Knowing what is said on enterprise Social Media: Towards the development of an Analytical Communication Framework

Conocer el contenido de los Medios Sociales empresariales: Hacia el desarrollo de un Marco Analítico Comunicativo

Mark Verheyden Peter Jan1
mark.verheyden@vub.ac.be
Vrije Universiteit Brussel, Bélgica

Recepción: 11/02/2017   Revisión: 15/05/2017  Aceptación: 19/06/2017  Publicación: 20/06/2017
http://dx.doi.org/10.5783/RIRP-13-2017-02-05-22

Abstract
In this paper, the author adapts Lasswell’s communication model to develop a framework for the analysis of content on Enterprise Social Media (ESM). To this end, the author systematically reviewed a decade (2007-2016) of literature in three scientific databases (Web of Science, Scopus and Business Source Premier) and critically discusses how the new framework complements existing models and frameworks. The newly developed analytical instrument consists of fourteen parameters organized along the different phases in the meta-theoretical communication model of Lasswell (1948). At the theoretical level, this paper fills a gap that exists at the intersection of public relations studies and social media scholarship. Practitioners could use our instrument to determine the extent to which ESM are used for professional communication.

Keywords: Enterprise Social Media, Enterprise Social Software, Systematic Review, Internal Communication, Public Relations, Communication Framework

Resumen
En este artículo se adapta el modelo comunicativo de Lasswell en un nuevo marco para el análisis de contenido en los Medios Sociales aplicados al ámbito empresarial (ESM en sus siglas en inglés). Para ello, el autor revisa sistemáticamente una década de literatura (2007-2016) en tres bases de datos científicas (Web of Science, Scopus y Business Source Premier) y examina críticamente cómo el nuevo marco complementa los modelos existentes. El nuevo instrumento consta de catorce parámetros organizados en las distintas fases del modelo de Lasswell (1948). En el ámbito teórico, el artículo llena el vacío existente en el análisis de la intersección entre relaciones públicas y medios sociales. A nivel aplicado, el modelo puede ser de utilidad para evaluar si las ESM sirven a la comunicación profesional.

Palabras clave: Medios Sociales Empresariales, Software Empresarial Social, Revisión Sistemática, Comunicación Interna, Relaciones Públicas, Marco Comunicativo

1 PhD candidate at the Vrije Universiteit Brussel, Department of Media and Communication Studies.
Summary

1. Introduction
2. Theoretical Framework
3. Methodology
4. Results
5. Discussion and Conclusions
6. References

1. INTRODUCTION

A few years ago, Solis and Breakenridge (2009, p. viii) pointed out that “many executives still view blogs as random musings, social networks as places where people troll for friends, and other social places as founts of pure narcissism”. How these perceptions evolve is a question that forms part of an ongoing research agenda. Empirical evidence on how employees use social media both inside and outside organizations is likely to shape the future of how managers perceive these digital platforms. Today, the current stock of knowledge does not yet offer definitive answers.

With this paper, we want to propose a communication framework that can be used to study interactions on Enterprise Social Media (ESM). Unlike other authors, who often approach this topic from an Information Systems (IS) perspective (Riemer & Tavakoli, 2013; van Zoonen, Verhoeven, & Vliegenthart, 2016), we used a communication approach to inform the structure of our framework. We have chosen to use Harold Lasswell’s (1948) communication model to distinguish between communicator, message, medium, receiver and effect as our principal theoretical building blocks. In the words of Kent (2010: 655), it is time that communication scholars and practitioners come “(...) to terms with the role of technology in public relations”.

We look specifically at “Enterprise Social Media” with brand names like “Yammer”, “IBM Connections”, and “Mumba Cloud”. In the words of Riemer et al. (2015: 199), these platforms “mimic the features of Twitter and Facebook, but are designed for application within organizations”. Analyzing interactions on ESM is interesting because, unlike public social media, these platforms create a public sphere only accessible to members of the community and therefore provide us with more focused data on intra-organizational dynamics.

The main intent of this paper is to fill a void in the existing literature on employees’ use of social media. In a recent systematic literature review, El Ouirdi et al. (2015) conclude that, thematically, the number of studies with an explicit communication approach are rare in this field. This lacuna urgently needs to be addressed since longitudinal studies continue to report that social media are believed to have a profound impact on how public relations is practiced (Wright & Hinson, 2015: 1). Similarly, Welch and Jackson (2007: 178) point out the existence of “considerable gaps in internal communication theory”. As such, we contribute to theory development in what is seen as one of the “fastest growing specializations in public relations and communication management” (Verčič, Verčič, & Sriramesh, 2012: 223).

2. THEORETICAL FRAMEWORK

2.1. Definitions and main research areas

Given the popularity of the topic, it is no surprise that numerous authors have come up with definitions of what social media are. Based on the number of citations, we can argue that the most popular definitions are the ones of Kaplan and Haenlein (2010: 61) and Boyd and Ellison (2007), with the latter preferring to speak of “Social Networking Sites” (SNS). In the field of public relations (PR), Solis and Breakenridge (2009: xvii) keep their definition general by arguing that a social medium is “anything that uses the internet to facilitate conversations”. What most definitions have in common is their focus on interaction and user-generated content.

In the literature, some authors have made an analytical distinction between “Public Social Media” and “Enterprise Social Media” (Leftheriotis & Giannakos, 2014; Leonardi, Huysman,
& Steinfield, 2013: 2). Leonardi and his colleagues define the professional variant of these tools as:

“Web based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing” (2013: 2).

To this definition we need to add that some authors refer to these same platforms as Enterprise Social Software (Kügler, Smolnik, & Raeth, 2013) or Enterprise Social Networks (Ellison, Gibbs, & Weber, 2015).

2.2. Social media and employee productivity

The fear of employees wasting their time online, something that has been called “cyberloafing” in the literature (Liberman, Seidman, McKenna, & Buffardi, 2011; Motowidlo & Kell, 2013; Ng, Shao, & Liu, 2016), offers a plausible explanation of why so many organizations are introducing written policies that define the boundaries of social media use during office hours (Olmstead, Lampe, & Ellison, 2016). At this point, the debate about the impact of social media use on work performance has still not been settled. Some have argued that the effects on productivity are mainly positive (Leftheriotis & Giannakos, 2014). The survey results in the study of van Zoonen et al. (2014: 852) even suggested that “(...) employees use their personal social-media accounts selflessly to contribute to organizational goals”. Others have come to less positive conclusions and found that social media use did not benefit, or even hampered, work performance (Landers & Callan, 2014). Some of the most recent studies avoid brass statements and argue that social media use in the workplace has both productive and unproductive effects (Carlson, Zivnuska, Harris, Harris, & Carlson, 2016) or is mediated by other factors like knowledge transfer (Cao, Guo, Vogel, & Zhang, 2016).

Scholars who study manager perceptions of social media use at work generally report a positive attitude towards these new media. In their research on the opinions of senior
managers, Sedej and Justinek (2013) found this group to be particularly enthusiastic about the use of social media for internal communication. Research focused on the attitudes of professional groups that deal with social media as part of their everyday activities, like PR managers (DiStaso, McCorkindale, & Wright, 2011) and social media managers (Parveen, Jaafar, & Ainin, 2015), equally report these executives to be generally positive but still unsure about many aspects related to employee social media use. Taylor and Kent (2010) add the critical note that these positive attitudes could be the result of intense “socialization” within the professional group. As a result of their content analysis of the professional PR literature, they found the belief in the potential of social media to outrun hard evidence of the tools’ effectiveness. A recent study reporting the results of a survey has again found that communication professionals are convinced of the positive effects of social media on the organization in general and employees more specifically (Cardon & Marshall, 2015).

2.3. What people say on Enterprise Social Media

Although managers generally express themselves positively about social software in professional settings, a recent report of the Pew center for internet research showed that more than half of all employees indicate that their employers have rules about social media at work (Olmstead et al., 2016: 3). Being positively disposed towards social media therefore does not mean that there are no attempts to control employees’ behavior. Although further research on this topic is needed, we argue that it is at least plausible that corporate social media were designed to harness the power of their public counterparts while avoiding the loss of control. Regarding adoption rates there have been mixed reports on the success of these platforms, with some authors shattering the myth that the technology alone will suffice to steer users’ behavior (Li, 2015; Pontefract, 2015).

To use the words of Riemer et al. (2015: 199), ESM “mimic the features” of platforms like Facebook and Twitter. Does this mean these organizational networks are used to share the same content as we see on public networks? At this point, there are only a small number of authors who have addressed this issue.
An extensive overview of the literature on ESM can be found in Stei et al. (2016), who identified user behavior and the effects of ESM usage as two valuable venues for future research in the field. Some authors have focused on the use of an ESM for learning (Scott, Sorokti, & Merrell, 2016) and knowledge management (Mäntymäki & Riemer, 2016). The author most associated with content analysis of ESM data is Kai Riemer. Together with his colleagues, Riemer has focused on the effects of ESM use on an organization’s formal hierarchy (Riemer et al., 2015) and the role of groups as local context for users in digital networks (Riemer & Tavakoli, 2013).

3. METHODOLOGY

The purpose of this paper is to establish a communication framework that can be used to study interactions on ESM. To achieve this goal, we have used Lasswell’s communication model as the backbone to our own framework. Following the logic of this model, we decided to build a first group of parameters around the notion of the sender. Next, our attention shifts to the message itself, the second element in Lasswell’s model. Channel and receiver, respectively third and fourth elements in the communication flow, are constants in our instrument because of our focus on one specific channel (ESM) with a well-defined audience (the employees). The last element in Laswell’s model is “effect”. We have chosen to make an analytical distinction between “actual effect”, in this framework limited to the measurement of engagement, and what Braddock (1958) in his extension of Lasswell’s model calls “purpose”, being the “intended effect”. Conspicuously absent from many communication models, including Lasswell’s, is what psychologists would call the “valence”, better understood as “tone of voice”, of a message. This is all the more surprising given the observation that emotion, or to use another term “affect”, is likely to play a considerable role in how the receiver decodes the message.

These different elements led to the creation of fourteen variables that together make up our analytical instrument. In what follows, we will clarify the theoretical underpinning of each of our conceptual blocks. To this end, we systematically analyzed the literature in three scientific databases: Web of Science, Scopus and Business Source Premier. We used the keywords “Enterprise Social Network*”, “Enterprise Social Software” and “Enterprise Social Media” while limiting our search to articles that carry the keywords in their title and were
published between 2007 and 2016. All relevant models were reviewed and discussed extensively, allowing us to construct our own instrument following the meta-structure of the broader Laswellian framework.

4. RESULTS

4.1. Adapting Lasswell’s communication model to social media research

Harold Lasswell (1948) developed his model of the communication process long before digital communication became the widespread phenomenon it is today. In fact, his famous phrase “who says what, in which channel, to whom, with what effect” dates back to a time period when mass media dominated the scene. Although Lasswell’s model is dated and received considerable criticism, it does allow scholars to outline the core elements of the communication process (Cobley & Schulz, 2013: 12). In a recent article Wenxiu (2015) demonstrated the use of Lasswell’s model for the analysis of new media. We do need to take into account the argument of Lievrouw and Livingstone (2006: 2) that the traditional three-part framework for studying media (production, text and audience), which also forms the core of Lasswell’s model, does not imply a linear relationship. Instead, “new media” are likely to reshuffle the dynamics of existing and future communication processes. To conclude, we also want to highlight the study of El Ouirdi et al. (2014) who used a similar framework in their conceptualization and taxonomy of social media.

4.2. The participatory forces of ESM

The affordances of social media imply that every employee theoretically has the same opportunity to take part in the public digital sphere. However, at this stage it is difficult to draw conclusions about the participatory effects of these digital communication platforms. It is nevertheless important to investigate who communicates on ESM. Is it really only 1 % as implied by Nielsen’s 1-9-90 rule (Nielsen, 2006)? And of those who participate, where can they be situated in the organization’s formal hierarchy? This debate is very much alive since some argue that social media “are firmly rooted in an ideology that values hierarchy, competition, and a winner-takes-all mind-set” (van Dijck, 2013: 21) while others found evidence of social media’s “flattening effect” on the organigram (Riemer et al., 2015).
In order to enable our instrument to bring additional empirical evidence to the table, we decided to create a new variable capable of assigning people who initiate a new conversation to one of three categories, being (1) employee (non-management), (2) line management and (3) higher management. We decided to add an additional variable that serves the purpose of indicating whether the internal communication professional is the one initiating the thread. This way, empirical analysis allows for easy comparisons between the posts of the internal communicator and those of other employees.

4.3. A typology of work related content

Trying to categorize the content of the posts on ESM does imply a certain form of interpretive process. Some of the studies that we have already mentioned accomplish this task by using genre analysis as their main research method (Riemer, Altenhofen, & Richter, 2011; Riemer, Overfeld, Scifleet, & Richter, 2012; Riemer & Richter, 2010; Riemer & Tavakoli, 2013). Our systematic review revealed several instruments that have been used for content analyses of public social media (Crijns, Hudders, Cauberghe, & Claeys, 2016; van Zoonen et al., 2016). We will discuss how each of these typologies informed our own framework.

Constructing an instrument with variables that capture the entire spectrum of content in online conversations is near impossible. However, for the purpose of this study, we focus on work-related content only. To this end we created four dichotomous variables, each of which will be discussed briefly.

Closest to the professional activities of the individual are posts that have a direct link with the work being done. Included in this category are those messages related to objects, processes and incidents that directly impact the work tasks of the employee. As such, this category is similar, albeit somewhat broader, to what van Zoonen et al. (2016: 331) define as “work behaviors”.

Having established a variable to account for work related posts, we quickly found ourselves in need of a different parameter that could integrate messages about employees’ jobs that do not directly relate to the work itself. The most obvious example are posts regarding compensation and benefits. Our new parameter, not found in existing typologies, fully
integrates the first variable. All work-related messages are therefore logically also job related.

Not all messages are related to someone’s professional tasks or broader job context. However, this does not mean that they are completely disconnected from the organization. Quite to the contrary, people often talk about the organization as an entity in itself. For this reason, we created, similar to van Zoonen (2016: 331), a third variable to register whether posts have a clear link with the organization. This variable encompasses the first two variables. All work and job related posts are therefore automatically categorized as organization related.

Our first three variables can be visualized as concentric circles that indicate the degree to which the content on ESM connects to the employee’s professional context. However, posts may also be related to the sector without having a direct link with work, the job or the organization. A logical step is therefore to introduce a new variable that is able to capture this content. Unlike the first categories, this variable does not constitute a new layer of the concentric circle because not everyone’s work in an organization is directly related to the sector in which the organization is active.

**Figure 1: typology of work related content on the ESM**

[Diagram showing concentric circles labeled Work related, Job related, Sector related, and Organization related]

Source: Own elaboration.
4.4. Effects of communicating through ESM

In this paper, we limit the study of actual effects to the measurement of how actively employees engage with content on ESM. This enables us to determine which posts trigger higher levels of engagement. The reason why we ask this question is because employee engagement has been identified as “one of the hottest issues in practice” (Verčič et al., 2012). Numerous scholarly contributions equally stress the importance of internal communication in fostering employee engagement (Mishra, Boynton, & Mishra, 2014; Ruck & Welch, 2012; Welch, 2012; Welch & Jackson, 2007). However, critical voices have argued that digital media do not fulfill their full dialogic potential (Grunig, 2009; Kent & Taylor, 2002), which implies that organizations are missing an important chance to foster employee engagement.

Similar to Crijns et al. (2016), we define engagement in terms of objectively measurable parameters like the number of likes and reactions. In some cases, a small number of people might engage in what we would call an “online conversation”, leading to numerous reactions to the same post. Therefore, we decide to enrich our analytical framework with a parameter that records the number of unique people that post reactions. We further add a variable capable of capturing whether the authors of the main post also react to their own message in the thread’s “comments section”. By doing this, our instrument is able to test whether the employees who initiate a thread also join the discussion after having posted.

4.5 Categorizing intended effect

In order to define categories with which to classify messages in terms of their intended effect, we found the four models of PR, as developed by Grunig and Hunt (1984), particularly useful. Although these models were developed as a typology for PR messages, analogies can be drawn with the intended effect of messages on ESM. We will discuss how each of these models relates to one of the four values in the variable we created. This way, our instrument is able of categorizing messages according to their intended effect.
The first of Grunig and Hunt’s (1984) models is the “press agentry” or “publicity” model. It mainly revolves around persuasion, hence the name of our first category. Included in this category are all messages that have the explicit “aim to induce behaviors in the reader” (van Zoonen et al., 2016: 331). Examples include calls to action or messages containing opinions backed with arguments to support these opinions.

The second form of one-way communication is what Grunig and Hunt (1984) call the “public information model”. Core to this model is the sender’s intention to share information. We therefore decide to categorize posts as “information sharing” when they do not contain questions or are not backed with arguments in order to convince the reader of a certain statement. We can find the same category in the typology of Riemer and Tavakoli (2013: 10). However, these authors define additional genres such as “problem solving and advice” or “social and praise” that are too detailed for the purpose of our analysis. We argue that the categories of these authors are thematic subthemes that are congruent with our proposed classification.

Some posts on ESM have the clear intent to trigger a communicative reaction from the audience. These actions mostly take the form of written comments that can be found below the initial post. In these cases, one-way communication makes room for two-way communication. In the two-way asymmetrical model of Grunig and Hunt (1984), the communicator gathers information through the communicative loop (Dozier, Grunig, & Grunig, 2013: 13). As such, we label as “information seeking” those posts whose first purpose is to get answers to a question. The authors of the posts that are labeled “information seeking” do not have the intent to persuade the reader or start a discussion.

A final type of intended effect is what we call “discussion”. We argue that it is precisely this element that leads to balanced forms of two-way communication. Therefore, it is central to Grunig and Hunt’s (1984) fourth and final model, also called “two-way symmetrical model”. Threads we label as “discussion” elicit others’ opinions without intent to receive a definite answer. We find a similar category in the work of Riemer and Tavakoli (2013: 10).
4.6. Tone of voice

Often it is not the content but the tone of voice that determines how a message is received. Some authors have found that the use of social media strengthens the perception of the organization having a “conversational human voice” (Kelleher & Miller, 2006: 395). For these reasons, we deem it necessary to include in our instrument a category able to measure what is called “valence” in the social psychological literature. Following Crijns et al. (2016), we use the labels “negative”, “neutral” and “positive” to map the tone of voice of the main message. We find van Zoonen et al. (2016: 331) to be using the same typology but calling it “sentiment” instead of “valence”. Since we want our framework to have the power of mapping the tone of voice found in reactions to the initial post, we need to add “no reactions” and “mixed” as additional categories to account for posts that do not receive reactions or where comments contain both positive and negative statements at the same time.

Table 1: Analytical framework to study the content found on Enterprise Social Media

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Number</td>
<td>Unique identifier (UID) of the thread</td>
<td>1, n</td>
</tr>
<tr>
<td>Position in hierarchy</td>
<td>Position of the author in the organizational hierarchy</td>
<td>1: Employee (non-management) 2: Line management 3: Higher management</td>
</tr>
<tr>
<td>Internal communicator (lead)</td>
<td>(Internal) communication manager is the main poster</td>
<td>0: No 1: Yes</td>
</tr>
<tr>
<td>Work related</td>
<td>Post is directly related to the work tasks of the poster</td>
<td>0: No 1: Yes</td>
</tr>
<tr>
<td>Job related</td>
<td>Post is directly related to the job of the poster</td>
<td>0: No 1: Yes</td>
</tr>
<tr>
<td>Organization related</td>
<td>Post is directly related to the organization</td>
<td>0: No 1: Yes</td>
</tr>
<tr>
<td>Sector related</td>
<td>Post is directly related to the sector</td>
<td>0: No 1: Yes</td>
</tr>
<tr>
<td>Internal communicator (comment)</td>
<td>(Internal) communication manager is present in the reactions</td>
<td>0: No 1: Yes</td>
</tr>
<tr>
<td>Likes</td>
<td>Number of likes</td>
<td>1, n</td>
</tr>
<tr>
<td>Reactions</td>
<td>Number of reactions</td>
<td>1, n</td>
</tr>
<tr>
<td>Intended effect</td>
<td>Intended effect of the poster</td>
<td>1: Persuasion 2: Information sharing 3: Information seeking 4: Discussion</td>
</tr>
<tr>
<td>Valence main</td>
<td>Tone of voice of the main post</td>
<td>0: Negative 1: Neutral 2: Positive</td>
</tr>
<tr>
<td>Valence reaction</td>
<td>Tone of voice of the reactions</td>
<td>0: No reactions 1: Negative 2: Mixed 3: Neutral 4: Positive</td>
</tr>
</tbody>
</table>
5. DISCUSSION AND CONCLUSIONS

The aim of this paper was to develop a communication framework with which the content found on ESM can be analyzed. We did so in light of ongoing debates about the use of these platforms for organizational communication purposes (Leonardi et al., 2013; Turban, Bolloju, & Liang, 2011). Surprisingly, only a handful of studies have focused on the development of typologies for the categorization of content on social media. The existing frameworks we reviewed (e.g., Riemer & Tavakoli, 2013; van Zoonen et al., 2016) largely ignore communication theory. We decided to address this issue by developing a framework grounded in Lasswell’s well-known communication model.

Current research on ESM has been published in journals such as *Computers in Human Behavior* (Kwahk & Park, 2016) and the *Journal of Computer-Mediated Communication* (Leonardi et al., 2013). As is apparent from these titles, the topic is popular among information systems scholars. In the fields of PR and organizational communication, interest in social media applications has mostly focused on communication between the organization and external stakeholder groups (e.g., Crijns et al., 2016). A recent systematic review of the literature further allowed us to identify two gaps in social media scholarship that we wanted to address. First, El Ouirdi et al. (2015: 459) found there to be a lack of studies linking social media with internal communication. Secondly, these same authors (2015: 460) argue that, if the field wants to evolve, more efforts need to be taken in terms of theory development.

In this paper, we focused on advancing the field through the development of an analytical instrument that builds on existing communication theory as well as recent empirical findings. Central to the structure of this instrument is Lasswell’s (1948) famous communication model. This allowed us to make analytical distinctions between different phases in the communication process that characterize the social interactions on ESM. For each of the elements out of Lasswell’s model, a systematic review of the current literature on social media use in professional settings was completed. This provided the input for the construction of the different variables in our own framework. As such, we build on the strengths of an established communication model while adapting it to a digital communication process.
We are convinced that our analytical framework can be of interest to both academic and professional audiences. For starters, scholars may be interested in using the framework to answer various research questions. At the level of the sender, posts of professional communicators may be compared with posts of other employees. Additionally, posts may be compared along hierarchical lines. With regard to content, an index may be created for which high scores is indicative of work-related discussions while lower scores could reveal that the network is mostly used for purposes other than work. Our inclusion of engagement variables could be interesting for scholars and practitioners who try to locate social influencers. Furthermore, it might be interesting to look for correlations between the type and sentiment of posts on the one hand and the engagement they trigger on the other hand. As these examples show, the framework is versatile and may be applied in various ways.

6. REFERENCES


Forma de citar este artículo: