The Effect of Social Networking Sites and Absorptive Capacity on SMEs' innovation performance

The Effect of Social Networking Sites and Absorptive Capacity on Firms' Innovativeness

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Some recent studies on firms' innovativeness found that relationship between innovation and the technology transfer by the social media networks is understudied in international journal, only few research have addressed this aspect adopting mainly a qualitatively approach. We point out the relevance of these platforms in generating innovative ideas thanks to firms' absorptive capacity of external knowledge. The use of social networking sites can provide a wealth of information about individuals and their networks, which can be utilised for various business purposes. It allows people to create online communities and share user-created content (UCC). Within this context the active connections among people such as customers, public institutions, and other business among others allow firms to generate innovations. To gain insights from the global economy, 215 worldwide small-medium enterprises from different sets of industries such as high tech and electronics, food and beverage and consumer durables were analysed, measuring if there is a positive relationship between social media networks, absorptive capacity, and innovation performance via the Partial Least Square – Path Modelling. Therefore, recommendations are preferred as to what small-medium enterprises should to enhance their innovativeness. The research ends with a conclusion and implications to both scholars and practitioners.

Keywords: *absorptive capacity, social networking sites, innovation performance, PLS-PM.*

Introduction

The proliferation of widespread access to internet, microblogging, social networking sites (SNSs) have changed the way in which marketers implement their business strategy. Firms are using social networking sites such as Blog, Facebook, Twitter, YouTube among others to acquire information related to consumers' needs and then absorb and transform the knowledge into new products or services (Bharati et al 2013). For instance, Facebook is a market leader with over 1,415 billion people registered, followed by Twitter with over 288 million monthly active accounts. A large number of social media users (47%) prefer to comment on or ask a question about a firm's product or service on Facebook and 29% of social media users interact with firms through its page and 28% through their own personal page (Statista 2015).

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Acknowledgement: Thanks to Professor Robert Smith from the University of the West of Scotland, who provided insight and expertise that greatly improved the manuscript.

The development of SNSs strategy accelerate and deepen firms' service innovation and growth by promoting specialisation within customers, suppliers, and other firms (Amy and Poston 2013). A growing number of SMEs is adopting social Networking Sites (Palacios-Marques et al. 2015a; 2015b). As mentioned by Stelzner (2013) 86% of marketers declare that SNSs are important for their business, 69% decide to learn more about social media platforms and 66% plan to increase blogging activities. Stelzner (2013) also highlights three types of benefits created from the use of SNSs. The first one is to generate more exposure (89%); the second benefit relates to the increase in online traffic (75%) and the last refers to lead generation (64%). This, in turn, results in faster time to market, faster product adoption and lower product development cost for firms.

As recently firms race to create innovative ideas, there is a upward awareness that this cannot be done without the involvement of digital tools (……). Because firms needs to intensify their capacity to absorb external knowledge and combine with the internal one (Cohen and Levinthal 1990). This capacity is recognised as absorptive capacity that support firms in acquiring knowledge from the external environment (March and Simon 1958; Zahra and George 2002; Coccia, 2008). In turns, firms tend to develop innovative ideas without conduct in-house research but generating a new knowledge by a dynamic and cooperative approach.

However while corporate firms have already started to introduce SNSs in their organisational environment to improve their innovation performance, small medium enterprises (SMEs) are accustomed to using these digital tools recently. SMEs are commonly recognised as effective business forms that positively influence employment generation, wealth creation, and economic growth (Soto-Acosta et al. 2015a, 2015b; Jardim-Goncalves et al. 2012; Damirchi and Rahimi 2011). Indeed SMEs play a relevant role in exploiting opportunities that make the attainment of equitable and sustainable growth (Campanella, Del Giudice, and Della Peruta 2013; Del Giudice and Maggioni 2014). These firms are particularly concentrated in the manufacturing sector (around 43 percent), establishing around 70 percent of employment (AUB Observatory, 2014). The relevance of SMEs in the market has inspired very few current studies in analysing their use of the new digital tools (Aboelmaged, 2014; Chan et al., 2012; Chong et al., 2009; Lopez-Nicolas and Soto-Acosta, 2010; Huy et al., 2012; Ramdani et al., 2013; Soto-Acosta et al., 2014).

Despite that, as far as we know research on the relationship between the use of SNSs and innovation performance in SMEs is a fundamentally new area. The majority of academic scholars have focused their own research on SNSs as marketing tools (Berinato 2010) or on how these channels increase marketing communication effectiveness (Dholakia and Durham 2010; Kozinets et al 2010; Trusov et al 2009; Decarolis and Deeds, 1999; McEvily and Chakravarthy, 2002; Levy, 2009; Pechlaner and Bachinger, 2010). Anyway, still little is known about how they may benefit firms' innovation performance (Palacios-Marques et al. 2015a, 2015b).

In line with the foregoing issues, the research investigate if there is a positive relationship between social media networks, absorptive capacity, innovation performance. An empirical research was conducted on 215 worldwide SMEs from a different set of industries such as high tech and electronics, food and beverage, and consumer durables (Amy and Poston 2013). Therefore via Partial Least Square – Path Modelling the positive relationship between the use of SNSs and innovation performance through a high level of absorptive capacity was demonstrated.

Based on this, the study was addressed in five sections. First of all, the theoretical framework provides a contextual backdrop on the relevance of social networking sites in the current economy and how they enhance firms' absorptive capacity. Consequently, the theoretical scenario ends reporting studies on the leverage of social media networks on firms' innovativeness. In order to address the gap in to the theoretical framework, the research design and findings were reported and discussed. In turns, suggestions are offered so as to support future innovation strategies and stimulate new academic research.

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Theoretical Framework

Leveraging Social Networking Sites in Firms' Innovativeness

Commentato [U1]: Molto probabilmente, alla luce dei commenti seguenti, eliminerei i titoli dei sottoparagrafi (sia questo che il seguente) e fare confluire tutto in un unico "Theoretica framework"

Social networking sites (SNSs) have changed the way in which marketers implement their business strategy and communicate with their consumers. SNSs are IT-based sources (Palacios-Marques et al. 2015a, 2015b) that "allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection and view and traverse their list of connections and those made by others within the system" (Boyd and Ellison 2008: 211). SNSs include digital platforms such as Facebook as social networking, You Tube as video sharing, Pinterest as picture-sharing, LinkedIn as professional networking, Blogs as weblogs, Foursquare as location-based social networking website, and Twitter as microblogging. All of these platforms are used by firms in order to enhance their absorptive capacity that concerns in the process of a combination between external and internal knowledge (Cohen and Levinthal 1990). In turns, the absorptive capacity enables firms to convert the external knowledge into new products or services (Del Giudice et al. 2014). In line with this, the SNSs are the suitable environment where people can share information, collaborate, discuss common interests, and build relationships (Palacios-Marques et al. 2015a, 2015b). And also these platforms facilitate firms' interactions with their stakeholders such as consumers, public institutions, and other businesses (Hvass and Munar 2012). Kaplan and Haenlein (2010) declare that SNSs are recognised to be as a new cyber space where users generate content (UGC). In fact, firms create brand communities in the form of brand fan pages where it is possible to develop an interactive relationship between firms and their consumers by linking and commenting on the brand's posts (Mc Alexander et al. 2002; Muniz and O'Guinn 2001). For instance, firms set up a Facebook page in order to develop one to one communication with users, to personalise services, and increase brand loyalty and reputation (Hanna et al. 2011; McAlexander et al. 2002; Muniz et al. 2001). Twitter is also a valued digital platform to promptly communicating with customers but would probably be a bad option if you cannot respond quickly (Culnan et al. 2010). With the use of SNSs, firms describe and promote new products or services to potential customers with whom they co-create new business ideas as well (Tussyadiah and Zach 2013). Firms use SNSs to generate, modify, share, and discuss internet content with customers (Kietzmann et al 2011). Therefore, a better costumers' engagement come from the use of SNSs. Although as Garretson (2008: 12) points out that "consumers increasingly use digital media not just to research products and services, but to engage the firms they buy from, as well as other consumers who may have valuable insights". In this way, consumers assume an active role promoting new products and services (Chalkiti and Sigala 2008; Casaló et al., 2010; Kaplan and Haenlein, 2010; Sigala et al., 2012). The relevance of

socialisation has been highlighted in the cyber space (Sigala et al., 2012) where explicit and implicit knowledge are connecting through an exchange process (Chalkiti and Sigala, 2008; Sigala and Chalkiti, 2012).

Concluding SNSs are considered as the perfect tools to influence current and potential consumers (Hanna et al 2011) and as a supportive technology that may be used, strategically or not, in any industry and in any strategy (Porter 2001).

Therefore, since we retain that SNSs have a positive impact in enhancing firms' innovativeness, we hypothesize that:

H1: *The use of SNSs positively influences firms' innovativeness.*

The benefits of a High Level of Absorptive Capacity

Given the chance to spread out information by virtual spaces, knowledge creation is quite relevant since it enables improvement of firms' knowledge capacity (Shih et al. 2010) because the acquisition and transformation of different types of external knowledge can benefit the companies in the innovation process (Del Giudice, Della Peruta, and Scuotto 2014). The knowledge has been considered as a flow (Weinberger 2007; Decarolis and Deeds, 1999; McEvily and Chakravarthy, 2002; Levy, 2009; Pechlaner and Bachinger, 2010) that moves smoothly among SNSs. This flow of knowledge circulate within a firm thanks to its absorptive capacity. As expressed above, Cohen and Levinthal define this capacity as a firm's ability to convert an external knowledge into a new product through a combination of external and internal knowledge. Indeed absorptive capacity needs both a stock of existing knowledge and external knowledge (Robert et al. 2012). Such capacity becomes valuable and profitable because firms create innovative products reducing their costs in conducting in-house research and their investment risk (Del Giudice et al. 2014; Chesbrough 2011; Kaplan and Haenlein, 2010; Metters and Walton 2007). It has been categorised in two dimensions: 1. Potential absorptive capacity and 2. Realised absorptive capacity. The first is characterised by knowledge acquisition and assimilation, where knowledge acquisition is the capability of firm to recognise, value, and acquire external knowledge, whilst knowledge assimilation is the firms' ability to absorb external knowledge. Secondly, realised absorptive capacity is distinguished by knowledge transformation and exploitation. Knowledge transformation can be defined as the ability of a firm to develop routines through the combination of existing knowledge and newly acquired and assimilated knowledge. Knowledge exploitation is the process through which a firm refines, extends and leverages existing competences or generates new ones by acquisition and transformation of external knowledge (Zahra and George 2002). This process allows firms to create relational networks with the external environment (Ahuja, 2000; Wolf et al., 2011).

Hence, innovation results more from borrowing rather than from invention (March and Simon 1958) where the relevant asset is the knowledge (Nicotra et al. 2014; Cardoso et al. 2012; Quintane et al. 2011; Del Giudice and Straub 2011; Chase 2004; 2006; Carayannis and Alexander, 2002). Given the fundamental role of absorptive capacity in determining firm's innovation performance, we concur with Zahra and George (2002) in regards to absorptive capacity as an explanation of innovative performance at the firm's level. By integrating implicit and explicit knowledge within firms, their innovative capabilities are enhanced (Sigala and Chalkiti, 2007). Hence business performance relies on the ability to acquire the customers' knowledge, and how that

Commentato [U2]: Improvvisamente definisci qui l'AC: in buona sostanza gli ingredienti ci sono ma: 1) vanno organizzati diversamente (v. il mio commento di prima); 2) vanno rafforzati sotto il profile di quell che emerge dalla letteratura

knowledge is used to develop new goods and services (Berghman et al., 2006; Dev et al., 2010; Gopalani and Shick, 2011; Gronroos and Ravald, 2011).

Based on this the following hypothesis has been investigated:

H2: Absorptive capacity positively affects innovative performance at firm level.

Firms' Innovativeness: the role of absorptive capacity and SNSs.

Commentato [U3]: L'ipotesi precedente parla di predittore dell'innovative performance e…subito dopo c'è un paragrafo che parla di capacità innovative dell'impresa?? Anche in questo caso è tutto mischiato…

On from above discussion, it can be inferred that the advantages of innovation stem from the improvement of absorptive capacity through the use of SNSs. Many researchers stress that absorptive capacity contributes both directly (Lichtenthaler 2009) and indirectly (Lane et al 2006) to innovation performance. According to Zahra and George (2002), absorptive capacity has a crucial role in the innovation process because a firm with higher absorptive capacity tends to adjust its internal organization to changes in its environment, explore opportunities even solutions, and also exploit innovation to meet its needs (Zahra and George 2012).

Innovation has been considered as either the ability to develop products able to meet the consumers' needs or the ability to use existing technology to develop new products or improve existing ones (Alder and Shenhar 1990). Duncan (1972) argues that innovation is a creative strategic action involving implementation of existing ideas to generate new ideas or figure out a problem. Innovation is also conceived as a driver of firms' evolution strategy rather than as just a reaction to the external changes. It is a means of generating new ideas (Damanpour 1996). Innovation is a result of interactive relationships between suppliers, customers, other businesses, and research centres (Laursen and Salter 2006). Mansfield (1986) suggests that the collaboration with other stakeholders enables firms to accelerate product time to market, product adoption, and consequently reduce product lifecycle. Briefly, innovation is performed in cooperation with external actors (Reichwald and Piller 2009) and it is originated through firms' knowledge circulation (that is a process on inflows and outflows of knowledge) which facilitate the development of internal innovation even its commercialization (Nonaka and Takeuchi 1995; Chesbrough and Crowther 2006). Despite that, for the success of an innovative firm, the acquisition and combination of knowledge capable of bringing together new ideas is not sufficient and a virtual network structure is required in order to support the innovation process in the long run and to make it successful enough to be deemed legitimate (Scuotto, 2014; 2015; Scuotto et al. 2015). Indeed absorptive capacity cannot be efficient without the use of SNSs in the process of developing a new product (Bharati et al 2013). Along this, SNSs are considered valuable to a firm since they are virtual environments where individuals and communities share, co-create, discuss, and modify user-generated content (Kaplan and Haenlein 2010). Hence using SNSs can improve their internal knowledge circulation, aiming at enhancing their market position.

Therefore, absorptive capacity in conjunction with social media strategy results in the following research hypothesis:

H3: *A high level of absorptive capacity through the use of SNSs positively influences firms' innovativeness.*

Methodology

From the above literature review, academic scholars (Bharati et al 2013; Dholakia and Durham 2010; Kozinets et al 2010; Trusov et al 2009) have focused their research on SNSs as marketing tools (Berinato 2010) or on how these channels increase marketing communication effectiveness (Dholakia and Durham 2010; Kozinets et al 2010; Trusov et al 2009). Little is known, however, about how they may benefit innovation the performance of a firm. No major study has analysed the relationship between absorptive capacity, SNSs and innovation performance (Palacios-Marques, Merigo, Soto- Acosta 2015a, 2015b).

Since we retain that firms might develop an innovative idea through the absorptive capacity to acquire information from customers (Chesbrough 2011) and also co-creating new products or services with them (Tussyadiah and Zach 2013), we assess if there is a positive relationship between the use of SNSs of social networking sites (SNSs) and innovation performance through firms' absorptive capacity in 215 worldwide small medium enterprises (SMEs) via Partial Least Square-Path Modelling (PLS-PM).

Data were collected through a survey carried on Kalypso consultancy firm. A total of 500 SMEs were selected using the Kalypso database. They were selected in reference to the following three control variables:

1. Firm size is a one of the most relevant factor of innovation performance. As established in innovation literature, firm size could be considered a proxy for slack resource and infrastructure that improve firms' innovativeness (Roger 2003).
2. Annual Revenue is a factor that represents both the firm's ability to survive and to invest in R&D activities (Utterback 1974).
3. The use of SNSs as part of firms' strategy that enables knowledge creation and acquisition so as to turn it into product or service (Culnan et al 2010).

Since the information on firm size and annual revenue were provided into the database, in the first instance the SMEs were approached by email to determine which of these firms were using social networking sites. When email information was not available, firms were called. After this first step of selection, 320 SMEs, belonged to manufacturing and service sectors, resulted using the SNSs to which a cover letter illustrated the scope of the study and the survey were sent by email. The survey was filled in from one respondent of each firm, holding the position as CEO or founder as considered the main firms' decision makers. The received responses were 215, a response rate of 67% that was considered statistically significance.

The survey was designed in English and structured using a funnelling technique (Bryman 2015) were initially broad questions were stated, followed to more focused questions related on the use of social networking sites to generate innovation. The purpose is to get a general idea and impressions about the situation, first and then to discover the key issues (Bryman 2015). To assess the data, the partial least square – path modelling was applied. The PLS-PM is a method that fits with this exploratory research because it focuses on prediction data (Lohmoller 1989; Bharati 2013). The PLS-PM is characterised by both a factor model and a path model. Factor model (Tabachnick and Fidell 2013) enables the researcher to evaluate items or manifest variables in relation to their own latent variables or factors. Path analysis (Weston et al 2008), on the other hand, measures the positive or negative connection among LVs. Unlike traditional multivariate procedure, PLS provides explicit and

Commentato [U4]: Rileggere non si capisce…il were non l'ho capito…forse where?

Commentato [U5]: Se usi il passato nel periodo precedente non puoi usare qui il presente…

estimated error of variance parameters (Byrne 2013), and is able to examine more than one regression equation/relationship at the same time.

Findings

From the aforementioned dataset, we selected nine manifest variables that were considered as the "reflection" of the relative three latent variables (table 1) (Tenenhaus et al 2010).

Table 1: Latent and Manifest variables

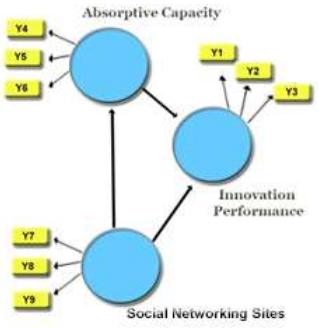
Latent variables	Manifest Variables
Innovation Performance	▪ Faster time to market (y1) ▪ Faster to product adoption (y2) ▪ Product lifecycle management (y3)
Absorptive Capacity	▪ External Knowledge (y4) ▪ Internal knowledge (y5) ▪ R&D activity (y6)
SNSs	▪ Social communities (y7) ▪ Social Media platforms (y8) ▪ Social Media Capabilities (y9)

Commentato [U6]: Queste sono derivate dalla letteratura? O sono state trovate in altro modo? Va specificato (e se sono state tratte dalla letteratura bisogna citare da chi…)

The hypothesised relationships among these variables, either manifest or latent, was illustrated by the path diagram below (Figure 1). Square shapes represent manifest variables whereas the oval ones are latent variables and one-way arrows indicate the impact of exogenous LVs on endogenous ones, and MVs on LVs. Latent variables were categorised in exogenous and endogenous: SNSs and absorptive capacity are exogenous latent variables, that is they are synonymous with independent variables that affect the relationship with innovation performance as endogenous latent variable. Moreover, in that case absorptive capacity was considered as either exogenous or endogenous because we retain that this variable affects innovation performance (endogenous latent variable) and is affected by SNSs (exogenous latent variable). Finally, innovation performance was measured as dependent variable.

Figure 1. Path Diagram

Commentato [U7]: Abbiamo la possibilità di usare un grafico più definite dal punto di vista grafico? E' molto sfocato questo



The reliability of the block of MVs and its LV was assessed by Cronbach's Alpha from which show that since the scores are >0.70, there is a positive internal consistency among LVs and MVs: absorptive capacity is .85, Innovation performance .81, and SNSs is .73. (table 2).

Commentato [U8]: Abbiamo specificato quale software e quale versione abbiamo utilizzato per effettuare I vari test statistici?

Table 2. Cronbach's alpha reliability coefficient

	Cronbach's Alpha
Absorptive Capacity	. 85
Innovation Performance	. 81
SNSs	. 73

Successively R^2 has been estimated so as to verify the quantity of variance of endogenous variables in relation to exogenous variables. As emerged from the findings the value of R^2 results as positive for both innovation performance (0.88) and absorptive capacity (0.71) (table 3).

Commentato [U9]: V. commento precedente

Table 3. R^2

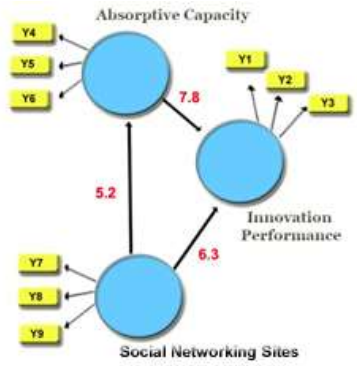
	Absorptive Capacity	Innovation Performance
R^2	.71	.88

The positive reliability, relationships among LVs was measured by a path analysis. The results show that absorptive capacity (7.8) is the crucial factor to improve the firms' innovativeness. Although the use of SNSs (6.3) seems also relevant in enhancing firms' innovation performance as well as their absorptive capacity (figure 2).

Commentato [U10]: Ho aggiunto their, va bene?

Figure 2. Path Analysis

Commentato [U11]: Stesso commento grafico precedente



From the above findings, the research hypotheses were confirmed as follows:

H1: T*he use of SNSs positively influences Absorptive Capacity.*

The relationship between SNSs and absorptive capacity was registered by value 5.2.

Commentato [U12]: Positive?

H2: Absorptive capacity positively affects innovative performance at firm level.

The high impact of absorptive capacity on innovation performance was registered by value 7.8.

H3: *Enhancing firms' absorptive capacity through the use of SNSs strategy positively influences the firms' innovativeness.*

Path analysis shows that innovation performance has a positive correlation with absorptive capacity (7.8) and SNSs (6.3).

Discussion and Conclusion

Taken together, our findings showed that the absorptive capacity mainly affects innovation performance that means that innovation performance depends on the firms' capacity to absorb external knowledge (Palacios-Marques, Merigo, Soto- Acosta 2015a, 2015b). As stated by Cohen and Levinthal (1990), absorptive capacity enables firms to acquire, transfer, and assimilate external knowledge into the organisation and then generate new ideas. Moreover the positive value (>.70) linked to the relationship between manifest variables and absorptive capacity shows a clear evidence that absorptive capacity is characterised by both a stock of existing knowledge and an ability to absorb new knowledge (Robert et al 2012). It appears that the firm's ability to identify and absorb external knowledge is limited in the absence of internal or existing knowledge, as the firm would not be able to independently evaluating the value of external knowledge (Del Giudice and Maggioni 2014).

However, the use of SNSs emerged as another relevant factor in improving firms' innovation performance. The role of SNSs in enhancing both firms' absorptive capacity and innovation performance was

confirmed by the following positive values of R^2 (.71 relates to absorptive capacity and .88. refers to innovation performance) as well as the path analysis (the relationship between SNSs and Innovation performance was registered by value 6.3. While the relationship between SNSs and absorptive capacity was 5.2. SNSs enable firms to create social communities shared by external stakeholders such as customers, suppliers, other firms, among others, as an environment where firms can share and discuss their respective ideas and co-create new product (Kaplan and Haenlein 2010). Chesbrough (2011) also points out that firms develop new products or services on the basis of contents generated by users. The use of SNSs accelerates and deepens firm's innovativeness. Firms create virtual relationships with customers, suppliers and other businesses gaining a competitive advantage. They may get to market more quickly, show faster product adoption, and lower product development costs for firms (Amy and Poston 2013). Hence SNSs positively affect innovation performance since knowledge acquired from users can be used to enhance process or to generate new products (Lykova and Atras, 2013; Ku, 2013). In this sense, SNSs may be recognised as a new environment which manages knowledge and encourages the development of new ideas (McEvily and Chakravarthy, 2002; Schultze and Stabell, 2004; Levy, 2009; Hine et al., 2010).

Furthermore, two relevant entrepreneurial mind-sets arose: 1. the entrepreneur's ability to create new online networks; and 2. their capacity to collaborate with external stakeholders (Hanna et al 2011).

The social networking sites enable marketers to develop new products or services thanks to collaboration with external stakeholders as customers (users). Such collaboration would be a process of discovery, realisation, and exploitation of a new idea (Garretson 2008; Chesbrough 2011).

Building on the idea that innovation includes either the ability to develop new products or services, meeting customers' needs or the capacity to improve existing products or services, using external technology (Alder and Shenhar 1990), the present research demonstrates that there is a positive relationship between the use of SNSs and innovation performance through enhancing firms' absorptive capacity in SMEs.

Implications, Limitations, and Future Research

Drawing practical implications from this study, we retain that an understanding of the relevance of SNSs as IT-based sources in improving firms' drive policymakers and other agencies supporting SMEs. Our results show that the SNSs have a positive role in affecting both absorptive capacity and innovation performance. In this sense, it can be implied that SMEs are aware of the need to implement an online strategy to be sustainable.

We shall recognise that this research is subject to a number of limitations and that the results arising from it are to be taken with a degree of caution. For example, we could not analyse how the use of SNSs among employees can encourage them in creating new products or services. Moreover, we suggest that other scholars expand on this study and analyse closely Small to Medium-sized Enterprises (SME), building interesting and valuable case studies to present a more comprehensive picture of how SNSs may support the innovation process.

Future research on small samples may also wish to look into online dimensions that may play a role in the innovation process and knowledge management.

Commentato [U13]: Sembra una frase isolata

Commentato [U14]: Mancano delle vere conclusion: si potrebbe isolare il paragrafo della discussion e fondere quello di conclusion e limitazioni, etc. come suggerito nel comment successivo

Commentato [U15]: Va fatta una parte discussion ed una conclusions: ora le conclusion…vengono prima delle implicazioni/limitazioni…

Commentato [U16]: Questa parte andrebbe espansa un po'

References

Commentato [U17]: Ci sono citazioni nel testo che non si trovano nelle references (ad esempio quelle di carayannis…). Aggiungiamone altre di Carayannis, quante più possibili. Citiamo qualcosa da JTT, JKM e da JKEC, anche. Va citato anche Albert Link, l'EIC di JTT

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