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The use of social media for knowledge acquisition and dissemination in B2Bcompanies: an empirical study of Finnish technology industries

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Abstract
Scholars and practitioners of knowledge management have paid increasing attention to the adoption of social media in business-to-business (B2B) setting for knowledge sharing; however, both the theoretical and empirical research in this domain are quite fragmented. The aim of this research is to deepen the understanding about the B2B companies' awareness of the potentials of social media in improving their absorptive capacity and, consequently, if and how such companies deploy knowledge strategies based on social media adoption. We carried out an empirical survey of Finnish technology companies operating purely in B2B markets. Results highlight that social media adoption is still in a preliminary stage of development. Companies show a lack of awareness of the potentials of social media as a means for external knowledge acquisition and internal dissemination. Results suggest a strong need of a structured approach to the adoption of social media to overcome cultural and organisational barriers.

Keywords
Social media; absorptive capacity; knowledge strategy; empirical study;Finnish B2B companies

1. Introduction

Kaplan and Haenlein (2010), define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content". A large number of social media application categories have been identified in the literature (Felix, Rauschnabel, & Hinsch, 2017): wikis (e.g., Wikia and Confluence), blogs (e.g.,WordPress and Blogger), microblogs (e.g., Twitter), social networking sites (e.g., Facebook, LinkedIn, Yammer, Socialcast), discussion forums (e.g., phpBB), open or private communities (e.g., Jive, Lithium community platform), content-sharing sites (e.g., YouTube, SlideShare, Flickr, Pinterest), social office tools (e.g., Google Docs), social bookmarking (e.g., Delicious), mashups (e.g., Google Maps), and virtual social worlds (e.g., Second Life).

The use of social media in enterprises is receiving increasing interest, also thanks to the growth of its perceived value (e-Marketer, 2013). A report produced by McKinsey (2012), revealed that an adequate use of social technologies could result in 20–25% improvement in knowledge worker productivity. Consequently, many large social media companies are attempting to tackle the "enterprise social network" space by providing business-centric services (e.g., Microsoft's Yammer, Slack, Convo, Socialcast, and more recently, Workplace by Facebook). Anyway, despite the popularity of the topic, social media in B2B settings have not been adequately studied by scholars (Siamagka, Christodoulides, Michaelidou, & Valvi, 2015). Even if authors agree that approaches and challenges of social media adoption in B2B companies are different from those of B2C companies (Chung, Andreev, Benyoucef, Duane, & O'Reilly, 2017; Habibi, Hamilton, Valos, & Callaghan, 2015; Volpentesta & Ammirato, 2007), social media research has been mainly focused on the business-to-consumer (B2C) domain (Michaelidou, Siamagka, & Christodoulides, 2011; Pettersson, Aramo-Immonen, & Jussila, 2014; Volpentesta & Felicetti, 2012). Scholars are generally more interested in the impact of social media on consumer purchase decisions (Wang, Yu, & Wei, 2012), their capability in supporting brands and collecting customer feedback (Breslauer & Smith, 2009), or in providing useful market research data (Nunan & Yenicioglu, 2013). Overall, although some researches provide anecdotal evidence about the importance of social media for business-to-business (B2B) relationships (Brennan & Croft, 2012; Corvello & Felicetti, 2014; Leonardi & Meyer, 2015; Mäntymäki & Riemer, 2016), both theoretical and empirical research on social media in B2B are quite fragmented and limited. There are some exploratory studies on social media in the B2B in the European and in the US context. Michaelidou et al. (2011) and Siamagka et al. (2015) studied social network usage in SMEs in UK focusing on barriers and factors affecting their usage as a

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marketing tool. Agnihotri, Dingus, Hu, and Krush (2016) and Schultz, Schwepker, and Good (2012) studied the effects of social media use by salespeople in USA and their customer satisfaction. Brennan and Croft (2012) proposed an exploratory study on social media usage in B2B marketing and branding analysing ten companies located in US, Europe and Asia. These studies faced the issue of social media in the B2B domain, mainly focusing on its value on marketing and sales. The main aim of our paper is to increase the understanding of the state of application of social media for external knowledge acquisition and internal (intrafirm) knowledge dissemination in B2B setting. To reach this aim, we carried out an extensive survey of companies operating purely in B2B markets in Finland. The novelty of this study relies on looking at the usage of social media in the B2B domain under a knowledge management lens. Moreover, its novelty is related with its implementation geographical area (i.e. Finland), where it represents one of the few known studies applied in B2B companies.

The paper is organised as follows. In section 2 we presented the theoretical background of the study, while in the section 3 are reported the research design and methodology. Survey results and discussion are present in section 4 followed by conclusions in section 5.

2. Theoretical background

It has been commonly assumed that it is much more difficult to utilise social media in the B2B context than in B2C relationships (Bengs & Wiklund-Engblom, 2012; Michaelidou et al., 2011). Reasons reside in the many significant differences, in terms of B2B relationships number of decision-makers, buyer behaviour and B2B products characteristics.

In the industrial B2B market, there are normally fewer customers compared to consumer markets (Geehan, 2011; Gillin & Schwartzman, 2011), but, in this case, customers are often complex organisations and the number of decision-makers/influencers is larger than in the B2C market (Sofo, Volpentesta, & Ammirato, 2008; Zachary, David, Kim, & Sarah, 2013). The customer and the user are not necessarily the same actors. For example, the former might be the decision maker and the latter the operational user (Malhotra & Birks, 2007). Moreover, in many B2B contexts, users also compete against others; this affects their willingness to share knowledge and leads to knowledge protection, in the forms of legal contracts and intellectual property rights (IPR), that may limit the usability of social media between B2B companies, customers and partner (Von Krogh, 2012). This situation demands a greater number of communication channels and different tailored messages, thus increasing the level of complexity in the adoption of B2B social media strategies (Habibi et al., 2015). Moreover, B2B products or services are often more complex than those oriented to B2C market and the development of new products as well as the decision–making cycle for B2B purchasing takes significantly more time, thus requiring deeper and long lasting relationships and richness of pre-purchase information (Morrison, 2014). Due to the complex nature of the product or service, as well as the higher level of risk involved in high-value purchases in the B2B market (Jerman & Završnik, 2012), B2B relationships are generally characterised by an intense production and exchange of knowledge. Social media are hence a useful tool to ameliorate risk perceptions and reassure customers, thanks to their capacity to communicate a large amount of customised factual information, based on the risk profile of individual decision-makers. Some researches presented the importance of social media in B2B relationships with customers (Brennan & Croft, 2012), while recent research shows that the use of social media in organisational context (also called Enterprise Social Networking, ESN) holds great promises for organisation too (Mäntymäki & Riemer, 2016). ESN are able to contribute to the inter-organisation knowledge management (Leonardi & Meyer, 2015; Von Krogh, 2012) and are positively associated with employee performance (Mäntymäki & Riemer, 2016).

More generally, social media in the B2B context are tools facilitating intra- and inter-organisational activities among peers, customers, business partners, and organisations (Ngai, Tao, & Moon, 2015).

The above factors lead us to believe that the usefulness and potential of social media, in the context of B2B companies should be studied empirically with an accurate investigation on internal and external (with customers and suppliers) B2B relationship.

2.1. Operationalization of knowledge management with the help of social media

Knowledge Management (KM) today is changing fundamentally, drawing increasingly on social media. Social media, also known as Web 2.0 or Enterprise 2.0, are software that supports group interaction toward establishing communities, and creating and exchanging content (Von Krogh, 2012). At organisational level two core concepts of KM are knowledge strategy (Von Krogh, Nonaka, & Aben, 2001) and absorptive capacity (Zahra & George, 2002). In this section, we discuss the connection between these KM concepts and social media use in companies. Operationalization is a process of defining the measurement of a phenomenon that is not directly measurable though its existence, but is indicated by other phenomena. Organizations KM features are difficult to measure directly with primary measures (Soo, Devinney, Midgeley, & Deering, 2002). However, there are quantitative secondary measures such as number of patents, number of new ideas,

number of innovations and novel inventions (Soo et al., 2002) that could be used to measure organizations KM features. We argue that way and intensity that organizations use social media for inter and extra organizational knowledge creation represent qualitative measures useful to operationalizing KM in B2B contexts.

Denford and Chan (2011) made a distinction between knowledge strategy and knowledge management strategy by introducing knowledge strategy typologies. KM is referring to a portfolio of procedures and techniques adopted to apply company's knowledge assets (Teece, 2000). KM strategy on the other hand is about management issues. It deals with business outcomes and support for firm's competitive advantage. Social media is a specific part of strategic decision-making based on digital resources. Bharadwaj, Sawy, Omar, Pavlou, and Venkatraman (2013), defined a digital business strategy as "an organizational strategy formulated and executed by leveraging digital resources to create differential value". The definition of Information Strategy stated by Kapovsky et al. (2013) and followed by Henfridsson and Lind (2014) does not differ that much: "a process of goal-directed activity intended to realise a strategy for using information systems in an organization", while Markus and Loebbecke (2013) referred to digital business strategy stating that it encapsulates and recognises the firm's digital resources in a wider "ecosystem" consisting of vendors, distributors and business partners that are engaged in creating and delivering a firm's products and services. Considering the above definitions Effing and Spil (2016) defined social media strategy as: "a goal-directed planning process for creating user generated content, driven by a group of Internet applications, to create a unique and valuable competitive position".

Using "KM levels" we can introduce social media as a vehicle to operationalise KM since they bring significant benefits to knowledge management by increasing vertical and horizontal communication (Davison, Ou, Martinsons, Zhao, & Du, 2014), by intensifying knowledge transfer (Leonardi & Meyer, 2015), by rising social capital (Kline & Konstanze, 2013), and supporting managers steering networked dispersed organizations as well as enhancing collaboration not only inside but also between companies and other parties. If we take a closer look to Von Krogh et al. (2001) knowledge strategy typology, it identifies two core knowledge dimensions. Namely, knowledge creation and knowledge transfer. These two dimensions resulted into four main knowledge strategy types: leveraging, expanding, appropriating and probing. In leveraging strategies focus is on inter firm knowledge transfer. Inter-company social media applications can ensure that company transfers efficiently existing knowledge from various knowledge domains. Expanding strategy implies increasing the scope and depth of knowledge domains by refining what is known and by bringing additional expertise to knowledge creation. Here communities of practice (Wenger, 1998) engaged in social media (internal in the company or external) are useful. Appropriating strategy focuses on new knowledge acquisition. Capturing knowledge from external partners, via mergers, joint-ventures and partnership for example. Social media channels provide completely novel level of network collaboration in different business ecosystems. Probing strategy empowers teams to create new knowledge. Social media offer opportunities for virtual team building, collaborative knowledge creation and for open innovation activities.

From a sales force perspective, social media should be an integral part of a firm's repertoire, as it allows salespeople to engage customers and build social capital that would "encourage customers to interact, engage, and establish relationships with (Agnihotri, Kothandaraman, Kashyap, & Singh, 2012).

Noblet, Simon, and Parent (2011) wrote about operationalization of absorptive capacity defined by Cohen & Levinthal (1990, p. 128) as "the capacity to recognise the value of new external information, assimilate it and apply it to commercial ends". They argue that absorptive capacity consists of two major components: external knowledge acquisition and internal (intrafirm) knowledge dissemination and that organizations wanting to make effective use of the sources that can boost their absorptive capacity need to focus on the communications interface both within the company and between the external environment and the company.

Zahra and George (2002) identified four dimensions of absorptive capacity: acquisition, assimilation, transformation and exploitation. Acquisition is capacity to recognise value and acquire the external knowledge needed in organization. Social media can be an inter-media between organizations. Assimilation refers to capacity to integrate external knowledge to use in company by using routines, processes and analyses for example. Social media provide these routines and perform as knowledge sharing arena in order to gain common understanding about the new knowledge. Transformation requires two fundamental elements: internalization and conversion. Reinterpretation of knowledge in order to gain new ideas for new pro- ducts for example. Here social media provide various communities of practices to utilise in open innovation. Exploitation is the capability to use new knowledge competitively. Here social media provide various platforms for innovation diffusion among collaborators and customers for example.

3 Research design and methodology

The aim of this research is to understand if B2B companies are aware of the potentials of social media in improving their absorptive capacity and, consequently, if and how companies deploy knowledge strategies which leverage on social media adoption. Three specific research questions investigate on internal and external B2B relationship:

RQ1. To what extent sampled companies use social media for knowledge sharing?

RQ2. What potentials and limits affect the adoption of social media?

RQ3. What kind of support companies would require to foster the adoption of social media?

To answer the research questions, we designed a structured questionnaire to survey decision makers employed in industries operating in the B2B market in Finland. The questionnaire structure and its questions were designed on the basis of research questions, generic social media related literature (e.g., Effing & Spil, 2016; Kaplan & Haenlein, 2010; Leonardi & Meyer, 2015; Ngai et al. (2015); Von Krogh, 2012), survey-type empirical social media studies (e.g. Agnihotri et al., 2016; Michaelidou et al., 2011; Schultz et al., 2012; Siamagka et al., 2015), and expert interviewers. We assessed the survey result in connection to the scientific literature about social and digital media in B2B contexts (e.g.; Brennan & Croft, 2012; Habibi et al., 2015; Zaki & Ross, 2014)).

A list of about 2500 companies was made available from the Federation of Finnish Technology Industries. A personalised email invitation containing information on the purpose of the study, the definition of social media and a list of social tool examples was sent to managers of that companies with the link to the Internet-based survey. Respondents were asked to indicate the percentage of other companies as customer of the company they were working for 125 different companies respecting the selection criteria to be wholly (100%) B2B organizations completed and returned the submitted questionnaire in the period October-December 2016. All of the answers were measured at an organizational level as respondents were instructed to indicate views of the organization they were working for, and anonymity was guaranteed too, to limit the risk of bias. For each RQ, respondents were asked to rate many statements (items) grouped in well-defined questions. Each item had five alternatives using a Likert-scale. Descriptive statistics have been carried out to describe basic features of the sampled companies on each question and to present quantitative descriptions in a manageable form. Further analysis has been conducted on each question through ANOVA technique considering three factors (the company's industry, its dimension, in terms of annual turnover, and in terms of number of employees) along three different areas of use of the tools (internally to the company, supporting interaction with customers and supporting interacting with suppliers).

Of the responding firms in the sample, 56% were from the metal products and machinery sector, 15% from electronics and electricity, 9% from business planning and consulting, 7% from metal refining, 9% were industries classified as "other", and 5% of the respondents did not report their industry. In terms of companies' dimension and particularly considering their turnover, the sample was composed by 17 (13%) firms with a turnover < €2M, 42 (34%) of firms with a turnover ranging from €2M to €10M, 44(35%) of firms with a turnover ranging from €11M to €50M, and 21 (17%) firms with a turnover > €50M. Considering the employees, the sample was composed by 60 (48%) firms with a number of employees < 50, 48 (38%) firms with a number of employees ranging from 50 to 250, and 17 (14%) of firms with a number of employees > 250. The responses concerning the respondent's position within the firm were management (66%), IT (18%), R&D (7%), marketing (6%), HR (2%), and a position classified as "other" (1%).

4 Results and discussion

4.1. RQ1

Three questions have been asked to answer the RQ1. In the first two questions, respondents were inquired to rate to what extent digital media (11 items) and social media (11 items) tools, useful for inter and intra-company knowledge acquisition and dissemination, were adopted in their companies.The aim of the third question was to understand the extensiveness of social media tools use in sup- porting some business activities that were most knowledge intensive (9 items). Possible answers to all items were on the Likert scale ranging from "Not at all" to "very actively" which assumed valuesof, respectively, "0" and "4".

4.1.1. Extensiveness of digital media use for collaborative work in B2B companies

The first preliminary investigation regarded the use of web-based digital media tools supporting knowledge acquisition and dissemination within the sampled companies. The importance of such tools and their significant role in B2B contexts have been studied by many scholars (Bauer et al., 2002; Walters, 2008). By adopting web-based digital media tools, B2B organizations can implement three-value adding strategies: information rich strategy, relational exchange and joint learning strategy (Walters, 2008). Social media tools extend to the 2.0 world the knowledge sharing originally managed through digital tools. According to Paroutis and Al Saleh (2009) the firm's history of using similar tools plays an important role in the eventual success of establishing knowledge management by social software. Moreover, as previous researches (e.g. Frambach & Schillewaert, 2002; Michaelidou et al., 2011) showed, the more innovative organizations, such as those adopting new technologies, are likely to adopt social media in their practice (Siamagka et al., 2015).

Digital tools investigated were: Meeting Tools (e.g. Google Hangouts), Webcast, Shared storage space (e.g. Dropbox), Document Management Systems (e.g. SharePoint, Lotus Notes), Instant Messaging, Services align meeting times (e.g. Doodle), Intranet sites (e.g. SharePoint), Extranet sites, and Project spaces (e.g. Basecamp).

Results show that, overall, digital media tools were quite utilised. Mean values of usage ranged from "moderately" to "actively". When analysing mean values within the three ambits, interesting information emerge.

- Internally. Companies belonging to the "Electronics and electricity" and to the "other" industries use digital tools more actively than the other sectors. Significant differences (at sig = 0.05, where "sig" is the level of significance) are evident respect to the use of 5 of the 11 tools (see Table 1). Further difference in use of digital media tools are evident considering dimension of the company. ANOVA confirms (at sig = 0.05) that the bigger is the company (both in terms of turnover and number of employees, see Figure 1) the more active is the use of digital media tools.
- Interaction with customers. No interesting information emerges considering the sectors as factor. ANOVA gives some confirmation that the bigger is the company the more active is the use of digital media tools. This is true when considering the number of employees as factor and "meeting tools" (sig = 0.49), "webcast in customer interface" (sig = 0.002), "Services for finding suitable meeting times in customer interface" (sig = 0.018), and Extranet sites in customer interface (sig = 0.03) as dependent variables.

Table 1. Internal use of digital media tool.

Digital Media Tool	Business Sector	N	AVG	SIG
Meeting tools internally (e.g. Adobe Connect Pro, NetMeeting)	Electronics and Electricity	19	2.42	0.043
	Metal Products and Machinery	67	1.66	
	Business Planning and consulting	11	1.73	
	Refining of metals	9	1.56	
	other	10	2.80	
	Total	116	1.88	
Instant messaging internally (e.g. Skype, Windows Live Messenger)	Electronics and Electricity	19	2.37	0.02
	Metal Products and Machinery	67	1.72	
	Business Planning and consulting	11	1.45	
	Refining of metals	9	1.89	
	Other	11	3.36	
	Total	117	1.97	
Intranet sites internally (e.g. Doodle)	Electronics and Electricity	19	2.84	0.049
	Metal Products and Machinery	67	2.21	
	Business Planning and consulting	11	2.00	
	Refining of metals	8	2.50	
	other	11	3.55	
	Total	116	2.44	
Extranet sites internally	Electronics and Electricity	19	2.37	0.050
	Metal Products and Machinery	64	1.67	
	Business Planning and consulting	11	1.09	
	Refining of metals	7	1.43	
	other	10	2.20	
	Total	111	1.77	
Project spaces internally (e.g. Basecamp)	Electronics and Electricity	19	1.63	0.050
	Metal Products and Machinery	66	1.18	
	Business Planning and consulting	10	1.90	
	Refining of metals	8	1.38	
	other	10	.90	
	Total	113	1.31	

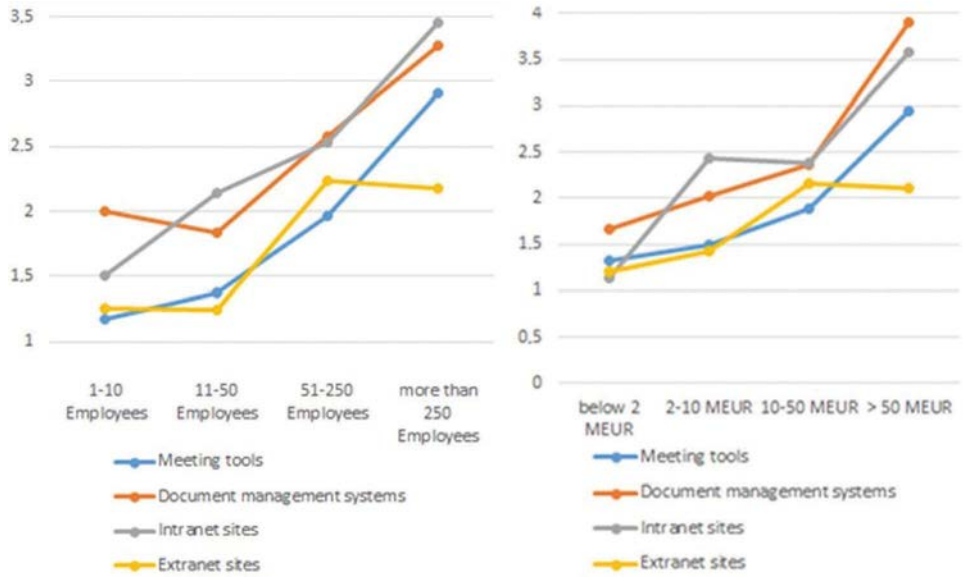

Figure 1. Internal Use of digital media tools, by number of employees and turnover, respectively.

- Interaction with suppliers. Companies belonging to the "Electronics and electricity" industry use "Meeting tools in partner interface" and "Instant messaging in partner interface" more than others (sig = 0.048 with average value of 2 and 0.004 with average value of 2.26, respectively). No significant differences emerge regarding the company dimension.

Most used digital tools internally to the company are Intranet sites, Instant messaging and Document management systems. Meeting tools and instant messaging show higher mean values when used in interaction with partners. In a general context of moderate to active use of digital tools, some industries (i.e.: "Electronics and Electricity" and "Other",which are mostly software development companies)show greater use of digital tools. In all industries,use of digital tools increases with the growth of company dimension as well.

4.1.1. Extensiveness of social media use in B2B companies

Social media tools investigated were: Blogs (e.g. Blogger, TypePad, WordPress, etc.), Microblogs (e.g.: Twitter, Yammer, etc.), Wikis (e.g.: Confluence, MediaWiki, etc.), Social Networking (e.g.: Facebook, LinkedIn, Google+, etc.), Discussion forums (e.g.: phpBB, etc.), Extranet with social media features, Social office tools (e.g.: Google docs), Social Bookmarking (e.g.: Delicious, Diigo, ect.), Open and closed online communities (e.g.: Ning, etc.), Virtual worlds (e.g.: Second life), Video sharing (e.g.: Youtube), Image sharing (e.g.: Flickr, etc.), Presentation sharing (e.g.: Slideshare, Prezi, etc.).

Preliminary results of the study show that social media tools were used more internally than externally in every studied industry sectors (see Table 2). More than half of the Industries categorised as other (mostly software development companies) answered they were using social media internally, at least moderately. Almost the same rate of internal use of social media was found for Electronics and electricity industries. Usage of social media for external interactions (with customers and suppliers) was far less frequent. The ratio of internal vs. external use was similar in other industries as well.

In terms of social media tools used by the companies in the sample (see Table 3), the most used internally were social networks, discussion forum, video and image sharing, while the social

Table 2. Internal and external use of social media in technology industry firms (at least moderate use).

Industry	Use internally	Use externally (with consumers and suppliers)	Number and percentage of all answers
Electronics and electricity	47%	26%	n = 19 (15%)
Refining of metals	36%	11%	n = 9 (7%)
Metal products and machinery	17%	3%	n = 70 (56%)
Business planning and consulting	36%	27%	n = 11 (9%)
Other (e.g., software development)	54%	11%	n = 11 (9%)
Undefined	20%	0%	n = 5 (4%)

Table 3. How actively social media tools are used with customers in companies, with respect to annual turnover.

Social Media tool	Turnover	N	AVG	SIG.
Microblogs (e.g. Twitter, Yammer) in customer interface	below 2 MEUR	15	.93	**.000**
	2−10 MEUR	40	.95	
	10−50 MEUR	44	1.09	
	MORE THAN 50 MEUR	20	1.70	
	Total	119	1.13	
Discussion forums (e.g. LinkedIn groups, phpBB, SharePoint forums) in customer interface	below 2 MEUR	15	1.13	**.050**
	2−10 MEUR	40	1.05	
	10−50 MEUR	43	1.30	
	MORE THAN 50 MEUR	19	1.47	
	Total	117	1.22	
Social networking (e.g. Facebook, LinkedIn) in customer interface	below 2 MEUR	15	1.47	**.049**
	2−10 MEUR	40	1.33	
	10−50 MEUR	44	1.45	
	MORE THAN 50 MEUR	20	1.90	
	Total	119	1.49	
Video sharing (e.g. Youtube) in customer interface	below 2 MEUR	15	1.07	**.006**
	2−10 MEUR	41	1.27	
	10−50 MEUR	43	1.28	
	MORE THAN 50 MEUR	20	1.90	
	Total	119	1.35	
Image sharing (e.g. Flickr) in customer interface	below 2 MEUR	15	.93	**.001**
	2−10 MEUR	40	1.00	
	10−50 MEUR	43	1.00	
	MORE THAN 50 MEUR	20	1.40	
	Total	118	1.06	
Presentation sharing (e.g. Slideshare) in customer interface	below 2 MEUR	15	.93	**.011**
	2−10 MEUR	38	.97	
	10−50 MEUR	44	.98	
	MORE THAN 50 MEUR	20	1.35	
	Total	117	1.03	

media tools most used externally where social networking sites (8.8%), discussion forums (4.8%), blogs (3.2%) and microblogs (3.2%).

- Internally. ANOVA reports few significant differences, at sig = 0.05. In particular, tools like microblogging and video-sharing tend to be more used when annual turnover increase reporting mean values of 1.45 (sig = 0.01) and 1.75 (sig = 0.008) respectively.
- Interaction with customers. When exploring the interaction with customers, there are no significant differences between the industries when considering the number of employees, but significant values are present considering the annual turnover (see Figure 2).
- Interaction with suppliers. The use with suppliers positively correlated to the firm's dimensions. In particular, significant differences were found in the use of microblogs (sig = 0.004), video sharing (sig = 0.008) and discussion forum (sig = 0.05) depending on the turnover and use of microblogs, presentation sharing and extranet with number of employees (all at sig = 0.000). See Figure 3 for details

Important differences appear when consider the use of social media tools respect to the sector. Sectors more related with computer science application ("electronics and electricity" and "other") show a diffuse use of the surveyed tools. Anyway, mean values on all item are low ranging from "somewhat" to "moderately", thus highlighting a scarce ability in capitalizing potentials offered by the social media tools. Noteworthy is that use of social media tools increases with the growth of company dimension (same trend as the use of digital tools).

4.1.2. Extensiveness of social media use in supporting business activities

We considered 11 knowledge intensive business activities that could be supported by social media tools: Communication and collaboration, Management and leadership, Induction and orientation to work (for new employees and employees changing work roles), Transfer of tacit knowledge, Corporate communication (e.g. internal news), Project communication, Improving efficiency of project work, Ensuring preservation of knowledge in the company (e.g. in the event of employees leaving the company), Utilizing expert know-how and reducing workload, Sharing best practices, Change management and communication.

Mean values of perceived use of social media tools in supporting internal business activities range from "somewhat" to "moderate", but significant differences emergewhen considering the three factors. In particular, ANOVA confirms differences in the use of social media tools among sectors. It highlights that "Electronics andElectricity" and "other" industries are better able to exploit potentials of the tools in supporting some particular activities (see table below) than industries operatingin the other surveyed sectors. Mean values of social media tools used for

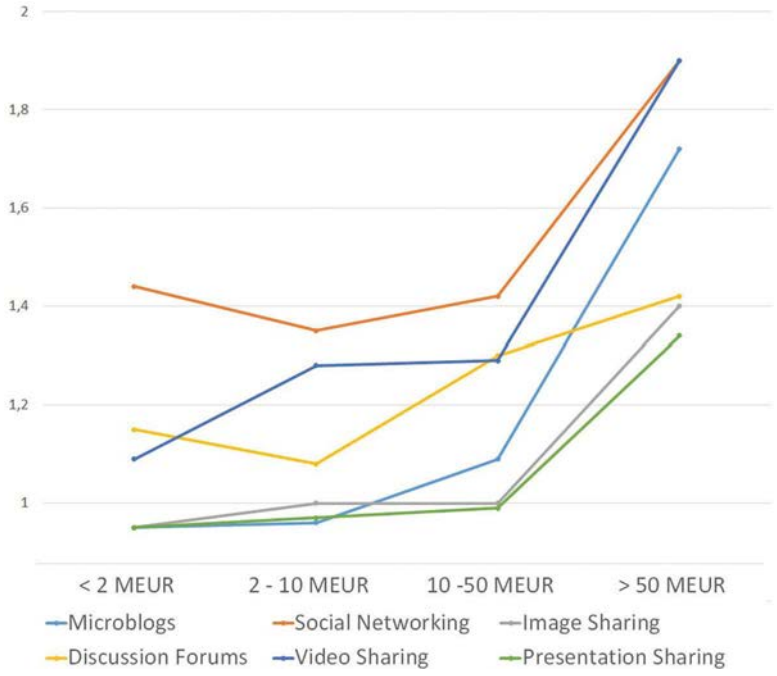

Figure 2. Use of social media tools with customers, by annual turnover.

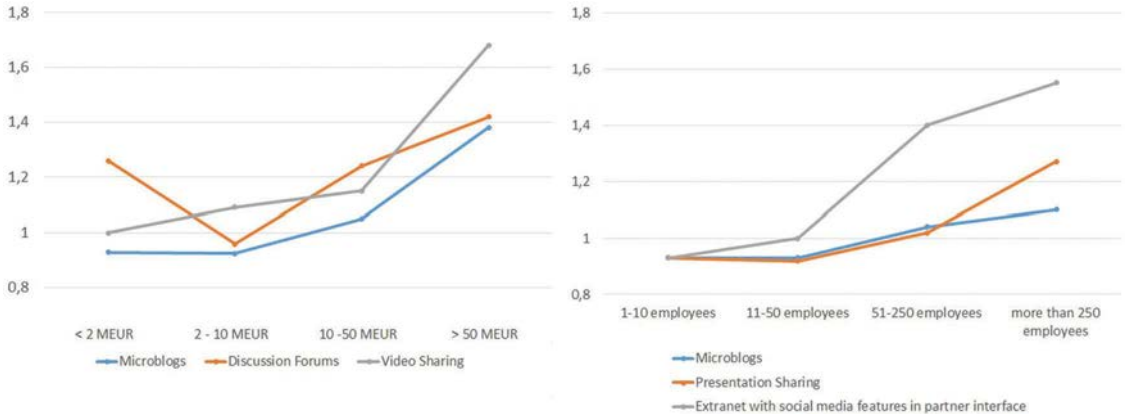

Figure 3. Use of social media tools with suppliers, by annual turnover and company dimension, respectively.

interaction with customers and with suppliers range from "somewhat" to "moderately", meaning a scarce use of such tools.

We found significant differences in the use of some social media for interaction with customers, depending on the annual turnover. The bigger companies are better able to exploit potentials of social media use in this ambit at sig< 0.05 for "use in product demos (videos, photos, blogs) in customer interface", "Use in building thought leadership in customer interface", "Use in gathering customer leads in customer interface", "Use in customer participation in R&D". There are no significant results with other factors.

Some industries ("Electronics and electricity" and "Business planning and consulting") highlight higher average values regarding the use of social media for communication with suppliers (1.53 and 1.50 at sig = 0.049 and 1.53 and 1.140 at sig = 0.014, respectively).

4.1.3. Discussion on results – RQ1

Use of social media tools within the surveyed companies is still in a preliminary stage of development. Companies are more inclined to use "traditional" digital tools for knowledge management instead of the social media ones. Only the "Electronics and Electricity" industry and "Other" industry (mainly software

development) show a greater use of both categories of tools. Companies operating in these two sectors appear to be better able to adopt a social media strategy for knowledge management. "Electronics and Electricity" and "Other" industry resulted to be more oriented to what Von Krogh et al. (2001) defined knowledge creation, at least in the knowledge creation dimension. They adopted social media tools to support knowledge intensive business activities more than companies operating in other sectors did. Respondents in "Electronics and Electricity" and "Other" industry adopted social media to support activities such as internal communication and collaboration, or internal transfer of tacit knowledge to foster *Knowledge leveraging strategies*. They adopted tools such as social networks and discussion forum to share best practices internally, thus showing a better adoption of *Knowledge expanding and probing strategies* (Table 2). B2B companies in the sample used Social media tools in external interactions to a lesser extent (Table 4), thus showing a low level of adoption of such tools to foster *Knowledge Appropriating strategies* as well as a scarce absorptive capacity.

Dimensions matter both in term of used social media tools and business activities where use such tools. Bigger companies demonstrate to better understand benefits of using social tools both for intra-firm use and for external interactions. Results indicate that bigger Electronic and electricity industries and Business planning and consulting companies are paying greater attention in social media as a communications interface between the company and the external environment.

Interesting information emerge when these results are compared with those of section 4.1. Even social media tools are considerably less used than digital media ones, a similar evolution on the use of the two tools' categories is evident, meaning an increase of use of both with the growth of company's dimension. This is in line with earlier studies on technology adoption (e.g., Del Aguila-Obra & Padilla-Melendez, 2006; Premkumar & Roberts, 1999) suggesting that firm size correlates positively with the use of technology, and that more innovative organizations, such as those acting in sectors related with computer science application ("Electronics and electricity" and "other", which are mostly software producers), are likely to adopt social media in their practice (Siamagka et al., 2015). This could mean that patterns of adoption of social media

Table 4. Social media use in supporting business activities.

Business Activity	Business Sector	N	Avg	Sig.
Use in internal communication and Collaboration	Electronics and Electricity	18	2.33	.000
	Metal Products and Machinery	67	1.40	
	Business Planning and consulting	10	1.10	
	Refining of metals	8	1.88	
	other	10	2.60	
	Totale	113	1.66	
Use in internal induction	Electronics and Electricity	19	1.26	.003
	Metal Products and Machinery	65	1.17	
	Business Planning and consulting	9	1.11	
	Refining of metals	8	1.38	
	other	10	2.00	
	Totale	111	1.27	
Use in internal transfer of tacit knowledge	Electronics and Electricity	19	1.37	.001
	Metal Products and Machinery	64	1.13	
	Business Planning and consulting	10	1.10	
	Refining of metals	8	1.13	
	other	10	2.10	
	Totale	111	1.25	
Use in internal general communication (e.g. internal news)	Electronics and Electricity	19	2.00	.010
	Metal Products and Machinery	66	1.41	
	Business Planning and consulting	10	1.60	
	Refining of metals	8	1.88	
	other	10	2.60	
	Totale	113	1.66	
Use in internal preserving information	Electronics and Electricity	18	1.44	.009
	Metal Products and Machinery	65	1.15	
	Business Planning and consulting	10	1.40	
	Refining of metals	8	1.75	
	other	10	2.00	
	Totale	111	1.34	
Use in internal sharing best practices	Electronics and Electricity	19	1.53	.049
	Metal Products and Machinery	66	1.20	
	Business Planning and consulting	10	1.50	
	Refining of metals	7	1.43	
	other	10	1.80	
	Totale	112	1.35	
Use in internal change management and communication	Electronics and Electricity	19	1.68	.049
	Metal Products and Machinery	65	1.26	
	Business Planning and consulting	10	1.20	
	Refining of metals	7	1.43	
	other	10	1.80	
	Totale	111	1.39	

are similar to the adoption of other internet-based technologies

4.2. RQ2

RQ2 was intended to investigate potentials and limits of social media adoption in supporting the business activities that are more knowledge intensive. To reach this aim, four different questions have been asked to the respondents.

With the first two questions, respondents were enquired about the perceived use (first question) and the potential use (second question) of social media tools in supporting knowledge intensive business functions (11 comparable items each). Possible answers to all items were on the Likert scale ranging from "Not used" or "No potentials" (value of "0") "to "very extensively used" or "Very much potentials" (value of "4"). Values of these two variables have been reclassified in a new variable, the "GAP", whose values are obtained by the difference between the given values of the potential use and perceived use.

The third question was intended to understand which actions the company arranged to support adoption and use of social media tools (13 items). Possible answers to each item ranged from "does not describe at all" to "describe very well" in a 5 points Likert scale.

The fourth question was aimed to point out limits to the adoption of social media tools within the company (15 items). Possible answers to each item ranged from "very insignificant" to "very significant" in a 5 points Likert scale.

The last two questions were intended to under- stand which solutions sampled companies used to support social media adoption and perceived limits of such solutions

4.2.1. The gap calculation

Both internally and externally (Interaction with customers and Interaction with suppliers), the majority of respondents indicated a positive difference between potential and perceived of social media tools in supporting knowledge intensive business functions (positive gap) (see table below)

- Internally. ANOVAs confirm ($sig \leq 0.05$) that this perception increase considering the annual turnover as factor for all the investigated business problems.
- Interaction with customers. ANOVA do not highlight any statistical significant differences considering the three factors at $sig \leq 0.05$ (the industry to whom the company belongs, the dimension in terms of annual turnover and the dimension in terms of number of employees).
- Interaction with suppliers. ANOVAs confirm ($sig \leq 0.05$) that gap growth, calculated on all the 11 items, is positively related to the company dimensions, both in terms of turnover and in terms of number of employees

4.2.2. Maturity of social media integration in business

Almost only one-quarters of the respondents stated that the item "The use of social media is allowed in my company" describes the situation in the company well or very well. On the same item, a quarter of respondents agreed that it describes "somewhat" or "moderately", while another quarter of respondents stated that the item does not describe the situation in the company at all. The rest of respondents do not say anything about their feeling with the item.

This situation also reflects the other items related to the maturity of social media integration in business. Only 8% of the respondents felt that the item "My Company has instructions for social media use that have been communicated to staff" describes the situation well or very well. Similarly, only 7% felt that the item "Management understands and supports social media implementation" describes the situation well or very well. For all the other maturity items, less than 5% of the respondents felt that the statements described the situation in the company well or very well.

ANOVAs show that no significant differences exist considering dimensions (both turnover and number of employees) as factors for all items. Differences emerge considering the industry as factor (see Table 7 and Figure 4). In particular, "Others" (mainly, software companies) shows higher mean values, meaning that the sector is more mature than others respect the social media integration in business.

4.2.3. Limits to the diffusion of social media tools within the company

In this question, respondents were asked to rate to what extent they agreed, on a Likert scale ranging from "Not important" to "Very important", 15 items representing different possible limits or obstacles to the diffusion of social media tools within the company. More than 60% of respondents rated "other projects are

more important or urgent" than actively support social media diffusion within the company as "important" or "very significant". Other factors acknowledged at least as "important" or "very significant" from over 50% of respondents were "We could not measure or assess the benefits for business" and "Lack of good case studies". Detailed results are reported in Table 8.

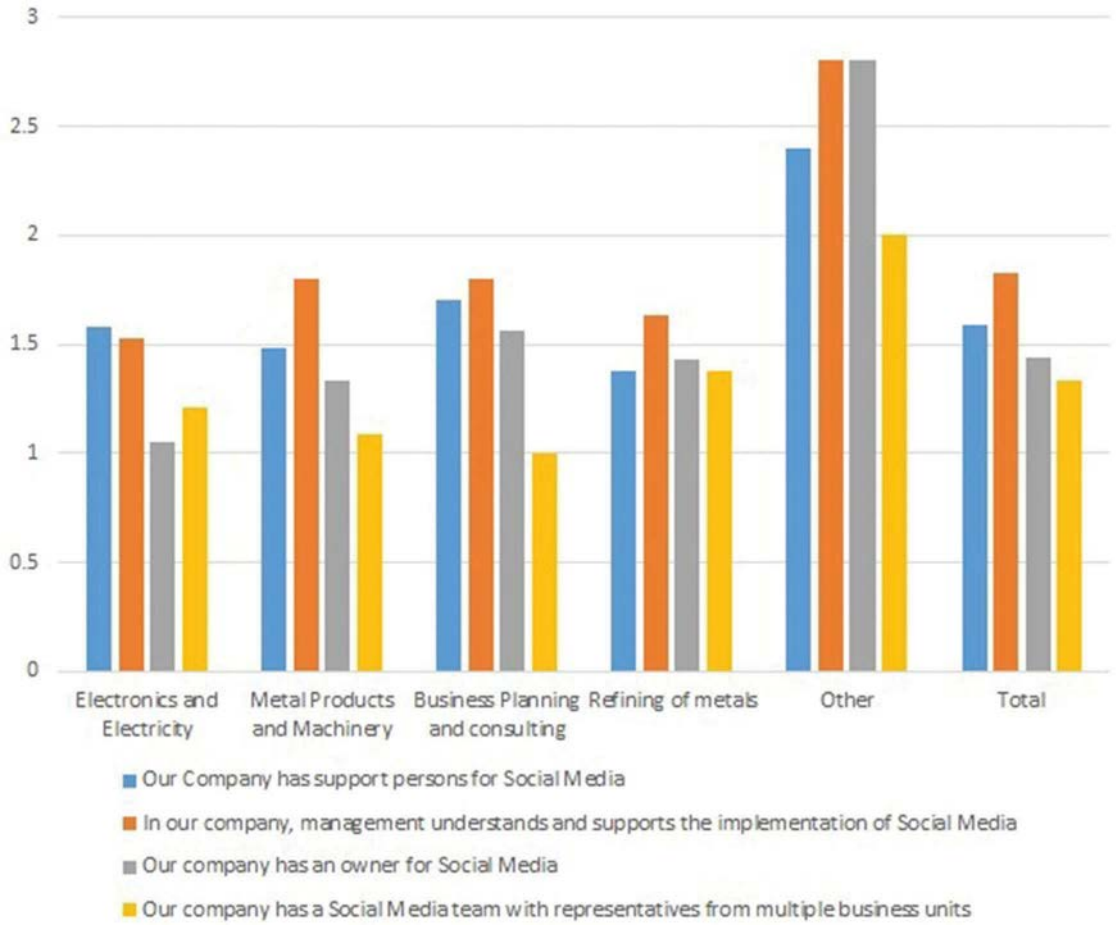

Figure 4. Maturity of social media integration by business sectors.

ANOVAs report no significant differences among companies considering number of employees and annual turnover as factors, while industrial sector is significant (sig≤ 0.05) as factor as reported in Figure 5

4.2.4. Discussion on results – RQ2

Main part of the surveyed companied perceive social media tools use under exploited respect its potentials both in intra and in inter-firms KM intensive business activities. No significant differences emerge among sectors but a positive relation exists considering the gap and the growth of annual turnover. On the other side, it is noteworthy that companies declaring a turnover below 2 M€ always show a negative gap in supporting internal KM intensive activities. Interpretation of this results can be twofold: "did smaller companies perceive social media tools over utilised respect their potentials or could smaller companies not understand potential support to business activities?".

Although good potentials are perceived from the introduction of social media tools in all ambits (see Table 5), surprisingly, very low values of maturity highlight that companies just do not put significant efforts in supporting adoption and use of social media tools as vehicle for companies' KM (see Table 6). Even if some industries ("other industries") are more active in the promotion throughout the company, absolute values highlight that the overall maturity level is low. This situation highlights that B2B companies in the sample are still not completely adopting a goal directed planning process to leverage and make effective use of social media as a means to boost their knowledge strategy, as well as their absorptive capacity.

Reason of this scarce commitment towards the diffusion of social media tools spread-out are various. Most important are: the lack of understanding of possibilities offered by social media, incapacity to measure or assess the benefit for business and lack of good case studies. These reasons motivated the shift of attention to other projects whose goals and benefits are more clear and measurable. Companies belonging to the "Electronics and electricity" sector seem to be more sensible and worried about such limits to the adoption.

4.3. RQ3

The RQ3 was intended to understand what kind of support companies in the sample needed to be better able to adopt social media into business functions together with their partners. Two questions were asked to reach this aim. With the first question, respondents were enquired to rate to what extent they were perceiving the importance of 11 items regarding the KM- related business problems addressable by adopting social media tools. The second question investigated the perceived usefulness of eight approaches supporting the application of social media tools (8 items). Possible answers to all items on the two questions were on a Likert scale ranging from "Not important" ("0") to "very significant" ("4").

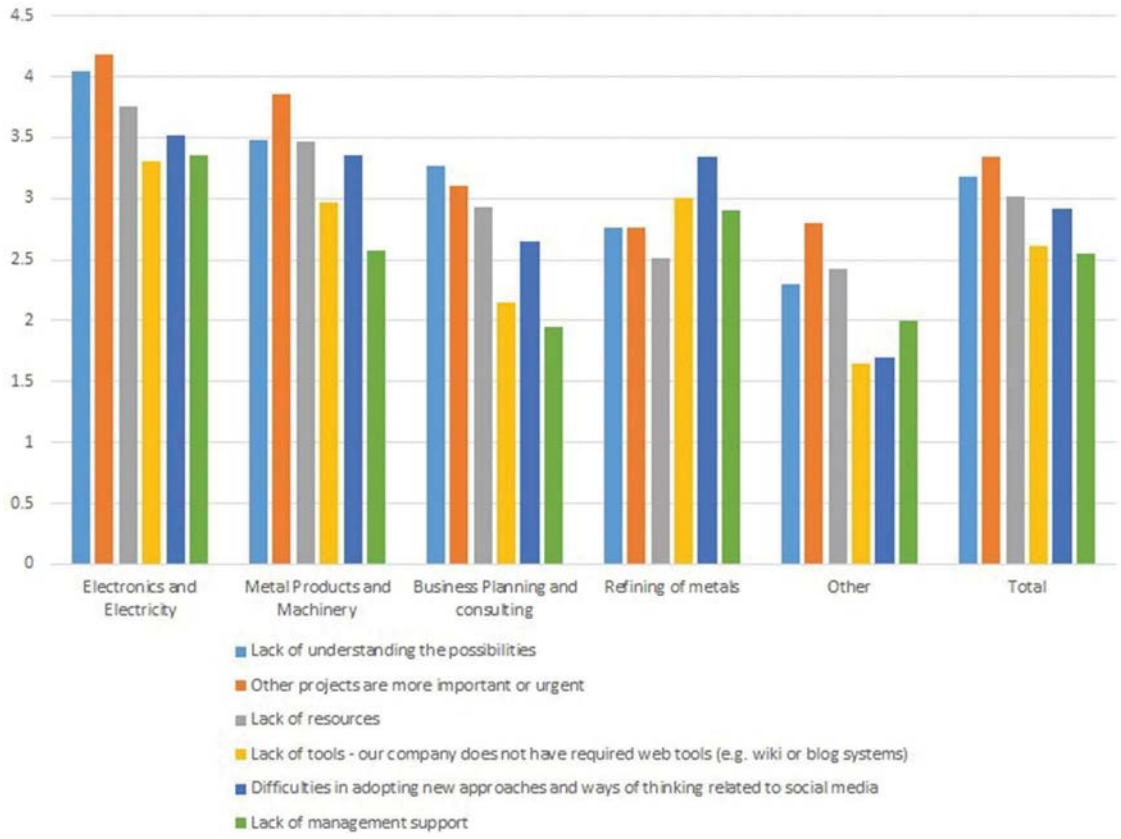

Figure 5. Significant barriers against using social media, by business sectors.

Table 5. Difference between potential and perceived of social media tools in supporting knowledge intensive business functions.

Business Functions	Internally			Interaction with customers			Interaction with suppliers		
	Positive GAP	No differences	Perceived use overcome its potential	Positive GAP	No differences	Perceived use overcome its potential	Positive GAP	No differences	Perceived use overcome its potential
Communication and Collaboration	52.99 %	35.04 %	11.97 %	56.03 %	36.21 %	7.76 %	52.72 %	33.33 %	8.94 %
Management and leadership	48.72 %	40.17 %	11.11 %	61.21 %	31.9 %	6.9 %	52.85 %	37.4 %	9.76 %
Induction and orientation to work (for new employees and employees changing work roles)	56.41 %	33.33 %	10.26 %	54.31 %	37.07 %	8.62 %	51.22 %	39.02 %	13.01 %
Transfer of tacit knowledge	54.7 %	35.04 %	10.26 %	45.69 %	43.97 %	10.34 %	47.97 %	39.02 %	13.01 %
Corporate communication (e.g. internal news)	58.12 %	29.91 %	11.97 %	46.55 %	43.97 %	9.48 %	58.54 %	34.15 %	7.32 %
Project communication	56.41 %	31.62 %	11.97 %	54.31 %	37.93 %	7.76 %	52.85 %	38.21 %	8.94 %
Improving the efficiency of project work	56.41 %	32.48 %	11.11 %	54.31 %	37.07 %	8.62 %	51.22 %	37.40 %	11.38 %
Preserving knowledge (e.g. in the event of employee leaving the company)	50.43 %	35.90 %	13.68 %	49.14 %	45.69 %	5.17 %	51.22 %	39.02 %	9.76 %
Utilizing expert know-how and reducing workload	53.85 %	33.33 %	12.82 %	50.86 %	38.79 %	10.34 %	52.03 %	35.77 %	12.20 %
Sharing best practices	57.26 %	33.33 %	9.40 %	66.38 %	27.59 %	6.03%	54.47 %	35.77 %	9.76 %
Change management and communication	56.41 %	32.48 %	11.11 %	53.88 %	38.02 %	8.10 %	79.67 %	20.33 %	0.00%

Table 6. Maturity of social media integration to business.

Statements about the current situation in the company	Agreement to statement (describes the situation well or very well in the company)
The use of social media is allowed in my company	27.2%
My company has instructions for social media use that have been communicated to staff	8.0%
Training has been provided or is provided for social media use	1.6%
Management understands and supports social media implementation	7.2%
Social media discussions about our company and product areas are followed regularly	4.0 %
My company participates in discussions about our product outside our own web pages (e.g., blogs, discussion forums, Twitter)	2.4%
Social media monitoring is linked to other business processes (e.g., product development, customer service, marketing)	1.6%
Social media use is linked to achieving business goals	3.2%
Business metrics have been defined for social media projects and the metrics are monitored	0.0%
My company has an internal social media plan or strategy	0.8%
My company has a social media plan or strategy for customer interface	0.0%
My company has a social media plan or strategy for partner use	0.8%
Measurable business benefits have been achieved from social media projects	0.8%

Table 7. Maturity of social media integration. with respect to business sectors.

Maturity of social media integration	Business Sector	N.	Avg.	Sig.
Our Company has support persons for Social Media	Electronics and Electricity	19	1.58	**0.049**
	Metal Products and Machinery	69	1.48	
	Business Planning and consulting	10	1.70	
	Refining of metals	8	1.38	
	Other	10	2.40	
	Total	116	1.59	
In our company. management understands and supports the implementation of Social Media	Electronics and Electricity	19	1.53	**0.013**
	Metal Products and Machinery	69	1.80	
	Business Planning and consulting	10	1.80	
	Refining of metals	8	1.63	
	Other	10	2.80	
	Total	116	1.83	
Our company has an owner for Social Media	Electronics and Electricity	19	1.05	**0.000**
	Metal Products and Machinery	69	1.33	
	Business Planning and consulting	9	1.56	
	Refining of metals	7	1.43	
	Other	10	2.80	
	Total	114	1.44	
Our company has a Social Media team with representatives from multiple business units	Electronics and Electricity	19	1.21	**0.001**
	Metal Products and Machinery	68	1.09	
	Business Planning and consulting	8	1.00	
	Refining of metals	8	1.38	
	Other	10	2.00	
	Total	113	1.20	

Table 8. Significant barriers against using social media.

How significant are the following barriers against using social media	Agreement to statement (describes the situation "important" or "very significant")
Other projects are more important or urgent	60.16%
We could not measure or assess the benefits for business	58.54%
Lack of good case studies	50.41%
Lack of understanding the possibilities	48.78%
Lack of resources	43.90%
Information security problems	40.65%
Difficulties in adopting new approaches and ways of thinking related to social media	40.65%
No need – things are done with emails and by meetings	37.40%
Lack of tools – our company does not have required web tools (e.g. wiki or blog systems)	35.77%
No need – our clients do not seek information on the net	34.96%
Difficulties with system integration	33.33%
Lack of financial resources (e.g. investing in tools and/or consulting)	29.27%
Difficulties with process integration	24.39%
Lack of management support	23.58%
Failed and bad experiences or experiments	16.26%

4.3.1. KM- related business problems that can be addressed by social media

Regarding companies' organizational business problems, social media was perceived to most significantly help in 1) overcoming challenges related to the transfer of tacit knowledge (44.8%), 2) reducing the time spent answering to emails and enabling real conversations, and 3) improving knowledge sharing and collaboration

with partners and subcontractors. Percentage of "perceived significance" in Table 9 is given by the % of responses that are "significant or "very significant"

ANOVAs highlight significant results when considering annual turnover as factor, meaning a greater awareness of bigger companies regarding the organizational business problems addressable with social media. (see Table 10 and Figure 6)

4.3.2. Approaches supporting application of social media

The three most useful approaches perceived to be better able to support the application of social media in industrial B2B companies included (see Table 11): case descriptions about social media use in industrial companies in Finland and elsewhere (perceived as "significant" or "very significant" by 58.4% of the respondents), benchmarking events with other industrial companies (40.7%), and information about different social media tools and their vendors (31.9%).

ANOVAs did not showed any significant results considering any of the three factors.

Table 9. Organisational business problems addressable by using social media.

Common KM- related business problems (that can be addressed by social media)	Perceived significance of the organi-sational business problem (that can be addressed by social media)
Experts in our company have to spend a lot of time on answering questions that are largely similar	22.6%
We do not have sufficient tools to support project work	22.4%
There are challenges in the transfer of tacit knowledge;	44.8%
Collaboration and co-authoring of documents is a challenge; it is difficult to co-write documents, e.g. offers and quotations, because of versioning, commenting, and managing changes	23.2%
Too much email, too much time goes to answering to emails and it is difficult to make conversations in email	42.7%
People meet with each other far too little, and it is difficult to get a big group together even if it would be useful	22.4%
Organizing meeting times is difficult, can cause a lot of changes, and takes too much time	11.1%
Customer services is overloaded with similar questions from customers by email and phone	10.5%
Sharing knowledge on markets and customers is challenging, information is not transferred from marketing to production, and the sales personnel do not get information	19.9%
Getting feedback from customers is difficult; we do not get enough feedback or product development ideas from our customers, or the information does not reach product development	20.9%
Knowledge sharing and collaboration with our partners and subcontractors is challenging	23.9%

Table 10. Organisational business problems addressable with social media, by annual turnover.

Social Media tool	Turnover	N	AVG	SIG.
Organizing meeting times is difficult, can cause a lot of changes, and takes too much time	below 2 MEUR	14	1.86	**.007**
	2–10 MEUR	40	2.85	
	10–50 MEUR	44	2.50	
	MORE THAN 50 MEUR	18	3.33	
	Total	116	2.67	
We do not have sufficient tools to support project work	below 2 MEUR	14	1.86	**.010**
	2–10 MEUR	40	3.00	
	10–50 MEUR	44	2.59	
	MORE THAN 50 MEUR	18	3.17	
	Total	116	2.73	
Sharing knowledge on markets and customers is challenging, information is not transferred from marketing to production, and the sales personnel do not get information	below 2 MEUR	14	2.07	**.019**
	2–10 MEUR	40	3.15	
	10–50 MEUR	44	3.07	
	MORE THAN 50 MEUR	19	3.37	
	Total	117	3.03	
Collaboration and co-authoring of documents is a challenge; it is difficult to co-write documents, e.g. offers and quotations, because of versioning, commenting, and managing changes	below 2 MEUR	14	2.14	**.029**
	2–10 MEUR	40	3.10	
	10–50 MEUR	44	2.80	
	MORE THAN 50 MEUR	19	3.42	
	Total	117	2.92	
There are challenges in the transfer of tacit knowledge;	below 2 MEUR	14	2.43	**.019**
	2–10 MEUR	40	3.48	
	10–50 MEUR	44	3.36	
	MORE THAN 50 MEUR	18	3.72	
	Total	116	3.34	
Experts in our company have to spend a lot of time on answering questions that are largely similar	below 2 MEUR	14	2.00	**.046**
	2–10 MEUR	40	2.63	
	10–50 MEUR	42	2.31	
	MORE THAN 50 MEUR	18	3.28	
	Total	114	2.54	
Getting feedback from customers is difficult; we do not get enough feedback or product development ideas from our customers, or the information does not reach product development	below 2 MEUR	14	2.86	**.050**
	2–10 MEUR	40	3.25	
	10–50 MEUR	44	2.52	
	MORE THAN 50 MEUR	18	3.17	
	Total	116	2.91	
Knowledge sharing and collaboration with our partners and subcontractors is challenging	below 2 MEUR	14	2.36	**.050**
	2–10 MEUR	40	2.95	
	10–50 MEUR	44	2.57	
	MORE THAN 50 MEUR	18	3.61	
	Total	116	2.84	

Table 11. Approaches supporting the application of social media.

Approaches in supporting social media use (adoption)	% of respondents rating approaches useful or very useful
Seminars and other events to deal with social media use in industrial companies	22.0%
Studies and reports about the topic	25.8%
Case descriptions about industrial companies in Finland and elsewhere	58.4%
Benchmarking events with other industrial companies	40.7%
Internet forums to provide information about the topic and to participate in discussions about the topic	21.2%
Supported company-specific consulting to make use of social media	22.2%
Information about social media consulting companies and their offerings	12.9%
Receiving information about different tools and their vendors	31.9%

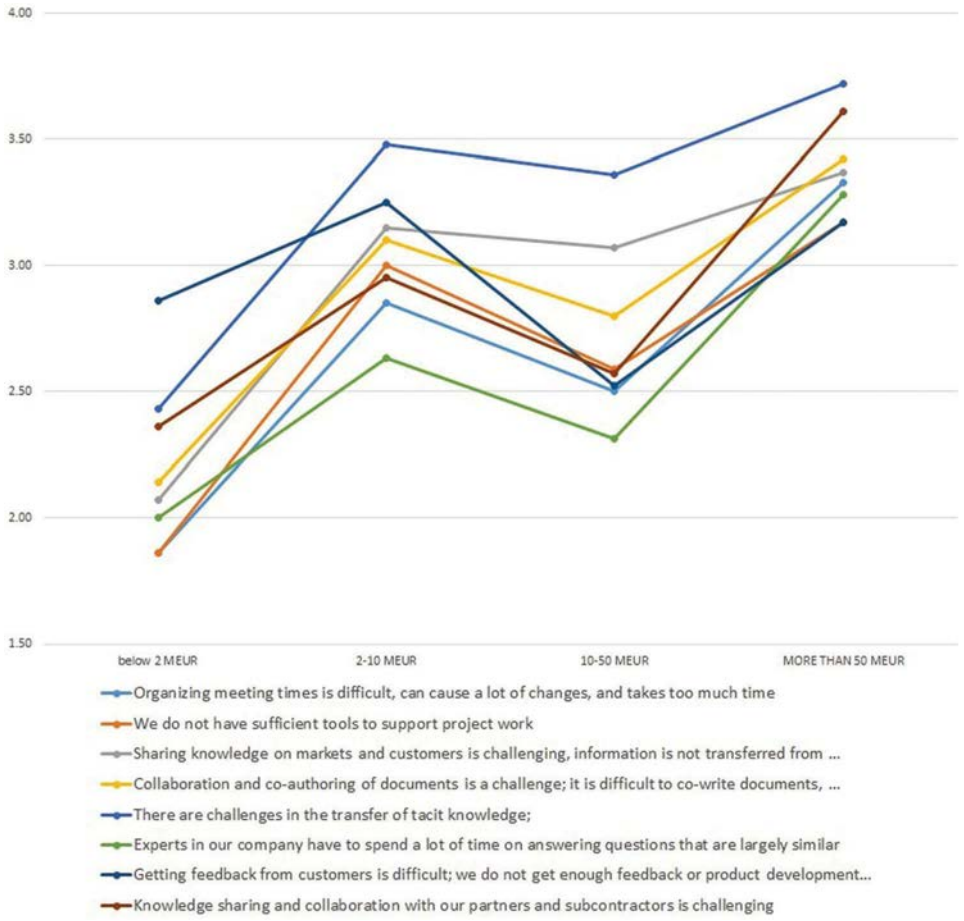

Figure 6. Organizational business problems addressable with social media, average values by annual turnover.

4.3.3. Discussion on results – RQ3

The first question gave indications about "where" (in which business problems) companies recognise that social media tools could support their business functions. Results highlight that respondents identified main potentials of such tools in the automation and improved efficacy of knowledge (tacit and explicit) sharing. Bigger companies demonstrate a better understanding of such potentials.

The second question gave useful insight on "how" companies would like to be supported to be better able to adopt social media. Results highlight a practical and fast approach to the question, meaning that companies prefer a learning approach based on benchmarking and case studies. The alternative way, which is not welcome from companies, is based on a longer and structured knowledge strategy, which can be, in the long run, the best way to capitalise all potentials of social media tools adoption in improving companies' absorptive capacity.

5. Conclusion

We found out that approximately 25% of the interviewed managers were in an opinion, that the use of social media is not allowed in their company. About a half of the respondents found use of social media allowed and somewhat appropriate but still the rest had vague opinion in between. Therefore, it was not a big surprise that the utilization of social media is not yet a common and accepted vehicle for companies' KM.

Overall, companies in the sample showed a lack of awareness of the potentials of social media as a means for external knowledge acquisition and internal knowledge dissemination in B2B setting. Social media adoption within the surveyed companies is still in a preliminary stage of development, especially in the case of the interaction with partners (customers and suppliers). Companies used to some extent social media as a knowledge leveraging strategy to improve their knowledge creation dimension while they were less focused on the knowledge transfer dimension. Overall, social media tools were scarcely adopted to improve companies' absorptive capacity. These findings are similar to those provided by other research (Bruhn, Schnebelen, & Schäfer, 2014) and by Itani, Agnihotri, and Dingus (2017) B2B study on social media reporting that, despite social media use is considered to be very important and beneficial for B2B marketers, social media are not predominantly used in B2B companies.

In accordance with (Habibi et al., 2015) the slower adoption of social media tools in the B2B context could be attributed to an inappropriate tactical perspective regarding social media. Indeed, in this study we found that surveyed companies do not put significant efforts in supporting adoption and use of social media tools as vehicle for companies' KM (see fig section 4.5). We found that the social media use was more intensive in industries belonging to the category "other" (mainly, software companies) that resulted to be more active in the promotion of social media throughout the company. In addition, we found that the "Electronics and Electricity" and "Other" industries showed a greater use of digital and social media tools for knowledge management, confirming the positive correlation between the firm's history of using innovative similar tools and their likelihood to adopt social media (Michaelidou et al., 2011; Paroutis & Al Saleh, 2009; Siamagka et al., 2015).

Our further analysis, conducted considering the firms` dimensions (in terms of annual turnover andnumber of employees) along three different areas of use of the investigated tools (internally to the company, supporting interaction with customers and with suppliers), led us to find out that dimensions matter both in term of used social media tools and business activities where such tools are used. Indeed, we found a positive correlation between engagement in social media and company size, in our sample at least, according with technology adoption theories (e.g., Del Aguila-Obra & Padilla-Melendez, 2006; Premkumar & Roberts, 1999) and social media adoption studies (Brennan & Croft, 2012; Sinclaire & Vogus, 2011). Our findings are in contrast with the information technologies theories proposed by Daniel and Grimshaw (2002), Zhu, Dong, Xu, and Kraemer (2006) and social media studies in B2B context (Braojos-Gomez, Benitez-Amado, & Llorens-Montes, 2015) that suggested a negative relationship between firmsize and the development of a social media competence.

Our study demonstrated that bigger companies understand benefits and potentials of using social tools better than the others, both internally and during interact with partners. In particular, bigger companies identified main potentials of social media adoption in the automation and improved efficacy of knowledge (tacit and explicit) acquisition and dissemination. It suggests that the usage of social media requires to investing and deploying in other business resources (e.g., human resource with expertise such as community/social media managers) to leverage social media for business activities on an efficient way. Thus, large firms, due to a greater availability of business resources, can early use social media and develop a social media competence on a faster way.

5.1. Implications of the study

Findings of our study highlight the need for structured approaches to foster the adoption of social tools for knowledge acquisition and dissemination. Companies seem to understand benefits of using social tools and there is a widespread consensus among interviewed managers about the under exploitation of that kind of collaborative tools.

Results show that despite managers are aware of the importance of collaborative social based tools, employees often perceive them as a waste of time. This study suggests that managers considering social media technology investments should focus on how to overcome cultural and organizational barriers to the adoption of emerging social technologies and how to integrate social technologies with the existing ICT infrastructure. While previous studies put in evidence a full awareness of the importanceof social tools in CRM activities in B2C companies, this does not happen in B2B contexts. We believe that management support in B2B firms plays a crucial role in exploiting social tools capabilities in inter-company business activities. For such activities, more transactional in nature, managers need to provide more support and guidance related to social media usage than in intra- company activities, where the interaction is typically more relational in nature and employees may be more cognizant of the value of social media applications.

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