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Technological affordance discovery in enterprise social media success

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Purpose – This paper aims to build on affordance theory from a discovery perspective, to illustrate how motivations behind enterprise social media adoption by companies in the fashion and apparel industries are discovered and realized in performance. Enterprise social media and its exogeneous technological affordances are introduced as action opportunities in an organization during implementation, to be discovered and acted upon by users to effect various performance outcomes.

Methodology – A case study approach was adopted. Data was collected on five fashion companies that have implemented enterprise social media for their internal communication.

Findings – The findings show that fashion companies adopt enterprise social media offered by external vendors to actively seek more effective internal communication and collaboration among their employees. However, fashion companies embark on different pathways of discovering and actualizing the affordances from the newly implemented enterprise social media. As a result, these firms achieved various kinds of performance benefits, which range from improved customer loyalty to enhanced innovation performance.

Originality/value – This study is the first to introduce a discovery perspective to affordance theory and systematically document the success of enterprise social media appropriation by companies in the fashion and apparel industries.

Keywords – Enterprise social media, firm performance, fashion and apparel, affordance theory, discovery theory

Paper Type – Case study

1. Introduction

Over the last decade, companies have widely adopted social media as an approach to connect externally with customers and the market for the enhancement of their business performance. More recently, an increasing number of companies have deployed social media technologies for internal use (Lam et al. 2016, Luo et al. 2019, Treem and Leonardi 2013). The implementation of social media technologies for internal use is commonly referred to as enterprise social media or ESM (e.g. Huang et al. 2015, Kane 2015, Leonardi et al. 2013). For example, Tupperware launched a series of internal social media initiatives to reduce communication costs and improve sales turnover amongst its part-time sales consultants in Denmark (Huy and Shipilov 2012). Dell deployed an internal social media platform named Employee Storm to facilitate the exchanges of ideas and knowledge amongst employees to improve innovation performance (Weinberg et al. 2013). **Indeed, companies worldwide are recognizing the benefits of ESM, and are estimated to spend more than USD 48 billion annually to implement ESM by 2024, from USD 31 billion in 2019 (MarketsandMarkets 2019).**

ESM success has emerged as an important research topic in recent years (e.g. Andriole 2010, Bauwens et al. 2008, Cook 2008, Leonardi et al. 2013). A stream of academic research has been dedicated to investigating social media (Ketonen-Oksi et al. 2016, Ngai et al. 2015), but ESM is only part of these studies' focus. Most studies concentrate mainly on the impact of ESM on employee-level work performance (e.g. Kügler and Smolnik 2013), and reside in technology-related sectors (e.g. Kiron et al. 2012). For instance, Denyer, et al. (2011) found that the deployment of ESM in a large telecommunications firm leads to improved employee perception of service delivery performance. The fashion industry is worth an estimated three trillion US dollars annually, and contributes to two percent of the world's GDP (Fashion United 2020). In this industry, large publicly listed companies dominate (McKinsey 2020), and fashion retail buying companies dictate supply chain relationships as opposed to producer-driven

technology-related industries (Gereffi 1999). Therefore, large fashion buyers (e.g. Kering) and retailers (e.g. Marks & Spencer) tend to adopt technologically innovative practices to stay competitive (Todeschini et al. 2017). In recent years, fashion companies have been highly proactive in using social media externally to take advantage of shifting consumption habits and improve various performance outcomes related to brand equity, customer engagement and marketing performance (e.g. Geissinger and Laurell 2016, Godey et al. 2016, Nash 2019).

Building on these studies, this research adopts an affordance perspective to identify evidence of ESM implementation and relate such initiatives to different fashion company outcomes. Thus, new understanding of how fashion companies use social media internally to improve performance is developed. Moreover, the affordance theory is extended by a discovery perspective in this study to offer original explanations of ESM performance benefits in a narrower fashion industry context.

This study draws upon and develops affordance theory. An affordance of technology refers to the action possibilities of a specific technology's functional properties or technical features which facilitate the realization of an individual or an organization's purpose or goal through its use (Hutchby 2001, Majchrzak and Markus 2013). As ESM implementation initiatives involve the realization of possible goal-oriented organizational actions in specific contexts, technology affordance theory (Leonardi 2011, Majchrzak and Markus 2013, Strong et al. 2014) is adopted as a foundation that can be built upon by the case study approach, as applied in this study (Eisenhardt 1989). To avoid methodological slurring (Goulding 2002), affordance theory is not directly tested. Instead, ESM affordances are theorized as the technological means of action potential for which fashion firms achieve organizational goals.

For the sake of advanced clarity, the key finding of this research is previewed here in this section. Mirroring the discovery concept in entrepreneurship studies (Alvarez and Barney 2007), the technological affordances introduced during ESM initiatives are pre-existing and

subject to user selection and integration into their work routines (i.e. affordance discovery followed by exploitation). For instance, the relevance of ESM features to improving existing work or communication routines can only be discovered and exploited during work activities. Subsequently, performance outcomes are improved as a result of these ESM affordances being actualized by the users through integration into their work routines. Hence, affordance theory is sharpened by the introduction of the discovery concept. The affordances of such systems first require relevance to users' specific routines before being discovered and exploited. This idea of discovery dichotomizes firms sharing similar characteristics, with one side able to discover the new affordances in practice, while the other is unable to do so. Indeed, without such discovery of affordances, enterprise technologies are left unused and unexploited (Li 2015). Hence, technological affordance discovery is observed in this case study by examining the factors, content, and outcomes of fashion firm ESM initiatives.

The remaining sections of this paper are organized as follows. An overview of the literature related to social media, ESM, and technology affordance theory is presented in Section 2. Following this, the methodology of this case study is described in Section 3, and the findings and discussion are presented in Section 4. Lastly, the conclusion is presented in Section 5.

2. Theoretical Background

Enterprise Social Media

Kaplan and Haenlein (2010) defined social media as Internet-based applications that were developed based on the principles of Web2.0, which allow the “creation and exchange of User Generated Content”. Bharati et al. (2014) defined social media as “a technology that is not focused on transactions but on collaboration and communication across groups both inside and outside the firm” (p.258). Hence, in this study, ESM refers to the internal platform upon which

Web2.0 communication tools such as blogging, instant messaging and social networking tools are integrated and hosted to support employee work communication and collaboration. ESM technologies include Yammer and WeChat Work, which integrate and host instant messaging, virtual meeting, social networking, and file sharing functions. Publicly available social media such as WhatsApp, WeChat or Facebook, which may be used by employees at work, are outside the scope of this study.

ESM serves as a platform that allows employees to communicate with co-workers and broadcast messages to others within the organization (Leonardi et al. 2013). Conceivably, the case study conducted by Denyer et al. (2011) in a telecommunications company is a more detailed investigation on the impact of ESM. The authors found that users perceived benefits from the deployment of ESM in terms of operational performance, including improved performance in service delivery and reduced time in internal communication. Further, a study by Kuegler et al. (2015) within a media company demonstrated that the implementation of ESM had a positive impact on employees' individual performance in both work-related and non-routine tasks. These studies suggest that while ESM systems may generally share similar technological features and functions, once deployed for use in organizations across various industries, different processes and performance outcomes may result. Despite reports of ESM deployment by fashion firms in practice (e.g. Adidas, Kering), the limited research on ESM implementation in the fashion and apparel industry suggests that an investigation is due.

Technology Affordance and Constraint Theory

The concept of affordance originated in ecological psychology (Gibson 1966, 1977, 1979). It was later adopted in the fields of information systems management (Leonardi 2011, Strong et al. 2014, Majchrzak and Markus 2013) and technology studies (Faraj and Azad 2012, Hutchby 2001) to develop the technology affordance and constraint theory (TACT) which explains

organizational changes associated with utilization of technology. TACT assumes that organizational actors' use of technology is not predisposed; instead, it is driven by the users' intents (Zammuto et al. 2007). Implicit in this assumption is the idea that when a new technology is being used by an individual or implemented by an organization, a new purpose is also being actualized, and change subsequently occurs (Strong et al. 2014). Specifically, technology affordance refers to the action possibilities of a focal technology's functional properties or technical features which facilitate the realization of an individual or an organization's purpose or goal through its use (Hutchby 2001, Majchrzak and Markus 2013). Technology affordances generally refer to the technological possibilities for goal-oriented actions, and not the technical features or functions of technologies (Markus and Silver 2008, Majchrzak and Markus 2013). Conversely, a technology constraint concerns the limitations imposed on an individual or organization's goal-oriented action when a focal technology or information system is being used (Majchrzak and Markus, 2013). From an operational perspective, technological affordances or constraints are only actualized through the focal technology's use over time in specific contexts (Strong et al. 2014). In addition, a single technology may offer numerous technological affordances and lead to multiple performance changes during its use (Strong et al. 2014).

In information system research, affordance is conceptualized as a “multifaceted relational structure, not just a single attribute or property or functionality of the technological artefact” (Faraj and Azad 2012, p.254). For example, the primary aim of introducing an ESM within an organizational environment is to facilitate employee search of subject experts and subsequent knowledge transfer (Wu 2013, Leonardi 2014). Despite similar intentions for implementation, when a technology consulting firm implemented ESM, it found that its individuals' network positions had transformed, which led to positive associations with individual job performance and perceived job security (Wu 2013). In a financial services study,

newly-implemented ESM enabled network translucence and rendered the communication connections and contents of employees visible within the company (Leonardi 2014). This improved communication visibility reduced work duplication and drove re-use of extant knowledge residing within the company's knowledge base for management and product innovation (Leonardi 2014).

Traditionally, internal communication channels were generally used to push messages from management to employees, but such channels have since been reduced to “mere nodes in complex networks where messages are propagated, attenuated and amplified by users themselves” (Aral et al. 2013). As an internal communication platform, the complex relationship ESM's technological affordances have with performance outcomes can be highly contextual and contingent (Orlikowski 2007, Faraj and Azad 2012). Hence, TACT is an intuitively appealing and theoretically rich lens through which to view and study ESM's effects on different performance outcomes and from various levels of analysis. To summarize, TACT explains the changes in employee actions or company practices as well as the performance outcomes that result from the perceived and actual use or implementation of focal technologies (Bærentsen and Trettvik 2002, Fayard and Weeks 2014). In this research, TACT's explanatory capacity has been advanced with new empirical contents relating to performance changes and the implementation of ESM by companies in the fashion and apparel industry.

3. Research Method

The case study approach was employed in this research. Case study is an appropriate approach to investigate and better understand rich contemporary phenomenon in depth and in its real-world context (Arino et al. 2016, Yin 2014). Given the lack of similar studies in these areas, a case study was the most appropriate method to uncover such issues in a comprehensive and in-depth manner. The intention of this study was to investigate current fashion company ESM

practices, and in particular, to explore the motivation, content and effects of ESM implementation. Therefore, the case study approach was taken due to the current lack of research that have specified relevant constructs to investigate ESM implementation success by fashion companies.

The population of interest in this study was a set of companies operating in the fashion and apparel industries. Following Yin's (2014) recommendation of data triangulation, data was collected from different sources and corroborated. Through triangulation, stronger support can also be developed for any constructs or propositions that may emerge (Eisenhardt 1989). To examine the ESM implementation in fashion companies, information was collected mainly from three sources: case studies published on the official websites of technology vendors, press releases and reports in the Factiva database, and cases shown in an organizational communication portal (www.simply-communicate.com). This approach offers additional construct validity as the published information had to be corroborated by the counter-parties before publication (Yin 2014). For example, the organization communication consultant and technology vendors' case study contents would have required the explicit agreement of the ESM business clients before publication.

Given the social nature of ESM use and the richness of the viewpoints from consultants, vendors, managers and users present in this study's data, empirical "reality" was established by examining the interpretations articulated by the case antagonists (Suddaby 2006). Importantly, the interpreted realities by these parties revealed the mechanisms and pathways of ESM success (or failure). In total, 29 articles discussing ESM implementation in 18 fashion and apparel companies of various sizes were collected over a six-month period in 2018. The researchers exhausted the data sources to ensure that no further ESM cases could be found. Out of the data for 18 cases, sufficient data was available on five fashion companies' ESM initiatives to address this study's research questions. Four of these five companies are large and

publicly listed, and the remaining one is private and much smaller in size. This sample also reflects the state of the fashion industry in which large public companies dominate (McKinsey 2020). Articles about the remaining 13 companies were discarded due to lack of relevant evidence or information about specific affordances or constraints, or ESM-associated outcomes.

Cross-case synthesis analysis is recommended for a case study that consists of two or more cases as the findings are likely to be more robust than the ones involving one single case (Yin 2014). This technique helps to identify and isolate explicitly the independent variables and dependent variables in predicting a phenomenon (Trochim 1989, Yin 2014). This case study included five cases; therefore, cross-case synthesis analysis was applied to find out the factors that motivated ESM adoption and the outcomes generated.

4. Analysis and Cases

This section presents the implementation of ESM within five fashion companies: Adidas, Gilt, Kering, Macy's, and Marks and Spencer. TACT was applied to analyze the cases, with a particular focus on understanding the factors, content, and outcomes of ESM implementation. The analysis and results are presented in the following sub-sections.

4.1. Adidas Group

Adidas Group, a leading global sportswear manufacturer and retailer, employs 56,888 people across more than 100 countries (Adidas 2018). In 2013, it launched a-LIVE, an integrated ESM platform that offers an open, collaborative, and efficient communication environment for its employees (Keck 2014, Runau 2011). Prior to the launch of a-LIVE, Adidas management realized that its employees were relatively young with an average age of 32 years and were from a multitude of cultural and ethnic backgrounds. Adidas employees were assumed to be more accustomed and responsive to contemporary personal communication tools such as social media (Keck 2014). According to Jan Runau, Adidas' chief corporate communication officer,

the a-LIVE platform was created to be an intuitive and personalized internal communication system believed to better suit the communication habits of Adidas' young and culturally diverse employees (Keck 2014, Runau 2011).

The a-LIVE platform acts as a central platform that integrates a series of social media tools for employees to access, including micro-blogging and enterprise social networking. Each ESM tool affords specific communication activities (Runau 2011). For example, the micro-blogging tool facilitates discussion, information update, and solution generation among employees across various locations, while the social networking service allows employees to instantly connect and communicate with one another. In addition, employees are able to combine, update and access all information that is personally relevant as well as share such information with others on this platform using the "public workspaces" and "communities" features (Runau 2011, Keck 2014).

Adidas recognized the need to "avoid succumbing to the social media hype" (Keck 2014) and ensured that the a-LIVE platform fosters a unified communication environment (Runau 2011). Practically, this platform serves as the means through which employees work together, collaborate, and manage organizational knowledge (Runau 2011). Consequently, a-LIVE becomes a "digital home" for employees that is "fun to use" and "future-proof" (Keck 2014).

4.2. Gilt

Gilt is an e-commerce fashion discount retailer and employs hundreds of employees across various cities in United States (Anderson 2018). It specializes in organizing online flash sale events to market discounted designer fashion apparel, home furnishing products and travel and lifestyle services to customers who subscribe to its event notices. Lead Engineer, Yoni Goldberg, suggested it "takes an agile, collaborative effort involving hundreds of employees"

to ensure success for each sales event (Atlassian 2018). To optimise workflows for the events, Gilt decided to abort “consumer-grade” communication tools and develop an ESM platform where employees working on the same event could communicate and collaborate in real time from various locations (Atlassian 2018b).

Gilt adopted Hipchat and Jira from an external software vendor and configured these ESM tools to facilitate internal communication and project management (Atlassian, 2018b). Project management in Gilt involves individual “interactions”, “working software” (instead of “comprehensive documentation”), “customer collaboration” and “responding to change” (instead of “following a plan”) by “self-managing” teams (Fleming and Riservato 2014). Hipchat offers employees a platform for online forums and instant messaging, thus improving employee communication efficiency and speed (Atlassian 2018a). Embedded on the ESM platform together with Hipchat, Jira is a software for project management, which employees can also access to facilitate their scheduling and logistical workflows. Overall, this integrated ESM platform increases work visibility and accountability for every employee in the entire company, streamlines workflow, and synchronizes work activities (Atlassian 2018a).

4.3. Kering

Kering is a French-based luxury apparel company selling products such as jewellery, watches and leather accessories from brands such as Gucci and Bottega Venetta (Kering 2018). It employs around 29,000 employees worldwide (Kering 2018). To replace the independent intranets managed by different brands under the company, Kering implemented a “corporate collaborative” ESM platform named “360” to digitize and enable communication among employees working for all of Kering’s brands (Sogeti 2013).

A platform hosting ESM tools such as an enterprise social networking service, micro-blogging functions and collaborative document management was installed. Kering employees

are able to access the profiles of all other employees and immediately engage in conversations with anyone. They are also able to create, broadcast and monitor messages as well as comment on messages posted by others. Employees across various business units and geographical locations are able to quickly share knowledge resources openly with all employees in Kering or with assigned colleagues in a specific department or project. The new social networking tool's user interface was also made available in ten different languages including Mandarin to facilitate cross-cultural employee exchanges (Sogeti 2013).

The ESM implementation in Kering led to the fostering of a group culture that centers on information sharing and work collaboration among all employees in an open and user-friendly work environment (Sogeti 2013). Such work culture is reported to improve innovation performance (Sogeti 2013).

4.4. Macy's

Macy's is a retail chain with 690 department stores and 160 specialty stores across 44 states in the United States (Macy's 2018). It employs around 130,000 people (Macy's 2018). Due to the rising influence of e-commerce and the economic downturn in 2008, many retailers sought means to cope with the changes in the market (Tibbr 2017). Macy's response was to search for ways in which its employees could have better communication and consequently be able to share information and leverage their knowledge (Tibbr 2017). Thus, the company focused on increasing internal communication speed between decision makers and customer-contact employees by adopting an ESM platform called Tibbr (Tibbr 2017).

According to a Macy's report, employees use Tibbr to share stores' update and sales service situations (Carr 2012). Employees also share their ideas and opinions with their senior management through Tibbr (Tibbr 2017). The company's chief information officer claimed that Tibbr enables employee quick access to the colleagues and information they need (Enache

2016). Moreover, the implementation of Tibbr reportedly improves customer loyalty by facilitating employee communication on service operations matters such as floor layout changes, product replenishment and customer requests (Tibbr 2017).

4.5. Marks and Spencer

Marks and Spencer (M&S) is a British fashion retailer selling products in 1,463 physical stores across 57 countries (M&S 2018). It employs around 81,000 people worldwide (M&S 2018). Management recognized that social media was a “natural channel for employees” and there was a need for a new internal communication system that felt “like business as usual” for users (CIPD 2014). With the intention to foster a sense of community among its employees and encourage enterprise collaboration, it adopted an ESM tool called Yammer (Calnan, 2015).

Embedded within an intranet, Yammer is a networking platform for employees (Calnan 2015, Chacos 2012). Employees generally use Yammer to commemorate the work they and their colleagues are doing, and to obtain problem solutions and “practical support from colleagues” (CIPD 2014). This platform enables employees to share messages and pictures with one another, including those pertaining to their offline work activities (Calnan 2015).

“Yammer is for the large groups, cross-functional teams and entire departments” (Microsoft 2016). Through the new affordances made available to employees by Yammer, M&S accrued performance benefits not only at the organization level but also across individual employee and store levels. For example, an employee’s motivation to sustain their good performance is reinforced when their actions and need for recognition is satisfied by the publishing of their exceptional performance on Yammer (Calnan 2015). Store-level performance also improved through organized competitions between stores based on the sale of newly-launched products (Calnan 2015). Finally, firm level performance in the form of enhanced corporate reputation was also achieved. For instance, the company’s employees

collaborated with one another on Yammer to locate a replacement for a customer who had lost a discontinued soft toy that was personally significant to him (M&S 2016).

5. Findings and Discussion

Table 1 provides a summary of case data on the five fashion firms' implementations of ESM. At the time of this investigation, four of the companies are publicly listed on U.S. and European stock markets and ranked among the world's largest fashion companies (Adidas, Kering, Macy's and M&S; Fashion United 2020), while the other company has since been acquired by a larger competitor (Gilt by Rue La La). The findings are presented in the following sections before a discussion of the emerging theoretical extension of TACT is detailed.

Insert Table 1

5.1. Motivations for ESM Adoption

The five fashion companies were primarily motivated to implement ESM to improve internal communication and employee work coordination across geographical and functional boundaries. All five companies adopted tools that were developed by software vendors and installed for internal use. Two companies specifically implemented ESM tools to improve employee communication; Gilt across locations in the U.S. and Europe, and Macy's between stores and corporate headquarters. In addition, two other companies (Adidas and Macy's) deployed ESM tools to complement strategic business orientations such as orientations towards the market and customers. Primarily, the organizational units (e.g. business units, stores, functions) within the firms in this case study sought to develop "a system of interdependent activities" based on communicative actions that transcend organizational limits and span

boundaries (Zott and Amit 2010). Finally, two of the companies (Adidas and Kering) explicitly indicated that they aimed to use ESM to tap into the “collective intelligence” of their employees to improve performance outcomes. Collective intelligence refers to the “capacity of human collectives to engage in intellectual cooperation in order to create, innovate and invent” (Lévy 2010). No evidence of fashion firms implementing ESM to constrain or limit employee communication and social activities was found (Majchrzak and Markus 2013). In line with recent findings (e.g. Huang et al. 2015, Treem and Leonardi 2013), the five fashion companies shared the same motivations for implementing ESM: to improve internal communication and employee collaboration. Nevertheless, multiple affordances of newly-implemented ESM were present in all five cases (Faraj and Azad 2012), which in turn led to reportedly different benefits.

5.2. ESM Affordances and Consequences

The five fashion companies understood how the characteristics of the implemented ESM differed from their existing internal communication technologies (Aral et al. 2013). Four of the companies (Adidas, Gilt, Macy’s and M&S) clearly recognized the convergent capabilities of their new ESM platforms. These technological affordances enabled more efficient internal search of subject experts (Wu 2013), and improved communication visibility (Leonardi 2014), by ensuring convergence among user-generated text, video, image or audio contents assembled and shared on the new ESM platform (Yoo et al. 2012). For example, Adidas’ ESM platform (a-LIVE) integrates a series of “personally relevant” social media tools that allow richer forms of user-generated content to be continuously assembled and transferred between tools and between users. Macy’s ESM serves as a central platform for employees to share, create and maintain work-related information and generated content. Explicit anecdotal evidence suggests fashion companies purposefully exploited ESM affordances such as “encoding of analogue information into digital formats” to replace previous everyday employee communication dynamics (Yoo et al. 2010). For example, Gilt replaced Skype with Jira and Hipchat to

introduce data-driven agile project management and multimedia-based internal communication. Kering replaced all existing intranets of its subsidiary companies across the world with a single ESM digital platform that is also supported in ten different languages.

Findings are also consistent with predictions made about the complex relationships between ESM affordances and outcomes being contextual and contingent (Orlikowski 2007, Faraj and Azad 2012). First, all five companies indicated positive company-level outcomes associated with such initiatives. For example, Adidas reported that company performance improves as its operating and business models were transformed by the ESM initiatives, while Macy's reported improved financial performance and competitive advantage as a result of its ESM initiative. Second, this research found novel evidence indicating ESM adoption positively transformed fashion company organizational cultures. For example, Gilt explicitly reported that its ESM initiative strengthened the company's "strong remote working culture" and "unique agile culture". Kering suggested that its ESM initiative fostered a "group digital culture" by digitizing and standardizing the way subsidiary companies communicate and conduct business.

Third, this study also found associations of service operations management outcomes such as customer loyalty, with fashion company ESM initiatives. For example, Macy's reported that ESM use by employees leads to improved customer service and in turn, customer loyalty. Marks and Spencer suggested that company reputation was enhanced when customer service outcomes driven and coordinated by employee use of the new ESM surpassed customer expectations. Fourth, the fashion companies also noted how individual and group level performance was impacted by ESM implementation. For example, Gilt reported that the ESM tools allowed employees to better connect and collaborate with one another on both work and nonwork-related matters. Kering reported that new ESM platform allowed its employees to access work-related contents while being mobile or outside work premises and thus, improved

productivity. Marks and Spencer suggested that its new ESM sustained employee motivation as their individual performances were published and recognized by others. Finally, Macy's added that its innovation performance improved as real-time information and ideas were shared on the ESM platform.

5.3 Discussion

In this section, the concept of discovery is presented as an extension of the TACT framework. The limitations of this investigation are also laid out. This study has illustrated how the introduction of ESM, as an exogenous technological object, into internal organizational environments offers fashion companies opportunities to discover, act upon, and realize novel forms of everyday work activities while the new social media tools are used in practice (Leonardi 2009, Zammuto et al. 2007). Fashion companies discover and realize the affordances of the ESM in different ways, when employees exploit the converging and digital characteristics of newly-implemented ESM in their work contexts. More importantly, ESM's affordances provide occasions for firms to discover and innovate value creation practices and in turn, improve business-related outcomes (Barley 1986). For added rigor, the constructs in this study are coded and compared with evidence in cases of six other large fashion companies. Table 2 shows the comparison between these two groups of companies. This additional comparison confirms the constructs' validity in this study, which are generalizable to TACT and the population of fashion firms.

Insert Table 2

5.3.1. Contributions

This study has comprehensively described the constructs of ESM motivations, contents and benefits, and provided an affordance-based explanation of the relationships among these constructs. This study has also described a set of social media for internal use which can improve fashion company performance. Additionally, the uncovering of a discovery component in TACT provides a richer explanation of how outcomes are contingent on user and collective perceptions of ESM features and affordances.

ESM affordances are defined as *potential* behaviours or action possibilities associated with achievement of performance outcomes (Strong et al. 2014, Volkoff and Strong 2013). For affordances to be realized, they first have to be *discovered* by users. At the heart of the concept of discovery is the identification of opportunities and subsequent exploitation of them (Ireland 2007, Alvarez and Barney 2007). In the five cases, the companies clearly discovered and exploited new ESM affordances to effect different performance benefits. These ESM technologies existed as independent entities provided by external software vendors, and were then introduced into internal environments for discovery and appropriation by users upon implementation by the firms (Leonardi 2007, 2011). Adidas' and M&S' management were conscious about employees' prior and existing experience with social media, and were keen to introduce ESM technologies with social media features to allow users to intuitively identify the opportunities and benefits of the new ESM without spending additional psychological resources (i.e. habituation; Groves and Thompson 1970, Thompson and Spencer 1966). Just like how more experienced entrepreneurs are better at discovering and exploiting market opportunities (Shane 2000), firms seeking to implement ESM should capitalize on employees' prior experience with social media to increase the likelihood of ESM affordances being discovered and actualized by the users.

To facilitate employees' discovery and appropriation of ESM, common advantages of social media over traditional internal communication media were also identified and focused

on by the firms. Macy's focused on the speed of communication, Kering emphasized the networking benefits, and Gilt looked at the agility of ESM to complement the nature of employee work and allow a more intuitive discovery of such opportunities to improve work performance. Hence, managers should encourage employee ESM adoption by emphasizing the social and productivity opportunities and ease of integration with their work tasks.

5.3.2. Future Research

This investigation also offers several opportunities for future research on fashion company' implementation of ESM. First, future researchers can attempt to capture the extent of ESM affordance discovery, include this construct, and test the validity of this extended theoretical model. Second, future scholars can focus on the individual, group, business unit, or firm level of analysis in developing the theories related to fashion companies' ESM deployment in this study (Klein et al. 1994). For example, scholars may investigate how newly-implemented ESM may enhance fashion retail chain operations and collaboration between stores and in turn, store and firm-level performance outcomes.

Third, researchers may look beyond financial and operational performance impacts of ESM initiatives (e.g. sales, customer satisfaction) and examine other variables such as customer-employee rapport (Gremler and Gwinner 2008). Indeed, the Marks and Spencer case reveals how individual employees can successfully exploit the technological affordances of ESM tools to build and enhance relationships with customers. Fourth, scholars may also study the innovation effects from ESM use. For example, service recovery performance of fashion firms, can be measured before and after ESM use by customer service employees, and the results can then be compared. The association between traditional innovation performance outcomes and ESM deployment or use can also be studied.

5.3.3. Limitations

Despite the strength of using the case study approach to generate and test theory in real-world settings, there are limitations to this approach. First, although the multiple case study approach applied in this study was able to capture and replicate fashion companies' ESM technological affordance logic, there was no specified relation between ESM adoption and a single outcome variable. Instead, various outcome variables that relate to individual, group and firm-level of analysis were identified (Faraj and Azad 2012, Orlikowski 2007). Plausibly, the different outcome variables uncovered in this investigation could be due to the contextual complexity of fashion companies' ESM implementation, which definitely warrants further in-depth research (Eisenhardt 1989). Second, this study's secondary data was collected mainly from online sources and does not fully represent the population of fashion companies that adopted ESM. However, the mix of fashion companies sampled in this study was able to represent the fact that large public companies dominate in this industry.

6. Conclusion

This case research has used qualitative evidence and applied TACT to determine the motivations, technological contents and consequences of five large fashion firms' ESM initiatives. Notably, this study is the first to apply TACT to investigate fashion companies, and found, a discovery process central to actualizing ESM affordances for performance benefits. Although fashion firms sought to rely on the convergent characteristics of ESM to improve internal communication and tap into the collective intelligence of employees, such affordances had to first complement specific employee behavioural characteristics and be discovered by them. Once such affordances were discovered and subsequently actualized, positive outcomes related to financial, service operational and social performances at individual, group and firm levels were reported by fashion companies. Hence, TACT, ESM and the fashion industry could potentially be rich and new areas of research for technology and operations management scholars.

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Table 1: Fashion companies case summary

Case Company	Motivation for ESM Implementation	ESM technological features	ESM impacts or outcomes
Adidas	<p>To complement customer focus and market-oriented strategy</p> <p>To support "open, honest, fact-based, non-political, collaborative and efficient" working environment</p> <p>To improve internal communication</p> <p>To reconfigure organizational communication to meet demands and communication habits of younger and new employees</p>	<p>Leverage on employee collective intelligence</p> <p>Digital platform that integrates and hosts a series of "personally relevant" social media tools</p> <p>Integrates specific communication activities with job tasks</p>	<p>Improve collaboration and knowledge management</p> <p>Improves operating model</p>
Gilt	<p>To support employee communications across different states in U.S. and Europe</p> <p>To support employee coordination for flash sale events</p>	<p>Replace Skype with Jira and Hipchat to allow real-time and agile project management</p> <p>Increase work visibility, streamline workflows and synchronize work activities</p>	<p>Strengthened "strong remote working culture" and "unique agile culture"</p> <p>Allow employees to connect with each other on both work and nonwork related matters</p> <p>Improved security over public social media tools</p>
Kering	<p>To digitize internal communications and enable collaboration</p> <p>To set up a new corporate platform that "unites all the brands of the Group and enables the gathering of the collective intelligence from the different entities"</p>	<p>New user interface was made available in ten different languages</p> <p>Replace existing independent intranets managed by different entities</p>	<p>Creation of a "group culture and facilitate the work of employees in an open, business-oriented and user-friendly environment"</p> <p>Develop "group digital culture and support its brands in their own digital transformation"</p> <p>Access to an internal platform while mobile</p>

Macy's	To complement customer-centric strategies and changing market conditions by better leveraging on the knowledge of employees	Central depository and platform for file sharing, creating and maintenance of personal profiles, instant messaging and personal announcements	Improve financial performance and competitive edge
	To improve communications between stores and with headquarters	Share knowledge about shop floor events and customer feedback	Increase innovation
Marks and Spencer	To foster a sense of community	Social networking service or social network platform	Improve customer loyalty Reinforce employee motivation through publishing of individual performance outcomes Improve store performance through inter-store competition
		Employee personalized profile page with personal information, current status at work, photo, downloadable contents Hosting of contests for both work and nonwork related activities	Improve firm reputation through coordination of customer service activities

Table 2: Common elements among fashion companies' ESM initiatives

	ESM Contents		ESM Motivations		ESM Outcomes	
	Case companies ^a (5 of 5)*	Non-case companies ^b (6 of 6)	Case companies (5 of 5)	Non-case companies (6 of 6)	Case companies (5 of 5)	Non-case companies (4 of 6)
Between-group comparison						
Elements	a-Live, Jira, JaliOS 360, Tibbr, Yammer	Bonobos information network, Facebook Workplace, threads, Moogle, Campfire, Box	Improve internal communication and collaboration; improve or digitize internal communication; improve customer-oriented performance	Centralize internal communication contents; increase means to communicate with remote employees; allow two-way communication; share ideas and experiences; strengthen communication and collaboration	Improves operational, innovation and financial performance; Enhance corporate reputation, customer service and loyalty; create or change culture	Bonobos senior manager of operations: "streamlined communication ... with our remote employees"; Columbia Chief HR Officer: "...break down silos...ignited our spirit of fun (culture)"; Monsoon Accessorize IT Director: "higher employee engagement and productivity"; REI internal communications manager: "Leaders and employees seem to be feeling a sense of ownership about their contributions"

^a Adidas, Gilt, Kering, Macy's and M&S (See also Table 1)

^b Bonobos (US), Columbia (US), Menswearhouse (US), Monsoon Accessorize (UK), REI (US), and Shiseido (Japan)

* Numbers in parentheses describe the number of companies that exhibit evidence of the construct