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Corporate Communication Related Knowledge Sharing by Professional Workers through Social Media

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Abstract: Social Media has become increasingly popular in recent years, providing an efficient way to maintain and make new business contacts, share information and create knowledge. They have been shown to facilitate business relationships and building social capital using Social Networking Sites and other Web 2.0 tool. Both professionals and companies are thus facing new challenges in the way they use social networks and in how they enhance their business purposes and relationships with other professionals and companies by sharing useful information. If companies have developed and implemented a social media strategy with a communicational approach in the last decade, workers are increasingly making greater personal use of social media for business purposes. This paper analyses the opinion workers have of the usefulness of Social Media to share information and get knowledge related to their businesses. We consider professional workers, whether employees or self-employed, to be those people whose work requires a certain level of qualification. Data was collected from 283 workers in the Basque region of the northeast of Spain through a survey, and in order to better understand their responses, six in-depth interviews were conducted among the respondents of the survey.

They were then asked about some points related to the use of these tools. Specifically, they were asked to rate six items in order to discover their opinion regarding the usefulness of social media. Two items were related to the benefits of the networks to contact with foreign professionals and the other four to assess the usefulness of the networks as regards accessing information of professional interest, entering discussion groups leading to new business ideas and to share knowledge in general.

Contingency tables have been used to conduct independence tests for verifying whether there are significant differences for six variables studied: three related to the actual worker (gender, age and type of worker) and three related to the nature of the firm that employs them (size, economic sector, and type of consumer it sells to). Statistically significant differences were found for the type of worker (self-employed) and the economic sector where the company operates.

The results show the opinions regarding the usefulness of Social Networking Sites (SNS) for sharing information and obtaining knowledge are highly rated by professional workers. This means they acknowledge the

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potential of Web 2.0 tools for the purpose referred. Surveyed workers appreciate the willingness of other professionals to share their knowledge and experience, while SNS are also used to disseminate information among professional specifics groups. In short, the information, ideas and experiences acquired through conversations that take place in SNS lead to business opportunities.

Key words: business networking, social media, knowledge creation, information sharing, self-employed, Web 2.0 tools

1. Introduction

Decades of research on social networks in the organization argues that informal relationships among co-workers are important channels through which organizational knowledge and expertise can be shared (Hansen, 1999; Kraut, Fish, Root & Chalfonte, 1990; Lin, 1999). New technologies such as the Web offer multiple opportunities for public relations scholars and practitioners. The Web has great potential as a dialogic communication medium. Dialogic communication created by the strategic use of the WWW is one way for organizations to build relationships with the public.

Web 2.0 was defined by Dale Dougherty in 2004 as a read-write web. The Web 2.0 technologies allow large global crowds with common interests in social interactions to be assembled and managed. At the centre of Web 2.0, we find SNS, which include professional networking sites for business purposes, these are parts of a single whole that we call Social media (SM).

The concept of "Web 2.0" began with a conference brainstorming session between O'Reilly and Media Live International (O'reilly, 2005). The Conversation Prism by Brian Solis and Jesse Thomas (2009) was one of the earliest models for helping to visualize the conversations that define the Web 2.0, also called the social Web. Web 2.0 technologies can help improve collaboration and communication within most companies (Andriole, 2010). According to this author, knowledge management is a natural result of the deployment of wikis, blogs, podcasts, and RSS filters. Formal knowledge management tools are giving way to more informal Web 2.0 tools, a trend expected to continue. Constantinides and Fountain (2008) establish that Web 2.0 is a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes. Web 2.0 applications support the creation of informal user networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing / refining of informational content. Lloyd (2009) states business professionals can share experiences with others who have a need to learn from similar experiences.

In the same way, SNS can be utilized to identify new business opportunities and new ideas, or deepen relationship with customers and to enhance collaboration between companies and other parties (Barker, 2008; Lehtimäki, Salo Hiltula & Lankinen, 2009; Hoffman & Fodor, 2010; Gillin & Schwartzman, 2011). Furthermore, Web 2.0 technologies can be a powerful lure for an organization; their interactivity promises to bring more employees into daily contact at lower cost. When used effectively, they also may encourage participation in projects and idea sharing, thus deepening a company's pool of knowledge (Bughin, Chui & Miller, 2009). There are different studies that analyse the corporate use for communication purposes in organisations of different sectors such as art, B2B environments, several activities, research funding, health, finance... (De Vicente, 2011; Jussila, Kärkkäinen & Aramo-Immonen, 2013; Bughin, Chui, Miller & Andy, 2009; Carim & Warwik, 2013; Huang, Angela Chang & Khurana, 2012; Bonsón & Flores, 2011).

Individual knowledge is necessary for developing the organizational knowledge base; however, organizational knowledge is not a simple sum of the individual knowledge (Bhatt, 2000). Organizational knowledge is formed through unique patterns of interactions between technologies, techniques, and people, which cannot be easily imitated by other organizations, because these interactions are shaped by the unique history and culture of the organization. We refer to knowledge management as a process of knowledge creation, validation, presentation, distribution, and application. These five phases in knowledge management allow an organization to learn, reflect, and unlearn and relearn, usually considered essential for building, maintaining, and replenishing of core-competencies (Bhatt, 2001; Bueno, 1999).

Recent literature about knowledge management has emphasized the importance of IT that allows knowledge and information flow, with most of this IT taking the form of virtual communities such as blogs, wikis, and other Web 2.0 tools (Ardichvili, Page & Wentling, 2003). The features of these new tools are that they allow and facilitate information transmission (Kaiser, Barghouti, Feiler & Schwanke, 2007; McAfee, 2006).

Social ties are channels or information and resource flows. Through social interactions, an actor may gain access to the resources of other actors. Such access, as Kanter (1988, p. 190) observed, "allows innovators to go across formal lines and levels in the organization to find what they need". Tsai and Ghosal (1998) show that the interaction between social ties is considered to be one of the precedents in the motivation to share information. Furthermore, social network and shared goals significantly contributed to attitudes toward knowledge sharing, and to the subjective norm on knowledge sharing (Chow & Chan, 2008).

2. Methodology

This research is based on a survey as well as on a qualitative case study design with the main unit of analysis being individual employees.

Survey data was collected from a sample of 23,000 professional workers (in non-manual but office-based roles) in companies of the Basque Country in north-eastern Spain. These professionals mostly work for small and medium enterprises (SMEs). The database belongs to the Basque government institution in charge of economic and competitive development, whose main goal is to drive change toward an innovative culture by fostering the implementation and use of information and communications technologies (ICTs) in companies. The targeted companies were from different economic sectors (manufacturing, services and knowledge) and varied in terms of employee numbers from 1 to 500. Three hundred and twenty questionnaires were returned with 283 being fully completed. The questionnaire was created and published using *Encuestafacil* (http://www.encuestafacil.com) and was sent out to be answered between 6 May and 13 May (2013). The results were processed using the Statistical Package for the Social Sciences (SPSS®) version 19 software.

In addition, we conducted in-depth interviews with six of the professional employees in order to get a better understanding on some key questions. A total of six employees (employed and salaried employees, from large and small companies) were interviewed and the interviews were recorded and lasted 30-40 minutes on average.

3. Quantitive Analysis: Results from the Survey

The composition of the sample is as follows: 51.2% of the professional workers responding to the questionnaire were female. The average age was 40 (40% of the responders were between 31–40 and 39% were between 41 and 50). 70% of these workers were self-employed (working for their own or for the company they

own), while the 30% of them work for some other companies. Regarding to the size of the company in terms of the number of employees, 43.1% of the survey respondents work for very small companies (1 to 9 employees), 33.2% of them work for small and medium size enterprises (50–250), and 23.7% belong to companies with more than 250 employees. According to the industrial sector, 65.7% of the professionals belong to tertiary industrial sector, 24% to quaternary sector and 9.2% to secondary sector.

Initial statistics show that the average number of Web 2.0 tools used for business purposes by the professional workers is 4.81. In terms of the type of these tools, 86.2% of the respondents are using LinkedIn, 75% the corporate Website and almost 70% Twitter and Facebook for job-related tasks. 53% of the workers use WhatsApp and 51% Google+. Figure 1 shows the Web 2.0 tools used by the employees.

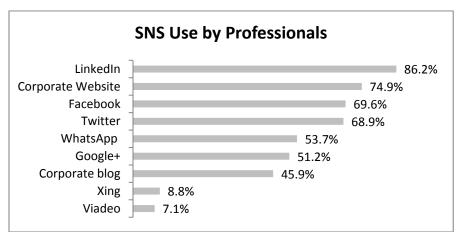


Figure 1 Type of Web 2.0 Tool Used by Professional Workers

Source: Generated by the authors based on survey data

We asked four questions to establish the opinion of professionals regarding the usefulness of SM to access and share information, and we asked a further two questions to find out how they reach out to other professionals abroad. Each question was answered using a range of "1. strongly disagree" to "5. strongly agree" except for the 6^{th} that was graded from one to four (see Table 1).

Table 1 Professionals' Opinion Regarding the Potential of SNS for Sharing Information and Knowledge and to Get in Touch with Workers Abroad

Question	Description of the question/opinion
1	Professional workers I am in contact with through SNS are given to share their knowledge and professional experience
2	SNS are useful to me when I try to gain access to technical information related to my work
3	I use SNS to disseminate information among professional specifics groups
4	When I enter into discussion with other professionals through SNS, it is useful to get new ideas that can turn into a new business challenge.
5	The contacts of my community in the SNS have helped me to get in touch with companies/professionals from foreign markets
6	The SNS have helped me to get in touch with foreign professionals

Source: Generated by the authors based on survey data

Apart from evaluating the assessment of the professional workers of the four opinions, U Mann Whitney and Kruskal-Wallis tests were performed to check the existence of any differences among the socio-demographical variables (age, gender, self-employed or salaried-employee) and company related variables (economic sector, size of the company, B2C or B2B).

The average assessment of the four opinions are set out in Table 2.

Table 2 The Average Assessment of the Opinion Questions

O	pinion regardi			ledge			
Question		1	2	3	4	5	6
Total		3.83	4.13	4.03	3.49	3.19	1.93
77 1	Male	3.88	4.1	4.04	3.55	3.17	1,91
Vender	Female	3.78	4.15	4.01	3.55	3.22	1.95
Statistical test	Statistical test		U Mann-Whitney				
Significance	Significance		0.835	0.983	0.349		0.611
	24–30	3.80	4.11	4.09	3.71	3.31	2.11
Ago	31–40	3.82	4.05	4.02	3.45	3.19	1.94
Age	41–50	3.91	4.23	4.09	3.57	3.20	1.89
	51–64	3.55	4.00	3.62	2.95	3	1.78
Statistical test	:		Krusl	kal-Wallis			
Significance		0.553	0.201	0.122	0.066	0.750	0.780
Type of worker	Self employed	4.00	4.32	4.16	3.64	3.22	1.89
Type of worker	Salaried employees	3.76	4.05	3.97	3.43	3.18	1.94
Statistical test	,	U de Mann-Whitney					
Significance		0.005	0.013	0.058	0.083	0.790	0.677
Question	Question		2	3	4	5	6
	< 10	3.90	4.27	4.09	3.66	3.19	1.94
Size of the company in terms of number	10–49	3.90	4.14	4.12	3.49	3.08	1.76
employees	50-250	3.82	3.95	4.03	3.50	3.12	2.03
	> 250	3.65	3.95	3.83	3.20	3.33	1.97
Statistical test		Kruskal-Wallis					
Significance	0.140	0.071	0.083	0.007	0.621	0.760	
	B2B	3.88	4.14	4.05	3.48	4.15	1.96
Type of customer	B2C	3.74	4.02	3.88	3.37	4.29	1.62
	B2B2C	3.79	4.16	4.05	3.57	4.25	2.01
Statistical test	Statistical test		Kruskal-Wallis				
Significance	Significance		0.579	0.248	0.609	0.342	0.050
	Primary	3.67	4.00	4.00	3.30	3.33	2
Economic Sector	Secondary	3.64	4.00	3.73	3.27	3.08	1,96
Economic Sector	Tertiary	3.90	4.19	4.06	3.48	3.08	1,77
	Quaternary	3.58	4.00	4.02	3.53	3.54	2.34
Statistical test	Kruskal-Wallis						
Significance		0,041	0.413	0.401	0.393	0.022	0.002

Source: Generated by the authors based on survey data

4. Discussion of the Results

The results show the high ratings given by workers to the four questions. The results highlight that

professionals find Web 2.0 tools useful for the purpose of sharing information and disseminating knowledge. The four questions scored quite highly (3.83, 4.13, 4.03, 3.49).

Statistically significant differences were found for the type of worker: Self-employed workers rating more highly Question (1) "Professional workers I am in contact with through SNS are given to share their knowledge and professional experience" and Question (2) "SNS are useful to me when I try to gain access to technical information related to my work" scoring on average 4 and 4.32, compared to salaried employees with 3.76 and 4.05 respectively.

One explanation could be that the self-employed uses more Web 2.0 tools for their work, with an average of 5.33, compared to salaried employees with an average of 4.59). Self-employed workers are considered to be more entrepreneurial and to make greater efforts to run their businesses.

Statistically significant differences were also observed by economic sector: professionals working in the tertiary sector scored Question (1) "Professional workers I am in contact with through SNS, are given to share their knowledge and professional experience" more highly with a 3.9 average assessment compared to the other three sectors.

There were no other statistically significant differences between the groups.

Regarding the advantage of using SNS to get in touch with professionals from markets abroad, workers from quaternary sector rate it higher. It seems logical that the quaternary sector — the knowledge sector — obtains a significantly higher rating in both items, as part of the work of those companies is to share information and ideas. Therefore, regardless of the duties of each worker, it is very likely that obtaining contacts is part of their obligations.

5. Qualitative Analysis

Additionally, six professionals were interviewed, who had previously completed the survey and were mostly working for B2B companies. See the workers and companies characteristics in Table 3. Two of them (3 and 4) work both as salaried employees and self-employed for their own company. Information was thus obtained from a worker in two different professional activities

They were questioned about what kind of Information they shared on the Web 2.0. Table 3 contains some of the characteristics.

	Professional	Type of Worker	Company	Type of customer	Economic Sector
1	Senior engineer	Salaried employee	A	B2B	Secondary
2	IT manager	Salaried employee	В	B2B	Secondary
3	Senior consultant	Salaried employee	С	B2B	Tertiary
4	Team member of a project	collaborator	D	Non profit	Tertiary
5	Marketing manager	Salaried employee	Е	B2B	Secondary
6	Commercial manager	Salaried employee	F	B2B	Secondary
	General manager	Self-employed	G	B2C	Tertiary
7	General manager	Self-employed	Н	B2B	Tertiary

Table 3 Characteristics of Those Interviewed

Source: Generated by the authors based on in-depth interviews data

Regardless of the social media strategy of the companies where the employee interviewees work, and regardless of their codes of conduct (in the case of their having one), the six professionals with whom we held a personal interview are using Web 2.0 platforms for their professional tasks. The specific uses are varied, depending on the duties performed and the context in which they operate (B2B, B2C). They are active observing what others do and how they do it so as to be able to adapt the strategy to their job needs. They watch where the customers are active, in which networks, forums, etc. and they register on the same platforms in order to be able to interact with them.

A senior consultant from C company said that she resorted to SNS to obtain Information and new ideas for a project she was working on. Furthermore she has exchanged ideas related to the association she belongs to: "when I tried to find some ideas and Information on different LinkedIn groups, the response of people, with similar projects as ours, was amazing. I found those groups very interesting since we exchange and compare some ideas".

A senior engineer from A company stated that thanks to Web 2.0 tools he could assess Information allowing him to know the suitability and the viability of projects they wanted to implement: "we use SNS to look at what other companies are doing. For instance, if we are considering entering a new market. We try to investigate if it could be viable and it would be therefore possible to enter it. Sometimes, if we decide to start up a new business, we look if there is something similar anywhere else in the world. We also try to compare what we are actually doing to what others do in order to evaluate if we are on the right track". On the other hand, he thought SNS could be very useful to investigate and solve problems and issues on specific matters. Confidentiality concerns are the reason they are not used for that purpose, while he acknowledged that some countries, such as Germany and Great Britain, are further ahead in that regard. Most of the projects carried out by industrial companies are subject to confidentiality protection, implying a restriction to publish any Information on Internet: We usually "carry out projects for other companies with Confidentiality clauses and we can therefore say little or nothing about what we are doing. Sometimes we cannot even talk to fellow employees". This circumstance often makes it difficult to ask and talk about technical problems facing us: "There are people that talk about it on digital networks, but we have no guidelines in place to deal with such matters".

An IT manager from B company thought that it was difficult to build relationships with customers through SNS, due to their kind of company, as it is an industrial one belonging to the electrical industrial sector, which has a small number of clients, with whom they are in close contact. However he did say that "SNS can be helpful to find skilled professionals for a technical issue through LinkedIn, and to help develop a new product for example".

6. Conclusion

The results of the research show that LinkedIn is the SNS preferred by professional workers, regardless of their age, economic sector, size or company, type of worker (self-employed or salaried employee) and type of business (B2B or B2C). This is followed by Twitter, Facebook and Corporate Websites.

The opinions regarding the usefulness of SNS for sharing information and obtaining knowledge are highly rated by professional workers. This means they acknowledge the potential of Web 2.0 tools for the purpose referred. Surveyed workers appreciate the willingness of other professionals to share their knowledge and experience, while SNS are also used to disseminate information among professional specifics groups. In short, the information, ideas and experiences acquired through conversations that take place in SNS lead to business opportunities.

The knowledge-sector employees are seen to be more optimistic than the others as regards the utility provided by the SNS to disseminate information and knowledge globally. Furthermore, they have a high opinion about the contribution of social networks when it comes to making foreign contacts, and we can therefore conclude that they are striving to reach out to the global market. It should be remembered that it is the knowledge sector and that part of the work of these companies requires sharing information and ideas with other stakeholders. Therefore, regardless of the role of each employee, they all share their knowledge with other persons. They thus become ambassadors of the company, while at the same time seeking out commercial partners on the international market.

Searching for information of professional interest is one of the most common tasks performed in Web 2.0. Furthermore, the people surveyed agreed how useful these tools were to be able to share expertise and professional experiences, in order to access information related to specific topics, as well as to disseminate information to specific professional groups.

We think management should encourage employees to make use of SNS as long as they provide useful information benefiting the company. Developing policy guidelines on the use of Web 2.0 tools with business purposes would be recommended for correct and appropriate use of these tools, while taking advantage of social networking channels.

7. Future Research Directions

This study opens up several areas for further research. First of all, a more in-depth study should be conducted to establish the issues and topics professional workers deal with and discuss on SNS. Secondly, research should be conducted to establish the barriers in their conversation, reasons why they would not talk about issues they are interested in. At the same time, solutions should be sought to break down these barriers in order to have freedom to discuss wide-ranging issues with other professionals.

Another line of research could be to identify whether workers use each SNS with different objectives, to talk about different issues, or whether, on the contrary, that does not make any difference in how the SNS are used. Policy guidelines on the use of Web 2.0 tools for business purposes should be developed for employees, and set standards and establish criteria.

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