A role for startups in unleashing the disruptive power of social media

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ABSTRACT

As social media attract increasing attention from executives and find varied applications in different industries, research on the subject has been investigating the antecedents, moderators, mediators and outcomes of social media adoption, as well as impacts on the organizational and individual level. However, relatively little attention has been paid to the discussion of the new sources of social media innovation—i.e., the upstream originators of social media solutions. Such innovations of a possibly disruptive nature often originate from startups, which can constitute a significant driver for social media development and can influence the adopting incumbents' behaviors. This study aims at shedding first light on social media-based solutions developed and delivered by startups. By surveying the Crunchbase database, we identified 724 funded social media startups, which were further classified into six categories, namely: (i) social network; (ii) social commerce; (iii) social recruitment; (iv) social management; (v) social loyalty and advocacy; (vi) contact management. Our findings show how the large majority of startups deliver social network solutions to incumbents, followed by social media management applications. The findings also shed light on emerging approaches to value generation and open innovation from social media related to and driven by startups.

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1. Introduction

Social media have radically transformed and are continuously transforming the way we, as individuals and professionals, communicate, collaborate, consume and create (Aral, Dellarocas, & Godes, 2013).

As social media are exploding in popularity among consumers, companies seek to extract value from these solutions in order to innovate their business models and managerial practices (He, Zha & Li, 2013; Luo, Zhang, & Duan, 2013). In the last years, several authors (e.g., Enders, Hungenberg, Denker, & Mauch, 2008; Kietzman, Hermkens, McCarthy, & Silvestre, 2011) remarked how companies have paradigmatically changed the way they are organized and managed, as well as how they compete. The broad social media practice embeds a number of new tools and approaches that have the potential to support or enhance these strategic, organizational and managerial modifications (Ngai, Tao, & Moon, 2015).

In fact, these radical—and probably not reversing—changes affecting modern completion are driven by an increasing embeddedness of companies in the "social" environment, which goes beyond inter-firm relationships (e.g., see Uzzi, 1997) and growingly encompasses interactions with end users (Gallaugher & Ransbotham, 2010). As a result, we urgently need to update our current understanding of the disrupting power of social media, as well as the nurturing of a scientifically-based and empirically-relevant debate about whether and how executives could extract value out of them (e.g., Kietzman et al., 2011). In this regards, a missing link emerges.

The social media phenomenon arose as an applied paradigm for communication and networking among individuals, with a limited or fuzzy theorization backing it (Ngai et al., 2015). A wide part of our current understanding is based on anecdotal evidence, grey literature or unproved assumptions. Additionally, the on-going theoretical effort is more devoted to investigate specific examples of social media (e.g., Facebook, Twitter, Pinterest, Wikipedia) rather than developing new interpretative lenses, and establishing clear

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guidelines for managers on how to collectively use them (Aral et al., 2013).

This confirms the need to crystallize the lessons learnt and provide executives with clear guidelines about whether and how they should develop a social media strategy for their organizations, thus underscoring the practical implications, the pragmatic tradeoffs, the activation triggers and the decisional levers they should take into account (Sultan, 2013). In particular, there is urgency for studies with a strong theoretical foundation that might offer a lasting guidance within a phenomenon that evolves dramatically on a daily basis. Executives from different industries (e.g., Kaplan & Haenlein, 2010; Kim & Ko, 2012) are puzzled by the lack of such knowledge, which could severely jeopardize the fruitful exploitation of this new relationship with end customers as well as other key stakeholders.

More specifically, the extant research on social media has been placing its focus on how large-size companies or incumbents in the one hand, and users or customers on the other hand, adopt and use social media (Aral et al., 2013). Therefore, the literature has been dealing with the investigation of antecedents, moderators, mediators and outcomes of social media adoption, as well as its impacts on the organizational and individual level (Ngai et al., 2015). However, relatively little attention has been paid to the discussion of the new sources of social media innovation—i.e., the upstream originators of social media solutions, tools, services and applications (Boyd, 2007).

While a share of such solutions come from large-size IT vendors and may be embedded or integrated as adds-on within their consolidated systems, a significant momentum to innovation in social media is given by new ventures or startups which develop and deliver a plethora of original products and services with varied applications. These startups aimed at jumping onto the social media hype, but, given their flexible, creative and lean strategic approach (Blank, 2013), may constitute a significant driver for the field's growth and development, with clear influences on incumbents' behaviors. Startups may hence trigger social media innovations that are truly disruptive in nature (Downes & Nunes, 2013).

Against this background, this study aims at narrowing this gap by crystallizing original evidence about startups' role as innovation enablers for social media, by means of an in-depth analysis of the applications offered by startups in the social media realm. By identifying and discussing the main application domains, the paper will shed first light on the current and future streams of innovation in social media, thus pointing at future research directions while providing practitioners with guidelines on the innovation paths they should follow to integrate or complement their social media efforts.

2. Literature review

As the field of research and practice evolves, definitions of social media vary widely. Historically, social media was first referred to as "Web 2.0" by Tim O'Reilly and Dale Dougherty in 2004. Later on, Web 2.0 was gradually replaced by the term "social media" to underscore the role of social interactions in the plethora of channels, tools and platforms that Web 2.0 accounted for (Corso, Gastaldi, & Martini, 2013). Coherently to this evolution, social media have been defined as the social interaction among people in which they create, share or exchange information and ideas in virtual communities and networks (Ahlqvist, Bäck, Halonen, & Heinonen, 2008). According to Kaplan and Haenlein, 2010, social media is "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".

As an increasing number of companies in different industries and competitive settings valued interactions and collaborations with users or customers, social media were increasingly acknowl-

edged as a highly promising set of tools and approaches to connect and share information with third parties (Ngai et al., 2015) or with own employees (Leonardi, Huysman, & Steinfield, 2013). Also, social media have been instrumental in establishing networking competencies, in helping firms performing better (Chiu et al., 2014) and in challenging existing marketing and customer relationship practices, such as customer service and promotional processes (Zeng & Gerritsen, 2014). As a result, companies' executives in a variety of industries (Sashi, 2012) have become increasingly convinced of the value of harnessing social media to improve and ultimately transform their business (Divol, Edelman, & Sarrazin, 2012).

Notwithstanding the paramount increase in the attention paid to social media by executives and in turn researchers, a certain ambiguity in the definition, the boundaries and the impacts of this phenomenon still exists (Leung, Law, Van Hoof, & Buhalis, 2013). The research streams associated to this broad term are also varied, reflecting the pervasiveness of its means, meanings and objectives (Tess, 2013).

A recent literature review (Ngai et al., 2015) concluded that social media covers a wide range of research topics, crosscutting three major research theories, namely: personal behavior theories, social behavior theories and mass communication theories, which in turn may be split into thirty-one different sub-streams of research, the most widely referred to being: technology acceptance, social capital theory, social identity theory, social influence theory, uses and gratifications theory, personal traits theory, theory of planned behavior, social cognitive theory, expectation and disconfirmation paradigm, social exchange theory and social network analysis.

Ngai et al. (2015) hence develop the causal-chain framework for social media research depicted in Fig. 1, which identifies the inter-relationships of different research dimensions and constructs linking to causes and results of users' behavior in the adoption of social media. Antecedents of users' behavior refer to social factors (e.g., social capital), users' attributes (e.g., user personality) and organizational attributes (e.g., marketing orientation). Users' behavior is also mediated by platform attributes (e.g., tool integrity), social factors (e.g., social influence) and users' attributes (e.g., user behavior), while it is moderated by user characteristics (e.g., user personality) and social factors (e.g. social influence). Outcomes affect both the personal context (e.g. user intention) and the organizational context (e.g., customer relationship).

Such framework helps shedding light on the multifaceted impacts of social media—both at an individual and organizational levels.

Kietzman et al. (2011) divided social media's features and functionalities into seven blocks:

1. *Identity*: is the extent to which users reveal themselves by adjusting data privacy control or using tools for self-promotion;
2. *Reputation*: it is the extent to which users can identify the social standing of others in social media settings;
3. *Relationship*: is about the relations between users; two or more users may have something in common that connect them, like the same friends or favorite music;
4. *Presence*: is about giving possibility to check whether other users are available, e.g. willing to talk or not;
5. *Sharing*: represents the extent to which users exchange, distribute, and receive content; as a whole, it is a measure of how "social" users or customers are;
6. *Conversation*: it is the extent to which users communicate with each other and implies different communication formats and protocols for both users who wish to use specific social media tools and firms who seek to host and track such conversations;