, as observed in the literature.

Insert Table 1 about here

Hollebeek (2011a, p. 786) defines engagement as an “individual-specific, motivational, and context-dependent variable […] between relevant engagement subject(s) and object(s).” Engagement subjects and objects represent focal actors within a service system; for example, a customer representing the focal engagement subject, while the engagement object may be a specific service provider (Brodie et al., 2011; Patterson et al., 2006).
We argue that the notion of engagement subjects and objects represents a conceptually appropriate lens through which to view this work, as it transcends other constructs, including ‘involvement’ or ‘participation,’ and reflects what Brodie et al. (2011, p. 259) suggest the key hallmark characterizing engagement: “[The undertaking of specific] interactive customer experiences [between] a focal agent/object within specific service relationships” and systems. This argument is conceptually rooted in the service-dominant (S-D) logic (Vargo and Lusch, 2008, p. 32). Specifically, Lusch and Vargo (2010) advocate that focal interactive, co-creative experiences may be interpreted as particular ‘forms of engagement.’ Engagement thus reflects interactions that extend beyond “[focal] transactions” (Van Doorn et al., 2010, p. 254); suggesting that further investigation into the engagement concept is of particular relevance from an S-D logic-based perspective, such as that adopted in this present work.

Most importantly, however, engagement has been posited to have particular relevance for understanding focal customer-firm and customer-to-customer interactions in technology-mediated environments (Sawhney et al., 2005; Bogatin, 2006; Bowden, 2009; Mollen and Wilson, 2010; Hollebeek, 2011a/b). Mollen and Wilson (2010, p. 1), for instance, suggest that engagement is expected to emerge as the “definitive umbrella term” for virtual interactions. Further, the link between ICT and engagement has been heralded as an emerging, key research area, with early work conducted in the context of online consumer experiences (Mollen and Wilson, 2010) and product innovation drawing on focal customer-to-customer interactions (Sawhney et al., 2005).
**Engagement Platforms**

Ramaswamy defines ‘engagement platforms’ (EPs) as “purpose-built ICT-enabled environments containing artefacts, interfaces, processes and people permitting organizations to co-create value with their customers” (Ramaswamy, 2008, 2009a, 2009b; Ramaswamy and Gouillart, 2010). While Nenonen et al. (2012) state that understanding EPs is crucial when managing co-creation processes, the authors differentiate between digital EPs, processes, tools and physical spaces.

Despite the extension of the EP concept beyond focal virtual realms, the understanding of EPs remains descriptive to-date. For example, Ramaswamy and Gouillart (2010) focus on the characteristics of transparency, access, dialogue and reflexivity when *describing* EPs. First, transparency implies that the focal actor’s interactions with a particular EP remain visible to a wider audience who engage in specific co-creation processes (e.g. on specific social networking sites). Second, accessibility is important for the actors’ ability to integrate resources, such as by adding or sharing content; thereby modifying the nature or characteristics of the EP. Furthermore, the authors note that EPs are designed to facilitate dialogue amongst actors since the subsequent exchange of information is considered a pre-requisite for effective value co-creation (Prahalad and Ramaswamy, 2000; Ramaswamy, 2008, 2009a, 2009b; Ramaswamy and Gouillart, 2010). Finally, reflexivity inherent in EPs implies that not only the actors should be engaged within the platform, but the platform must be capable of adapting to changes from within the EP itself.
The lack of a consistent definition of EPs likely represents a direct consequence of the limited empirical contributions made in this emerging area to-date. Henning-Thurau et al.’s (2004) related work investigates factors motivating actors to engage within virtual brand communities, while Wiertz and De Ruyter (2007) examine firm-hosted online communities providing user-to-user support to focal service issues. The authors’ findings provide further support for Oldenburg’s (1999) and Figallo’s (1998) results, which emphasize that individual social benefits like voluntarism, trust or commitment, which individual actors may experience within focal online environments, represent key drivers of user engagement.

In this study, we define engagement platforms (EPs) as: Physical or virtual focal actor touch points, which are designed to provide structural support for resource integration, and that intend to ensure co-creation in relation to a focal actor or object, in order for enhance an actors' ability to experience engagement with such focal object.

**Physical and Virtual Interaction in Engagement Platforms**

American futurist and early visionary John Naisbitt (1982, p. 52) foresaw in the 1980s that “the more high technology around us, the more the need for [a] human touch.” Less than two decades later, the Internet had become available to the majority of the population in industrialized nations, thus engendering a tremendous transformation of the service landscape. Up until this point, the adoption of ICTs in service had been extremely limited; following the principle of “high touch, low tech” (Bitner, Brown, and Meuter, 2000, p. 138).
Researchers have since acknowledged that the advancement, ubiquity and sophistication of modern ICTs transformed the scope and nature not only of focal customer-firm, but also customer-to-customer interactions (Parasuraman, 2000; Zeithaml, Parasuraman, and Malhotra, 2002). Specifically, the shift towards technology-mediated customer/firm interfaces has been viewed not only to be prevalent, but likely inevitable; and is expected to continue to influence the ways in which customers and providers exchange and integrate focal resources (Froehle, 2006; Froehle and Roth, 2004).

Lee and Park (2009, p. 9618) further illustrate this point by arguing that “with the advancement of IT, many traditional service providers are starting to provide services online.” Prominent examples of cases where ICTs contributed to “diminish[ing] personal interaction in service” (Walker and Johnson, 2004, p. 564) include focal self-service environments, such as online banking and shopping. Here, customers independently perform tasks by using a service provider’s ICT infrastructure via a specific web-interface (Bitner, Ostrom and Meuter, 2002, Campbell, Maglio and Davis, 2011).

While the Information Systems literature assumed ICTs would be inherently transformative and evolutionary (Orlikowski, 2000), a new generation of businesses emerged at the turn of the twenty-first century. Based on their online presence, companies run by digital natives (Vondanovich et al., 2010) including Google, Facebook, and eBay, were unprecedented at the time of their conception; that is, they did not require any technology-induced shift from a physical, towards a virtual customer interface, which more traditional bricks and mortar retailers, including Walmart or retail banks, were required to undertake in order to remain competitive within an evolving business landscape (Lee and Park, 2009).
Service researchers have long argued that traditional face-to-face service interactions are rapidly being “replaced by technology-based service encounters” (Edvardsson et al., 2010, p. 566). However, opposing perspectives emerged, which challenged the prevailing service landscape once again. Today, as ICTs have become ubiquitous, we witness Naisbitt’s (1982) prediction from almost thirty years ago: Interactions between service providers and customers are undergoing another significant shift. However, currently it is not the shift from the physical to the virtual realm; but the new breed of digital natives, instead, shifting ‘back’ into the physical space, thus implying a subsequent shift in the nature of focal EPs. In the next section, we outline relevant cases illustrating the identified shifts in the adoption and nature of focal EPs in contemporary service systems.
3. Illustrative Case Studies on Transitioning Engagement Platforms

Overview and Method

Building on Sawhney et al. (2005) and other researchers addressing the ‘engagement’ and EP concepts in focal business contexts, we adopt a multiple case-study approach (Eisenhardt, 1989; Miles and Huberman, 1994). Specifically, this approach, which is designed to generate theoretical insights, is recommended whenever “little is known about a phenomenon” (Eisenhardt 1989, p. 546), as in the present research context. Further, our analytical approach is based on the principles underlying grounded theory (Glaser and Strauss, 1967).

We sourced the data for our explorative inquiry from publicly available documents related to our selected cases, specifically Microsoft and Google. Specifically, after collecting and analyzing content from relevant news articles, investor statements and industry publications, we adopted Bowen’s (2009) procedure to guide our subsequent document analysis which attempted to identify themes and patterns in the data (Guest, 2012). As such, this research is based on the principles underlying inductive theory building, and culminates in a conceptual framework that describes engagement ecosystems (Colquitt and Zapata-Phelan, 2007). The following sections outline the case studies of Microsoft and Google, which we selected based on the respective industry leadership position held by these organizations, as well as these organizations’ (alleged) recent shift from a purely virtual, to a combined virtual/physical EP approach.
Google Case

Arguably the most prolific Internet company of the twenty-first century, Google revolutionized the market for online searching and advertising. To this day, advertising remains crucial, with Google reporting a 31 per cent increase of its gross revenues to US$13.97 billion in first quarter of 2013. Google operates a variety of EPs fuelling its revenues. While the company’s sole EP was its search engine when founded on September 4, 1998 the firm has substantially expanded its services during the last decade, including through the introduction of new services to its portfolio, including web-based email (i.e. Gmail), cloud-based document management (i.e. Google Drive), and maps (i.e. Google Maps).

After introducing its operating system ‘Android’ for mobile phones and tablets, and its personal computer operating system Chrome, Google launched its own technical devices, most notably the Android phones and tablets, as well as the Chrome Book, a low-cost laptop. Analogous to Apple, Google strives to control the user experience by selling the necessary applications through its Google Apps marketplace. Moreover, regardless of the specific technical device used, Google offers consumers the opportunity to utilize its focal web services, including Gmail, video sharing via its YouTube platform, or social networking using Google+.

The outlined recent expansion of Google’s services suggests that the main type of consumer EP the company has yet to capitalize on; is that of physical retail stores. In February 2013 several technology blogs, as well as the public media, announced that Google planned to open what was then called ‘Google Stores’. While Google initially
denied its intention to open retail outlets the blogosphere remained undecided as to whether these claims held truth. At the time, Google had already presented its technical devices (e.g. laptops and smartphones) in temporary pop-up stores, including at airports and through its own Chrome Zones, stores-within-a-store run in co-operation with the retail chains Best Buy in the US, and PC World in the UK.

However, this model may be considered obsolete in comparison to what Google allegedly envisions for its own stores. In the current model, all financial transactions are managed by Best Buy and PC World’s employees who, despite being trained by Google, have pre-defined sales targets. Conversely, employees in Google stores would perform the roles of educators, rather than act solely as salespeople.

According to an article in the LA Times, the introduction of Google Glass, a revolutionary wearable set of digital glasses, which blur the boundaries between the virtual and physical realities for its user, is the key driver behind Google’s decision to open retail stores for the 2013 holiday shopping season. According to internal sources, the revolutionary nature of this technology, combined with a relatively high price (of US$1500), requires potential customers to initially experience the device in a physical environment. The notion of ‘try before you buy’ has already been a recipe for success for other firms. Google is, therefore, not the first technology company that would materialize its existence by opening physical retail outlets. Microsoft, the Seattle-based software conglomerate already operates its own retail outlets, as outlined in the next case study.
Microsoft Case

Microsoft, the company pioneering the development of operating systems for personal computers, already attempted to undergo a transformation not dissimilar to the one that Google may be aspiring to. From 1999 until 2001, Microsoft experimented with physical retail outlets, then called microsoftSF, and operated by Sony Retail in San Francisco, CA. After a transformative period in the mid-2000s, Microsoft opened its first retail store in Scottsdale, AZ on October 22, 2009. As of April 2013, the organization operates approximately 40 stores within the US and Canada.

Though often criticized for their similarity to Apple stores, Microsoft stores are a physical and online retail platform offering consumer electronics including the xBox, Microsoft software packages, as well as Windows phones and other Microsoft technologies including the ‘Surface’ tablets. Potential customers are able to use and experience the various technical products and interact with Technical Advisors and Specialists; that is, Microsoft staff members offering training with Microsoft products and troubleshooting advice. Further, customers are able to get help on a walk-in basis, or even make appointments for personal shopping experiences or technical advice online, as well as in store.

Similar to Google, Microsoft engages with its customers through a variety of EPs, including technical devices, physical locations, and virtual environments. However, unlike Google, Microsoft’s business model is not based on advertising, but linked to a retail and licensing model where revenues are generated through selling hardware and software.
4. Discussion

*Theoretical Implications*

This paper provides a direct response to Huang and Rust’s (2013) call for more research into the nature and dynamics of firm-to-customer interactions within the ICT/service interface (Chesbrough and Spohrer, 2006; Raj and Sambamurthy, 2006; Ostrom et al. 2010; Huang and Rust 2013). In addition, it responds for the call for the undertaking of further research regarding the role of EPs (Brodie et al. 2011). By drawing on the cases of Google and Microsoft, we illustrated the ways in which these organizations implemented, or are suspected to implement, a multiple-EP ecosystem, consisting of both physical and virtual engagement platforms.

Our findings show that focal EPs provide both physical and virtual touch points which, collectively, can improve the performance of service systems by enhancing its ability to exchange and integrate resources across customer-firm, as well as customer-customer networks. We argue that understanding the relationship between a service system’s performance and focal engagement platforms is crucial, because it has implications for an organization’s ability to facilitate co-creative processes. Spohrer and Maglio (2010) argue that the performance of a service system is measured by its ability to co-create value which, according to Prahalad and Ramaswamy (2004), is contingent on that system’s ability to exchange and integrate resources. It therefore becomes important to understand how and why focal EPs can enhance resource exchange and integration. Figure 1 provides a conceptual framework of the engagement ecosystem that originates from the Google case.
Our findings allow us to expand on Ramaswamy’s (2008) definition of EPs, which focuses on specific ICT-enabled environments, as well as on the one provided by Nenonen et al. (2012), who differentiate between digital EPs, processes, tools and physical spaces. In contrast, we conceptualize engagement ecosystems from a holistic perspective by considering the state of each focal EP (i.e. physical or virtual interface), as well as the purpose of each EP (i.e. interactional or transactional) within that ecosystem. This approach allows us to identify four archetypes of EPs, namely Operating, Instrumental, Enabling and Supplying Platforms, and to explain their role, characteristics and implications for the performance of a service system.

The fundamental role of operating EPs is to enable service firms to co-create value in the digital realm. These platforms enable both customer-firm and customer-customer interactions and generate revenues for service provider, for example through advertising or customer subscriptions. As such, platforms like Gmail or Youtube are entirely virtual, interactional, and designed to enable a continuous exchange and integration of resources within actor networks. Instrumental EPs, on the contrary, are the necessary prerequisite that enable customers to access a service provider’s operating EP. These physical platforms are designed to enable the continuous exchange of resources, either within customer-customer or customer-firm networks. However, instrumental EPs like smartphones or tablets need to be integrated with applications that are typically available through an organization’s enabling EP. Google’s App Marketplace is an example for such an enabling EP, or virtual platform that is designed for transactional, temporary, customer-firm exchanges. Finally, supplying EPs such as the prospective
physical Google store, not only help to transition the role of enabling EPs into physical realms, but also support instrumental EPs.

Our illustrative cases suggest that an engagement ecosystem with both physical and virtual EPs may be more likely to enhance an organization’s capability to successfully co-create value with its customers. This, in turn, is expected to generate higher revenues. Although the inclusion of greater numbers of EPs may not result in superior organizational performance per se; we argue that the specific characteristics of the digital economy, where business models are largely based on advertising revenues, posit the necessity for such an expansion. This is because it allows organizations to 1) control the accessibility of their engagement system and 2), to collect data about customer behaviour across all EPs.

Ramaswamy and Guillard (2010) suggest that, in order to be successful, EPs need amongst other criteria, to be accessible. For technology firms such as Google or Microsoft, accessibility of their operating EP at the virtual/interactional interface is of the utmost importance since the vast majority of their advertising revenues is generated here. The prerequisite for accessibility and usability of the operating EP is the ability to control the instrumental EPs at the physical/international EP (i.e. technical devices), as well as the enabling EP at the virtual/transactional interface (i.e. software applications). We argue that by introducing supplying EP at the physical/transactional interface (i.e. retail stores), technology firms ensure, essentially, the accessibility of their operating EP.

Ensuing a constant stream of advertising revenue also requires that organizations collect data about their customer’s behavior, which can be achieved by controlling the
technical devices, or instrumental EPs that customers use. However, technical devices are oftentimes complex to use, or represent technical innovations, such as Google Glass, which remain largely unknown to customers. By expanding into supplying EPs, technology firms are able to introduce customers in the use of new devices, to provide training that, in turn, may lead to an improved customer experience and engagement, and also may result in additional revenues through the sales of such devices.

**Managerial Implications**

Our findings demonstrate the importance of understanding how customers can become engaged due to positive and complementary virtual and physical experiences. Practitioners should consider how EPs can ideally be configured across an engagement system in order to facilitate engagement, share knowledge, educate, and to enable co-creation processes (Ramaswamy, 2009). The recent work by Payne, Storbacka and Frow (2008), and Payne, Storbacka, Frow and Knox (2009) on managing the co-creation of value provides additional valuable managerial insight into this process.

Implementing an engagement ecosystem will likely be a unique process for each organization, and we suggest that managers give special attention to the relationships among relevant variables linked to the consumer engagement process when implementing engagement ecosystems. These variables include specific engagement antecedents and consequences, as well as the relative importance and/or existence of any interactions amongst the known dimensions of consumer engagement. In addition, Kumar et al. (2010) extend the customer value management framework to “Total Customer Engagement Value,” which represents an important advance in managerial thinking that
has implications for managing online brand communities. Finally, the modelling of the consumer engagement process generates challenges which include both the development and dissolution of the state of consumer engagement.

**Limitations and Future Research**

Due to its exploratory nature, this research has a number of limitations, which provide a basis for further theoretical and empirical research in this emerging area. At a theoretical level, the roots of consumer engagement and EPs are shown to lie within the expanded domain of relationship marketing, and the service-dominant logic. However, further theoretical research is needed to integrate other relevant theoretical perspectives within this emerging viewpoint.

While the research offers initial insight into the nature of EPs in an online and physical retail store setting, further research is needed, including studies in different contexts examining different product categories to generate more generalizable findings. Examining the network of interaction facilitated with EPs to co-creation of value are also important also warrants further research. Attention needs to be given to the dyadic and/or networked aspects of engagement within consumer-to-consumer (C2C) interactions, as well as to consumer-to-business (C2B), business-to-business (B2B), and business-to-consumer (B2C) interactions. Given the complexity of this emerging research area future empirical research is recommended to take a pluralistic approach, that is, by integrating the use of interpretative and quantitative methods that include empirical data from both service providers and customers.
References


Vivek, S. D. (2009), A Scale of Consumer Engagement, Doctor of Philosophy Dissertation, Department of Management/Marketing, University of Alabama.


# Table 1: ‘Customer Engagement’ Definitions

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<thead>
<tr>
<th>Author(s)</th>
<th>‘Customer Engagement’ Definition</th>
<th>Key Hallmark</th>
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<tr>
<td>Kumar et al (2010: p. 297)</td>
<td>A customer’s active interactions with a firm, with prospects and with other customers, whether they are transactional or non-transactional in nature.</td>
<td>Active interaction</td>
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<tr>
<td>Van Doorn et al. (2010: p. 254)</td>
<td>A customer’s behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers.</td>
<td>Beyond transactions</td>
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<tr>
<td>Vivek (2009: p. 7)</td>
<td>The intensity of an individual’s participation and connection with the organization’s offerings and activities initiated by either the customer or the organization.</td>
<td>Varying degrees of participation</td>
</tr>
<tr>
<td>Patterson et al. (2006: p. 1)</td>
<td>The level of a customer’s physical, cognitive and emotional presence in their relationship with a service organization.</td>
<td>Service focus</td>
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Figure 1: A Conceptual Framework of Google's Engagement Ecosystem.