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WHY FIRMS USE SOCIAL MEDIA: AN ABSORPTIVE CAPACITY PERSPECTIVE

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Abstract

The use of social media has significant impact on various areas of society. In the past few years, firms have systematically embraced social media as a major means of communication, collaboration, as well as exploration and exploitation of knowledge. In the practice literature, many claim that social media use increases the competitive advantage and performance of firms. However, evidence of these claims is often anecdotal and has not been linked to theories of competitive advantage and firm performance. Based on a field study of 20 firms, this paper aims to substantiate such claims empirically and theoretically. Firstly, we develop a classification of different social media use types. This is because, as we point out, social media use should not be conceptualized and theorized as a single construct. Secondly, we develop a set of theoretical propositions assessing how such social media use types relate to the firms' absorptive capacity, and their ability to recognize, assimilate and exploit new external knowledge. We find that particular social media use types—not social media use in general—increase firms' absorptive capacity and, ultimately, their competitive advantage and performance.

Keywords: Knowledge management, social media, absorptive capacity, qualitative research.

1 Introduction

Social media are a class of Internet-based social computing technologies aimed at mass co-creation and the multidirectional exchange of user-generated content (Kaplan and Haenlein, 2010; Parameswaran and Whinston, 2007). Social media and their surrounding organizational structures constitute a new class of "social" information systems (IS) (Schlagwein et al., 2011). Initially, social media were only used for leisure activities (Kaplan and Haenlein, 2010), but they have since been increasingly embraced for business purposes (Andriole, 2010). This is an on-going global transformation. In 2005—when "Web 2.0" emerged as a global technology phenomenon (O'Reilly, 2005)—hardly any firms used social media for business purposes. In 2011, however, 77% of the 500 largest global firms used external social media (Schlagwein and Prasarnphanich, 2011). The trend to embrace social media has continued in 2012 (Barnes et al. 2012).

How does the use of social media create business benefits for firms? Our knowledge regarding this question is surprisingly fragmented. One reason for this is that "social media" as a concept are inherently difficult to define, and hence difficult to study. Social media undergo permanent mutations, remain in "perpetual beta" and are "continuously deployed." That is, any specific social media platform (e.g. Facebook) might change its features overnight. In addition, the use of social media can be very versatile. Firms may use the same set of social media technologies very differently. Another reason for our fragmented knowledge is that the impacts of social media have been studied in many different disciplines, with research aims, methods and theories that are difficult to integrate. This may explain why, surprisingly, social media use has not been sufficiently linked to theories of competitive advantage and firm performance.

In this paper, based on the analysis of 20 firms, we aim to explain how social media use creates business benefits and competitive advantage by increasing a firm's "absorptive capacity" (ACAP). ACAP is a concept describing how firms achieve competitive advantage through superior abilities in absorbing and utilizing external knowledge (Cohen and Levinthal, 1989; Cohen and Levinthal, 1990; Lane et al., 2006). Hence, the research question of this study is: *Does social media use increase the absorptive capacity of firms?* Based on our findings, we propose that certain social media use types do increase the ACAP of firms, while other use types are irrelevant to firms' ACAP.

The remainder of this paper is organized as follows: firstly, we review existing studies of social media use by firms. After this, we introduce the core claims of ACAP theory. Next, we explain our research method. The findings are then presented, leading to the development of our theoretical propositions. We conclude with a discussion of the implications of this study for future IS research and practice.

2 Literature Review: Social Media and the Firm

We have analysed the relevant literature through a structured review (Okoli and Schabram, 2010; Webster and Watson, 2002). The scope for the initial search has been confined to top-tier journals and conferences and considers both the recommendations by senior scholars (Willcocks et al., 2008) and aggregated journal rating listings (Harvey et al., 2010). A forward and backward search (Okoli and Schabram, 2010; Webster and Watson, 2002) was conducted to capture any relevant and significant papers that did not lie within this initial scope. Specifically, we have searched for and summarized the current knowledge regarding business benefits, competitive advantage, innovativeness and firm performance resulting from social media use. In the following section, we briefly highlight how social media have been researched and what has been found in this regard.

Some studies have used social media as a static, "black box" construct. We do not consider this approach appropriate for our study as social media are a dynamic class of social computing technology platforms, applications, technologies and services (Kaplan and Haenlein, 2010; McAfee, 2006) with a wide range of different uses. Classifications based on traditional media theories or technological features are possible (Kaplan and Haenlein, 2010), but do not specifically account for the versatility of social media use.

As an alternative approach, some studies have considered the different social media *use types* in firms. That is, such studies have used a categorization of social media uses against business aims instead of social media's technological features. The resulting categories could include information dissemination, knowledge management, communication, collaboration, innovation, training and learning (Turban et al., 2011). Some would add rapid application development and customer relationship management (Andriole, 2010). We agree with this perspective. However, for this paper, we developed a new set of social media use types based on the analysis of our data because previous classifications have not been empirically developed, do not follow replicable concept development techniques, and may not have been evaluated for conceptual overlap between categories.

What is social media used for in and by firms? Major research streams include:

Firms use internal social media for knowledge management (Gray et al., 2011). This is not surprising, as social media tools in general have their conceptual roots in knowledge management, with its core abilities such as sharing and storing information (Levy, 2009; Mueller et al., 2011). Drivers for and barriers to using social media for knowledge management in firms have been discussed in the literature (Paroutis and Al Saleh, 2009).

External social media platforms have mainly been used by firms to gauge marketplace reactions (Jansen et al., 2009), to engage communities of users (Lipsman et al., 2012) or to effectively manage customer relationships (Michaelidou et al., 2011). Social media can be used for viral marketing (Li and Du, 2011; Rui et al., 2010; Trusov et al., 2009). External social media can also provide a way to collaborate with customers (Haefliger et al., 2011) in customer-centric practices (Wagner and Majchrzak, 2007).

Firms are also using social media—both internally (with employees) and externally (with customers/consumers)—to improve collaboration and communication efficiency (Andriole, 2010). Social media increase firms' ability to source new ideas and refine products and services (Kiron et al., 2012). Through using this ability, social media use in firms improves their innovativeness (Standing and Kiniti, 2011).

A key gap in the literature is that there have been no attempts to establish the total impact of social media use on the firm (Larson and Watson, 2011; Michaelidou et al., 2011). To the best of our knowledge, no study has theorized the link between social media use and competitive advantages/firm performance. That is, we are missing the connection between the study of social media and theories of the firm.

3 Theoretical Background: An ACAP Framework

Absorptive capacity (ACAP) (Cohen and Levinthal, 1989; Cohen and Levinthal, 1990) holds the view that differences in firm performance (i.e. differences in competitive advantage) can be explained by their different abilities to explore, assimilate and exploit new knowledge. Recent conceptualizations describe ACAP as a dynamic capability of the firm in that ACAP is the ability of the firm to create and deploy the knowledge necessary to build other organizational capabilities (Zahra and George, 2002). We build upon the re-conceptualization by Lane et al. (2006), as it is thoughtful, comprehensive and relevant to our problem. This states that ACAP is the ability to:

"(1) recognize and understand potentially valuable new knowledge outside the firm through exploratory learning, (2) assimilate valuable new knowledge through transformative learning, and (3) use the assimilated knowledge to create new knowledge and commercial outputs through exploitative learning." (Lane et al., 2006, p. 856)

We have used the theoretical lens of ACAP as a sensitizing device (Walsham, 1993) to analyse the data and literature in this study. By relating the above three core processes of ACAP—exploratory learning, transformative learning, exploitative learning—to findings in the literature regarding social media use in or by firms, we have found indications that social media use increases a firm's ACAP (see Table 1).

ACAP Dimension	Social Media Use Business Aim	Study
(1) Exploratory Learning	To patrol user-generated content effectively	e.g. Berinato (2010); Larson and
(understanding, recognizing,		Watson (2011)
acquiring knowledge)	To take up marketplace information quickly	e.g. Jansen et al. (2009)
	To communicate B2B (business-to-business)	e.g. Michaelidou et al. (2011)
	more effectively	
(2) Transformative Learning	To store and search for knowledge easily	e.g. Gray et al. (2011)
(assimilating, maintaining,	To enable crowdsourcing	e.g. Turban et al. (2011)
reactivating knowledge)	To leverage collective intelligence	e.g. Standing and Kiniti (2011)
(3) Exploitative Learning	To develop business applications faster	e.g. Andriole (2010)
(transmuting, applying,	To access the market more easily	e.g. Standing and Kiniti (2011)
maximizing impact of	To create viral eWOM (electronic word-of-	e.g. Li and Du (2011); Rui et al.
knowledge)	mouth)	(2010); Trusov et al. (2009)

Table 1: Dimensions of ACAP and Firms' Social Media Use

Firstly, we found that social media use appears to increase the firm's ability for exploratory learning, that is, understanding, recognizing and acquiring external knowledge. This is supported, for example, through more effective patrolling of external user-generated content (e.g. tracking Twitter feedback) in social media (Berinato, 2010; Larson and Watson, 2011) and, hence, quicker uptake of real-time marketplace information (Jansen et al., 2009). In addition, social media help inter-organizational connectedness and exchange (Michaelidou et al., 2011).

Secondly, social media use appears to increase the firm's ability for transformative learning; that is, assimilating, maintaining and reactivating knowledge. Internal social media (e.g. internal social bookmarking, wikis or micro-blogging) allow for easily searchable and openly flowing information within the organization (Gray et al., 2011). Social media further allow for crowdsourcing structures (Howe, 2006) that tap into and preserve collective intelligence (Turban et al., 2011). Hence, social media leverage the collective intelligence of and for the firm (Standing and Kiniti, 2011).

Thirdly, we found that social media use seems to support the ability for exploitative learning, that is, transmuting, applying and maximizing the impact of acquired knowledge. For example, social media allow new business applications to be developed faster (Andriole, 2010). Social media also help to connect with the marketplace faster for the commercialization of new products (Standing and Kiniti, 2011) and, hence, help to exploit this connection by creating (viral) electronic word-of-mouth (e.g. via Facebook) (Li and Du, 2011; Rui et al., 2010; Trusov et al., 2009).

Why is ACAP relevant to studying our phenomenon of interest? Firstly, it is an established finding that increased ACAP leads to better firm performance, innovativeness and competitive advantage (e.g. Helfat et al., 2007; Zahra and George, 2002). Information systems (IS), in turn, are considered to impact on ACAP (Roberts et al., 2012). By implication, ACAP is an appropriate lens through which to study the mediated impact of IS on firm performance. Secondly, ACAP has been used to study the effect of other knowledge management (systems) in and around organizations (e.g. Corso et al., 2006; Lagerström and Andersson, 2003; Moos et al., 2011).

As summarized in Table 1 above, social media use appears to increase the ACAP of a firm and, by extrapolation of prior findings, firm performance and competitive advantage. Naturally, building on ACAP in this study does not imply that there are no other theoretical perspectives that would be able to create interesting insights into the social media use of firms. However, we have used ACAP in this study as it is a useful major theory for studying the impact of IS on firms (Roberts et al., 2012).

4 Research Method

As stated above, our paper aims to: (1) identify social media use types in firms: and (2) provide evidence for and theorize the impact of these social media use types on the ACAP (and, hence, the performance and competitive advantage) of firms.

Given the highly dynamic nature of the social media context, we have considered it necessary to be open to new and unexpected findings and have therefore followed a mainly inductive approach to uncover our findings (i.e. we did not deductively develop our theory before going into the field). The underlying epistemological principle of this research is induction within the interpretative study of IS (Klein and Myers, 1999). Interpretative studies of IS are concerned with understanding the underlying structure of a phenomenon (Orlikowski and Baroudi, 1991) and thus are particularly useful for exploring the little understood and theorized issues that are the subject of this study. The knowledge of the total impacts of social media (as stated above) and of the relationship between IS and ACAP (Roberts et al., 2012) is fragmented.

We have used a qualitative, case-based approach for data collection and analysis (Silverman, 2011). Qualitative methods support research within the interpretative paradigm as they allow the capture of the broader organizational setting of new phenomena (Kaplan and Maxwell, 2005). Here the phenomenon of interest is the current rapid increase of social media use by firms.

Specifically, we have analysed 20 Australian firms across industries and firm sizes, primarily based on 23 interviews with one or more executives and/or social media experts in each firm. The data collection was conducted throughout 2012. We have chosen a purposive sampling strategy (Polkinghorne, 2005) with a focus on "information-rich" cases (Patton, 1990). We spoke to participants with at least three years of managerial experience in social media use by the respective firm. We have used theoretical saturation (i.e. no new insights were emerging from new cases) to determine the appropriate end point of our empirical data collection (Ezzy, 2002).

In the interviews, we have used a mix of open-ended discussions (Myers and Newman, 2007; Polkinghorne, 2005) and the repertory grid (RepGrid) technique (Curtis et al., 2008; Tan and Hunter, 2002). The combination of these two methods was chosen as they complement each other: the open-ended discussions allowed for the exploration of unpredicted findings related to social media use. The RepGrid technique ensured that constructs considered obvious by the participants were not missed, and that the different effects of social media use were compared in a systematic way. The interviews were our main source of insights.

The open-ended discussions resulted in semi-structured interview data. We performed on-going analysis of the data using thematic analysis. All interviews were transcribed to be coded with NVivo software. We have undertaken the coding with the aim of identifying the facets, constructs and themes underlying the phenomenon (for further methodological details, see: Braun and Clarke, 2006; Ezzy, 2002; Neuman, 2006).

The RepGrid interview technique resulted in structured data. RepGrid is a systematic technique for identifying how people attribute meaning to experiences. The technique is based on comparisons within a set of experiences (here social media use) by the participants (for further methodological details, see: Curtis et al., 2008; Tan and Hunter, 2002). As we were interested in understanding participants' constructs around the nature, benefits and issues of the different social media uses of the respective firm, only the construct elicitation phase data were used for this study.

The next step in our analysis was to explore the use facets derived from both interview methods and examine the relationships between them (Ezzy, 2002).

The following section shows the results of this study. Firstly, we present the firms' different social media use types that emerged from the data. Secondly, we present the empirical results related to ACAP, immediately followed by our corresponding theoretical interpretation.

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¹ RepGrid originally emerged as a technique for studying individual-level phenomena (it is based on personal construct theory); it has since been successfully used to study organization-level phenomena as well.

To 1	use of social media for the unidirectional broadcasting of information.		
To To			
I :≣ To	broadcast information to others	X	X
2 10 C	demonstrate knowledge through advice on a product or service	X	X
To 1	broadcast news in a timely manner	X	X
To I	present information that has been selected from another source	X	X
To 1	To market products and services of the firm		X
To !	build the firm's brand image or reputation	X	X
	use of social media for facilitating dialogue and connecting users.		
To o	To engage with other users in different functional/professional areas		X
To o	To connect with experts on a subject		
Dialogue To To T	facilitate serendipitous knowledge discovery	X	
To	receive feedback on a brand	X	X
To s	scan for information, feedback or new ideas	X	X
The	use of social media to facilitate the creation of a particular outcome (solution, prod	duct, se	
E To	engage in discussions to create a new solution, product or service	X	X
To o	collaborate within a group of users		X
To :	support specific business functions (such as HR, R&D)		X
Collaboration Co	To support general business administrative functions		X
To 1	To manage projects within the organization		X
	connect with clients as a client portal	X	
The	use of social media for the storage, maintenance and retrieval of knowledge.		
e g To	manage and maintain knowledge		X
gg r To	use as a central repository of information	X	X
To t	formalize information	X	
Knowledge Maintenance	keep an audit trail of information	X	
To:	store general business information		X
As	a searchable database	X	
The	The use of social media for generating fellowship, loyalty and social relationships between users.		
	encourage fellowship and cohesiveness	X	
To l	build social relationships	X	
I 5 Tal	connect groups with similar private interests	X	
<u> </u>			

Table 1: Five Types of Firms' Social Media Use Identified in Our Data

Note: $TA = thematic \ analysis; \ RG = RepGrid.$ Duplicates facets have been removed or merged.

5 Results and Interpretation

5.1 Social Media Use Types

In brief, five distinct social media use types emerged through our data analysis: "Broadcasting", "Dialogue", "Collaboration", "Knowledge Maintenance" and "Sociability". The thematic analysis of the interview data identified 23 facets of different social media use in firms through an open coding process. Applying the RepGrid technique, we identified another 23 facets. We consolidated facets by re-formulating them consistently in the form: "to [business aim]". We removed duplicates and redundant facets. Next, we related the facets to emerging central themes (Ezzy, 2002). Ultimately, we arrived at the above five distinct social media use types composed of 27 facets. To evaluate the facets and themes, we discussed them in several iterations within the research team and went back to the participants to evaluate if we had adequately represented the facts and language of practice.

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² For an example of the classification process, the excerpt—"So it [social media] is a free way of getting the brand out there to existing customers, to new prospective customers" (Participant 5, Product Manager)—was ultimately coded as the facet "to build the firm's brand image or reputation", falling into the social media use type of "Broadcasting".

Table 2 shows the final set of five social media use types and 27 social media use facets. Table 2 also shows our single sentence definition of each social media use type (i.e. each use type can be considered a distinct theoretical construct). It should be noted that most participants referred to "knowledge maintenance" as "knowledge management," but we decided not to use this term due to its loaded, specific meaning in the academic context.

Our participants usually distinguished between internal social media (aimed at employees) and external social media (aimed at customers/consumers). We found that four of the five generic social media use types were conducted with both internal and external social media. For example, the broadcasting of firm messages via a Twitter account to external recipients constituted *external* "Broadcasting", while the broadcasting of external industry news and blogs to employees via a Yammer constituted *internal* "Broadcasting." "Knowledge Maintenance" was the exception with firms in our sample reporting only internal use.

In the following section, we use this fine-grained understanding of firms' social media use types to theorize the findings (representative empirical citations) related to ACAP.

5.2 Firms' Social Media Use and ACAP

5.2.1 Social Media Use and Exploratory Learning

The exploratory learning process of ACAP is considered to have two sub-processes: the recognition of external knowledge (Lane et al., 2006) and the acquisition of external knowledge (Camisón and Forés, 2010). The exploratory learning process includes business activities that locate, identify, evaluate and acquire external knowledge (Camisón and Forés, 2010).

The data indicate that one common use of internal social media was that external news, sources and articles were curated by an internal team and broadcast to the relevant departments within the organization. The following vignette provides an example of how internal social media broadcasting was used by the firm as a more effective substitute for traditional communication media:

"We've got a few internal blogs in pilot. We've got some knowledge management blogs, which are designed to disseminate information about the key things the firm is interested in. For example, practice area news [industry news] [...] the blogs are attached to RSS aggregators so basically the knowledge management team are curating the news that are coming through, so they'll see the latest new item and say 'yes, that's relevant to the team' [...] the knowledge management team is acting as a filter for it because there are so many feeds that are coming through. [...] They'll tag it, and they'll add jurisdictions, and they might even change the summary to make it more relevant for the people." (Participant 4, Technology and Innovation Manager)

The data suggest that the filtering and broadcasting of external knowledge to employees via internal social media (e.g. Yammer) support the firm's ability to recognize and acquire new knowledge. Therefore, we propose that:

Proposition 1: The "Broadcasting" use of internal social media has a positive impact on the exploratory learning capacity of the firm.

Social media also allow dialogues in the form of discussions and question-and-response-type communication. The following participant stated that his firm used an independent external social media platform to identify and discuss the future requirements of its products:

"Particularly with software, you need to know their requirements. And it's enterprise software [...] it's [sold] to a sort of small core group of [...] customers, [...] and their problems are pretty unique to them. So, it is important to know what requirements they have and problems they encounter. So, yes, [external social media] is one of the ways we get that kind of intel." (Participant 5, Product Manager)

Such feedback does not necessarily emerge naturally in external social media; many firms systematically trigger such responses. A vignette from an IT executive of one of the studied firms illustrates this more proactive approach:

"We were doing a product launch for a product that was all about performance [reporting] [...] So, we went to a very large [...] group on LinkedIn and basically started asking, 'what performance metrics do you pass up to your management' [...] huge, huge response, and used the responses to tailor the words that we would use in the [marketing] messaging." (Participant 14, IT Executive)

This evidence suggests that the "Dialogue" use of external social media supports the localization, identification, evaluation and acquisition of external knowledge. This is because the systematic use of external social media allows the firm to acquire relevant knowledge and proactively seek feedback from customers and other external parties. We propose that:

Proposition 2: The "<u>Dialogue</u>" use of <u>external</u> social media has a positive impact on the <u>exploratory</u> learning capacity of the firm.

5.2.2 Social Media Use and Transformative Learning

The transformative learning of the organization is a mix between the assimilation and transformation of acquired knowledge (Lane et al., 2006). In particular, this process consists of the analysis and interpretation of knowledge (Szulanski, 1996) as well as the transformation, maintenance and reactivation of knowledge (Camisón and Forés, 2010) in order to allow for knowledge combinations in innovative, value-generating ways.

Our participants reported that internal social media were used as a place where knowledge could be stored and maintained as well as retrieved and effectively reactivated. An example of the "Knowledge Maintenance" use is as follows:

"Our technical services division, [...] extended [the internal social media] into placing files and things that the whole company might need. Just info sheets, that kind of thing. They put them on there because it's so much easier than trying to find it on a network drive somewhere. That's something that's worked really well." (Participant 16, Communications Manager)

The ease of searchable internal social media allows the stored knowledge to be quickly found and reused, supporting the reactivation of relevant knowledge. In the following quote, the participant referred to social media as building up an "organizational memory:"

"So, yeah, the [internal social media] [...] allows particular business units to [...] engage with each other beyond email, and [...] the useful thing is about building up an org. memory. Because, obviously, unlike email threads, it's [...] more searchable. So, when they bring on new staff, they're actually referred to previous threads that are about a particular aspect." (Participant 7, Consultant)

Transformative learning depends on effective access to what is currently known in the firm. The data suggest that internal social media support transformative learning through the more effective maintenance of knowledge. In this way, the "Knowledge Maintenance" use of internal social media contributes to the transformative learning ability of the firm. Therefore, we propose that:

Proposition 3: The "Knowledge Maintenance" use of internal social media has a positive impact on the transformative learning capacity of the firm.

In addition, our participants reported that social media facilitate the engagement across departments, locations and time zones, resulting in more efficient communication and discussion between employees. The following vignette provided by a firm's communication manager exemplifies how the "Dialogue" use of internal social media helps to share and activate knowledge that already exists in the firm:

"It's really good because I can reach out to my counterparts in other countries. We can have discussions, [...] [we find] it really useful for engaging people across time zones. And being able to get instant answers instead of a barrage of emails [...] I think, on the whole, the company sees the benefits. It grows day by day. People might be asking questions about a particular area of the business; they need help and throw it up on Yammer. There are so many examples of how we get this done a lot quicker." (Participant 16, Communications Manager)

This evidence suggests that the "Dialogue" use of internal social media can contribute to the transformative learning process in the firm in two ways. Firstly, it helps the firm to generate "collective intelligence" by generating a space for discussion and collective evaluation. Secondly, it helps the firm to assimilate knowledge horizontally through the organization by facilitating access to knowledge bases of other employees (e.g. in other departments or countries). Hence, we propose that:

Proposition 4: The "<u>Dialogue</u>" use of <u>internal</u> social media has a positive impact on the transformative learning capacity of the firm.

5.2.3 Social Media Use and Exploitative Learning

The final learning process of ACAP, that of exploitative learning, is concerned with the application and transmutation of external knowledge that has been acquired, assimilated and transformed (Camisón and Forés, 2010). The aim of this exploitative learning process is to create new knowledge outputs or new commercial outputs (Lane et al., 2006).

The following vignette provides an example of the "Collaboration" use of social media. This firm uses an internal social media platform to collaborate on their financial budget:

"A private group [was created on the internal social media platform] for our 2013 budget [...] to communicate timing and involvement, and it's locked down to general managers and above. It's so they can actually post updates and tell which centres they've been to and how they're progressing." (Participant 20, IT Project Manager)

We deduce that the "Collaboration" use of internal social media allows the organization to create particular outcomes: business processes and solutions (knowledge outputs), as well as products and services (commercial outputs). This use of social media helps the firm to capitalize on its knowledge base by producing knowledge-based outcomes more effectively. Hence, we propose that social media used for collaborative knowledge work aid exploitative learning:

Proposition 5: The "Collaboration" use of internal social media has a positive impact on the exploitative learning capacity of the firm.

The participants reported several cases in which social media-based bridging between departments helped to develop services or products faster in their respective firms. In the following example, a consultant described how use of blogs allowed the two different functions (i.e. marketing and product development) to connect with each other, helping the development of new products:

"I think some of the content in the blogs may have paved the way for some of the products that rolled out later each year [...] you'd get people in marketing writing a blog about market needs, trends that were happening out there, and gaps [that] we were in a position to fill but we weren't [filling], and then people in product development would read the blog and get working on developing a product to meet that customer need." (Participant 12, Consultant)

Hence, such evidence suggests that the "Dialogue" use of internal social media not only supports transformative learning but also exploitative learning. That is, social media help to transform knowledge for new product development (see also Flatten, Engelen, Zahra, Brettel and Ahmed, 2011). Hence, we propose that:

Proposition 6: The "<u>Dialogue</u>" use of <u>internal</u> social media has a positive impact on the exploitative learning capacity of the firm.

In summary, one of the notable findings that emerged from our analysis and interpretation of the collected data is that certain use types of external and/or internal social media—"Broadcasting", "Knowledge Maintenance" and "Collaboration" with internal social media, as well as "Dialogue" with both internal and external social media—support the ACAP of firms. Ultimately, these social media uses support a firm's performance and competitive advantages through increasing its ACAP (Helfat et al., 2007; Zahra and George, 2002). Another implicit finding is that other social media use types—nearly all external social media use types, as well as the "Sociability" use of both internal and external social media—do not support ACAP.

6 Implications and Conclusion

Based on the analysis of data collected from 20 firms and building on ACAP theory, this paper makes two contributions. Firstly, we develop a set of five distinct social media use types in firms: Broadcasting, Dialogue, Knowledge Maintenance, Collaboration and Sociability. This helps us to understand and study the meta-concept of "social media." Secondly, we develop a set of theoretical propositions relating these use types to the three main processes of a firm's ACAP. As discussed above, we interpret the evidence as meaning that social media use increases the effectiveness of the firm's ACAP, and hence its competitive advantage and overall performance. This contributes to our theoretical understanding of the impacts of social media use. This research also contributes to ACAP theory by identifying new emerging antecedents of ACAP (this is within the boundary condition of only being interested in the direct effects of social media use).

These two contributions lead to two main considerations for future IS research:

Firstly, our theorizing required us to develop a more fine-grained analysis of the different use types of social media. That is, we developed a more detailed elaboration of social media use types in relation to business aims for this study. From a broader perspective, we suggest developing better concepts and constructs for how IS are actually used against business aims. Capture-all "system use intensity" or "system use intention" constructs seem too simplistic to capture the diversity of social media use. Social media might be used in very different ways at the same levels of system use intensity.

Secondly, the paper implicitly suggests that IS should play a (larger) role in theories of organizations and the firm. Many such theories (e.g. resource-based view, dynamic capabilities/ACAP, transaction cost economics) do not usually consider IS/IT as an explicit construct. This is less than satisfactory not only for IS researchers but also for IS practitioners. In particular, consulting companies (Bughin et al., 2011) and the participants in our study agree on the critical importance of the effective utilization of IS (i.e. social media) for firm performance. Hence, we encourage IS researchers to strengthen theory at the intersection of IS and strategy, for example, by linking the existing findings on the use and value of IS/IT to theories of the firm. ACAP is a major theory relevant to this intersection (Roberts et al., 2012).

This paper has one key "take-away" for IS practitioners: our analysis suggests that investments in social media activities should prioritize internal social media as they have more impact on ACAP. Within internal social media, priority should be given to social media activities that support ACAP learning processes as discussed above.

This study has some limitations. Firstly, we studied a sample of 20 firms. Certainly, larger samples might more strongly support claims of generality and generalizability. Secondly, we sampled only Australia-based firms. Cross-cultural studies will add value to the discussion as organizational social media use varies between cultures (Schlagwein & Prasarnphanich 2011). Thirdly, the use of social media might not be stable and its nature likely to change in the future. There is still some skepticism, distrust, and cautiousness limiting social media use in business.

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