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Gulstad, Sophie; Rosenstand, Claus Andreas Foss

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Innovation management - Subject-specific SoMe's influence in decision-making

Sophie Lanng Gulstad*

Aalborg University, Kroghsstraede 3, 9220 Aalborg, Denmark. E-mail: slg@hum.aau.dk

Claus A. Foss Rosenstand

Aalborg University, Rendsburggade 14, 9000 Aalborg, Denmark. E-mail: cr@hum.aau.dk

* Corresponding author

Abstract: This paper presents the preliminary findings of a research-inprogress in two B2Bs. The area of concern is innovation management in digital businesses; the paper discusses how subject-specific - and perhaps more unknown - social media (SoMe) such as GitHub affects the agendas in digital businesses with spectacular focus at decision-making in product development. Moreover, the paper will suggest how this can be linked to innovation management in digital businesses. The research question is: What is the significance of subject-specific SoMe for product innovation in digital businesses, and how are they utilized constructively in innovation management? The research is based on a qualitative approach consisting of field studies and interviews in two digital B2Bs and is theoretically framed with critical discourse analysis, drawing inspiration from Foucault. Our observations show that software developers' interpretation of innovative ideas or concepts are based on knowledge and dominating discourses on subject-specific SoMe. The important observation here is that innovation managers generally are unaware of this strategic influence.

Keywords: subject-specific social media; social media; decision-making; technical product development; workflow; Innovation management; digital businesses.

Introduction

The digital revolution, including the emergence of SoMe, has reshaped society and brought a lot of new conditions for businesses (Ayonso 2014). SoMe have introduced significant and radical changes in communication between businesses, communities, and individuals (Kietzmann et al. 2011; Van Dijck & Poell 2015). Many businesses are increasingly recognizing the value of SoMe, and these media's many opportunities by

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investing in them (Ayanso 2014). However, we argue, they are often not aware of how SoMe, in an uncontrolled manner, influence the business itself on a strategic level.

The area of concern is innovation management in digital development businesses. Here it is important to the innovation managers to identify the innovation potential of digital processes and, at the same time, manage the development of new digitized workflows. Most innovation managers would probably say that they have a strategy regarding development and innovation processes; that they are in control of who is in position to influence the processes, and not at least; who makes the important decisions. However, our research-in-process, which have observed the influence of SoMe on digital businesses, shows that this is not always the case: The workflows in digital businesses are very often divided where managers only follow certain processes. Typically, they are most involved in processes dealing with strategic decision making. The closer the process is to the actual product development, the lesser involvement from the innovation manager. Innovation managers - including idea and concept-owners - often have their focus on other tasks than following a detailed development process. To this end, the simple explanation is that technical development is an unapproachable field typically far from innovation managers' core competencies. This division of a general and specific work between innovation managers and specialists ensure efficiency: However, developers also make essential decisions with strategic relevance during the technical product development and these decisions are heavily influenced by information on subject-specific SoMe such as GitHub, Uplabs, Dribble, and Behance.net - which innovation managers often seems to be are unaware of.

Method and wondering

The ambition is to help innovation managers in digital businesses to strategically leverage subject-specific SoMe to strengthen their innovation management.

The observations have taken place in two digital B2Bs. One business specialized in the development of digital B2B and B2C solutions. The other business is a global developer and supplier of a SasS product. Both businesses are deeply engaged in human digital behavior and technological development. They have contact with many different industries, which, for various reasons, want strategic and innovative development of their digital growth potential.

The qualitative data collection methods have been divided into two sessions. The first session was a 14-day field study consisting of observations and documentation of workflows, meetings, product development, etc. Secondly, followed by 12 semi-structured, open, thematic qualitative interviews (Kvale & Brinkmann 2015) with employees in different positions - including managers and programmers. This is theoretical framed with critical discourse analysis, drawing inspiration from Foucault, but also counts key figures such as Fairclough, Wodak, Laclau, and Mouffe (Nelson et al. 2002). The empirical data has provided linguistic and discursive formulations about the influence of subject-specific SoMe, workflows, and product development in digital businesses. In addition to the critical discourse analysis, the research includes theories about framing (McCombs et al. 2003) and constructivist decision theory (Herbert Simon 1955; Simon1956).

Our observation shows that software developers interpretations of innovative ideas or concepts are based on knowledge and dominating discourses on SoMe such as GitHub, Uplabs, Dribble, and Behance.net. The important observation is not that these subject-specific SoMe platforms help developers with strategic choices. The important observation is that innovation managers generally are unaware of this strategic influence. This phenomenon has been observed to be systematic. A typical example is UX designer teams, where several subject-specific SoMe is used multiple times daily. Here, developers say that their decisions about programs they use for digital user interfaces or, at a more concrete level, how the visual design of a product appearance, is based on knowledge and inspiration from these media. To this end, it is inherent that these decisions are decoupled from internal strategic innovations management decisions. Front-and backend Developers mention Github as an indispensable inspiration in their work: As a place to discover the news and not at least to download specific code for their projects.

In the perspective of decision theory, this is quite interesting: Herbert Simon argued that all business decisions are rationally bounded due to lack of resources, time, and knowledge. The complexity of the environment and our limited cognitive system make maximization impossible in real-life decision-making situations like the one developers find themself in when facing possible solutions — or discourses — in subject-specific SoMe. Simon argued that we do not maximize, instead we 'satisfice'. This means that we have adequacy criteria to decide whether an alternative is satisfactory and that we choose the first option that satisfies our criteria. In other words, we do not evaluate all available options (Simon 1955; Simon 1956).

This leaves a wondering about innovation management potential regarding subject-specific SoMe if innovation managers were (more) aware of these media platforms' strategic influence. To this end, we raise the following research question: What is the significance of subject-specific SoMe for product innovation in digital businesses, and how can innovation managers leverage it?

A panopticon discipline

Jeremy Bentham's panopticon is originally an architectural innovation design for prisons to provide comprehensive observation of prisoners. The prison design features two circular towers, one inside the other, the outer one containing cells that face the central tower. An "all-seeing place" from which guards, who would be invisible to the prisoners, would have an unobstructed view of each cell (Foucault 1975). Today 'panopticon' is also discussed in the context of social media as a metaphor to illustrate that those platforms and applications allow multilevel and latent surveillance. By using the platforms, users become subject to multilateral and constant monitoring. Through this, new power relations and asymmetries are formed (Mitrou et al. 2014).

Many employees in the digital industry have a large consumption of subject-specific SoMe. They use them as monitoring tools; to scan the market and, in this way, keep themselves updated to their professionalism as well as news and trends in the digital businesses. The digital market is developing rapidly, and as an employee, it is a must to be present online on the subject-specific SoMe to be present at all; otherwise, you simply become obsolete to the digital market. A consequence is the employee's daily 'collection' of large amounts of knowledge, and more or less intentionally, this knowledge influences

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the business's internal agenda by producing potential actions and positions. When software developers enter the panopticon position behind the computer screen, they are not just observing but also presented with proposals for what is right and wrong 'behavior'. And they never know exactly when they are being observed themselves. - Which could further lead to a discussion about who the key players are when it comes to external communication in digital businesses; this might not always be a task that belongs to the managers or the marketing team.

The use of subject-specific SoMe is not just a question about insignificant research or daily surfing on the Internet. For example, many programmers post specific work assignments in open forums at the subject-specific SoMe Github to gain input on possible solutions with potential strategic impact.

Github facilitates social coding for over 35 million software developers by providing a web interface and tools for collaboration. Users at the platform can follow each other, rate each other's work, receive updates for specific projects, and communicate publicly or privately (Techtarget 2018). This popular subject-specific SoMe gives employees in the digital industry the opportunity to quickly search through a massive amount of technical projects and interact with likeminded from all over the world. The discursive power and influence that a subject-specific SoMe like GitHub have are, therefore, explicitly expressed through the agenda and discourse, which frames the software developers' mindset. This includes several aspects, from overall themes and trends to specific problem-solving suggestions.

Recent research (e.g. Ayonso 2014) shows that the increased use of SoMe, in general, is more than a channel to communicate. It is also a way to evaluate and leverage your community position. To this end, also subject-specific SoMe have "social consequences". What is said, written or otherwise communicated, defines the business and their possibilities. The spoken words do not neutrally reflect the corporate atmosphere, their identity, and social relationships. No, it is a manifestation of a specific historical and cultural way of looking at the (digital) world, and not at least its actors (Foucault 1994).

In other words, there will always be some dominating discourses. Discourses that transform and reproduce social reality (Jørgensen & Phillips 1999, p. 18). Developers are constantly in situations where they re-evaluate their agenda, and their choices are interdependent on what discourses they are or want to be part of and which (subject)positions (Foucault 1982) that are available.

The discursive power that subject-specific SoMe represent not only affects what businesses are engaged with but also frames how (McCombs et al. 1997). So why does the influence of subject-specific SoMe on digital businesses not get more attention from a strategic point of view?

Positioning

So far, there has been a significant focus on how businesses can improve the quality of innovation and their position in the market by working with innovation management involving suppliers, customers, and other stakeholders (Ojasalo 2003) - e.g. during the idea generation processes or user-feedback on prototypes. Involving others is typically a strategic choice based on the desire to position the businesses as "someone who listens to

customer needs" or for the simple good reason that the business finds it valuable getting these inputs. Whatever is behind the involvement, it is a common fact that innovation managers are aware of this strategy. They know that external factors and external knowledge in a way are "implemented" inside the business.

The use of subject-specific SoMe also contributes to this kind of strategic knowledge. The knowledge becomes agenda setting and contributes to specific innovation workflow in the business, like product development processes. As an example, it could have an effect on which code language is preferred or how the user interface of an app is designed.

From a critical discourse perspective, subject-specific media creates a "world inbetween" in businesses with actions, opportunities, and positions in organizational life. Thus, positioning must be understood dynamically (Foucault 1980). For many businesses, subject-specific SoMe is an unexploited opportunity to get hold of new ways to negotiate or fight for a powerful positioning in the digital business industry.

The observed paradox is that businesses on many other fronts acknowledge the value of SoMe and these media's many opportunities to promote products and services (Ayanso 2014). To this end, more resources are invested in SoMe and acknowledge the importance of positioning on them (Ayanso 2014). So why don't the subject-specific SoMe platforms' influence on product innovation get more attention? And how can the above insight be transformed into important strategic innovation management decisions?

It is well known that the media in general influence opinions (e.g. McCombs et al. 1972; Talbot 2007) and to this end, it is a fundamental change in our society that we have SoMe (e.g. Kietzmann et al. 2011; Huang, Baptista, and Galliers 2011). Today, SoMe does not only frame our social interaction, but it is also a symbol of cultural change inherent in our communication (e.g. Kietzmann et al. 2011, Van Dijck and Poell 2015). Subject-specific SoMe are no exception.

In recent decades, the conditions for innovation management have changed significantly. Innovation processes and their management take place within a complex field of increased dynamics and external influences. Greater information accessibility is accompanied by intensified knowledge creation (Fichter 2012). A statement this research-in-progress complements with a focus on subject-specific SoMes influence on essential decisions in product innovation in digital businesses. It has been pointed out that SoMe must be regarded as something that directly influences and changes business processes (Huang, Baptista & Galliers 2013). These media platforms create and disseminate information like never before, but they also affect the way businesses perform (Ayonso 2014). To this end, the working hypothesis is that businesses can benefit from the new digital reality as long as subject-specific SoMe are taken strategically into the innovation management's consideration.

Conclusion

To recapitulate, the research question for this research-in-progress is; what significance of subject-specific SoMe is for product innovation in digital businesses, and how innovation managers can leverage it? So far, we have pointed towards a discursive approach to subject-specific SoMe as a solution to identify the significance to product

innovation in digital business; however, the 'how' part of the research question is still to be elaborated.

However, the research-in-progress shows, that essential decision in the digital businesses, in a way, are made outside the businesses. The fact that strategic decisions in digital businesses are based on knowledge and input from subject-specific SoMe raises new questions about whether innovation managers should consider formulating some criteria to be met in innovative decision-making processes. Of course, innovation managers cannot always be present when employees make decisions. But subsequently, in every decision, it should be possible to identify the discourse and set of "rules" that governed it. To this end, there is a need for further research regarding innovation governance of subject-specific SoMe.

It is also a central conclusion that subject-specific SoMe, for many businesses, presents several unused platforms with the potential to be positioned strongly in the digital industry.

The subject-specific SoMe should be considered as a key source of both knowledge to digital development as well as an opportunity to position the business. Although the subject-specific SoMe in this paper are linked to the term 'surveillance', it is essential to point out that the understanding of surveillance here is not a reference to a relationship that favors the supervisor and reducing the person under surveillance to a powerless, passive subject (Foucault 2002). The monitoring practices do not degrade the actors taking part in it. Neither as monitors who follow the information streams of others, nor, more importantly, as monitors, who themselves contribute significantly to these streams of information. Rather, it is that these surveillance practices are part of a discourse that can help build rather than degrade the business.

Areas for feedback

- Please, make references to similar research projects.
- Please, come up with suggestions for further perspectives.
- Please, reflect on the practical implications in your innovation management context.

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