Organizational Generativity, Social Media and the Co-creation of Nonprofit Services: A Sociomateriality Perspective

Fatuma Namisango
University of Technology Sydney
fnamisango@gmail.com

Kyeong Kang
University of Technology Sydney
Kyeong.Kang@uts.edu.au

Junaid Rehman
University of Technology Sydney
Junaid.Rehman@student.uts.edu.au

Abstract

This paper presents the relationship between organizational generativity, nonprofits' use of social media, and the co-creation of nonprofit services. While anchoring to the sociomaterialism perspective, we analyze social media interactions of nonprofits by identifying social media affordances and symbolic expressions. To explain the hypothesized relationships, we conduct a survey of nonprofits using social media to co-create services. We applied structural equation modeling (SEM) techniques to generate measurement models and test our hypotheses. Our findings indicate that organizational generativity is positively related to social media affordances for nonprofits, the symbolic expressions of social media to nonprofits and service co-creation. We generally observe that organizations have to build the capacity to operate in new ways as a means of exploring the opportunities and possibilities offered by social media as well as leveraging social media interactions for service co-creation.

1. Introduction

The realm of social media spans all kinds of organizations and disciplines — organizations, as well as individuals, appropriate social media for unique purposes. While focusing on social media use in organizations, we need to recognize the differences in social media use driven by the scope, aim, culture, and nature of organizations. For instance, for-profit organizations are performance-oriented and focus on generating profits for founders and shareholders, while nonprofit organizations are public-serving organizations and focus on social value. The key performance indicators for social media use in the for-profit organization will mainly relate to ROI [1] while those of nonprofit will relate to donation growth, beneficiaries, and social contributions. Nonprofits tend to focus on public engagement and common social goals than the for-profit organization. This renders their social media use and aims ultimately different from those of profit-oriented organizations as well as other types of organizations. This study focuses explicitly on nonprofit use of social media and nonprofit-public interaction in the creation and provision of nonprofit services.

For-profit organizations use social media as a marketing and customer relationship strategy aimed at improving sales and maximizing profits [1, 2]. In nonprofits, social media is widely recognized for information sharing, community creation, collective action, maintaining relationships [3-5]. The key activities of nonprofits on social media and the associated outcome or consequence of such activities are not yet fully defined and illustrated. Social media also allows nonprofits to engage with the public in mobilizing and combining material and nonmaterial resources to provide nonprofit services [5], a practice technically known as service co-creation. Social media functionality, such as posts and comments are resources for engaging in value co-creation in nonprofits [6]. However, very few studies have considered nonprofit interaction with the public on social media as a service co-creation practice and the outcome of social media interactions [7].

Because nonprofits intentionally share information, build communities, call for action, and maintain relationships on social media, they attempt to leverage social media to foster their operations. It is important to note that social media offers opportunities for nonprofits to act in the ways they do, which are popularly noted as social media functions for nonprofits. We recognise that the above-mentioned functions are action possibilities or opportunities that emerge as nonprofits interact with the public using social media technology in their routine operations. When organisations use social media they require "capacities for action" [8] or "the capacity to act" [9] in ways that leverage the opportunities provided by social media to support their routine operations. It is important that actors – i.e., individuals, groups and organizations – have the ability to rejuvenate, reproduce and transform their actions (i.e., generativity or generative capacity) [10, 11]. Earlier studies have not sufficiently discussed the capabilities required by organisations to make the most of social media and survive the dynamics of this environment. Consequently, the relationship between the organisation's generative capabilities, how organisations interact in technology enabled environments, and associated outcomes lacks an empirically motivated explanation.

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While many studies identify and present the functions of social media in nonprofits – i.e., technically social media affordances for nonprofits – many have not elaborated the nature and role of the organization's ability to reconfigure resources to produce new possibilities to challenge the normative status quo on social media. Moreover, such ability – i.e., generativity or generative capacity could enable organisations use technology in their routine operations and enabling technology afforded actions [12]. We, therefore, consider that it is important for the organization to recognize and consider its ability to challenge status quo and therefore transform its actions in a social media environment. We submit that generative capacity – as an attribute of an organization – helps a social organization to drive its interactions towards co-created social outcomes.

This study examines the interactions between nonprofits, the public, and social media as a context for (nonprofit) service co-creation with emphasis on the role of generativity. The research question underlying this study was how is organizational generativity related to nonprofit social media interactions and service co-creation? Our motivation to answer this question is twofold. First, it helps us to provide an empirical explanation of the relationship between social media use in nonprofits and the co-creation of services. Second, it also allows us to explain the role of the organization's ability to revitalize, rejuvenate, and produce new possibilities for action on social media.

The rest of the paper is organized as follows. We review potential forms of service co-creation enabled by social media in nonprofits. We also discuss generativity as an organization attribute in close relation to the aspect of organization dynamic capabilities. We provide the theoretical background of the study and the research model. We mention the methods used in the study, the findings, and then discuss our findings.

2. Co-creation of Services

Co-creation of services is "the activity, practice or process of jointly creating services in a specific business context" [13]. It involves resource integration and value realization among multiple engaging actors [14]. Like other co-creation processes, service co-creation is supported by space or platform of engagement [15]. With a space of engagement, service co-creation requires the organization to attract consumer involvement, participation, and engagement in the organization's service processes [13]. Service co-creation, depending on the context, will emerge in multiple interrelated forms [13, 16, 17]. There many forms of service co-creation as identified in different contexts, including the following.

Co-ideation represents a form of service co-creation through which the organization allows customers and other stakeholders to contribute ideas, view ideas, and track the implementation of ideas [17]. Co-ideation could involve other activities such as co-exploration, co-diagnosing, and co-meaning creation. This is the most popular form of service co-creation reported in the literature and has been realized in service innovations [17], public service provision [18], and health care services [19]. For nonprofits on social media, co-ideation activities would particularly include sharing ideas, identifying potential ideas, and translating potential ideas into actions that mitigate community needs, service gaps, and possible improvements.

Co-initiation, which is usually the initial step towards the entire process of service co-creation. It relates to activities of customer involvement and contribution towards discovering service offering and solutions that create value for both the organization and the customer. Co-initiation is a popular form of service co-creation emerging in collaborative innovation and co-production of enhanced public service [20]. Co-initiation of nonprofit services would involve spurring community involvement in resource mobilization, tailoring services to certain outcomes, co-sensing the needs of the community, and gravitating towards meeting those needs [20].

Co-progression, which represents an ongoing process of, or set of activities for developing, reshaping and gradually advancing an organization's services or community development programs towards becoming more valuable and relevant to the organization's target community. Co-progression in this context is premised on the processes of co-design and co-development of services, which are inclined on defining service propositions and prerequisites. Social media could enable co-progression of services because such online communities have the potential to support the conceptualization of services [21]. Service co-creation forms such as co-development are evident in health care services [19].

Co-promotion, generally, involves activities of attracting two or more entities to launch a single product or service under the same brand name with the same price and a single marketing strategy. Service consumers are active co-promoters who improve the effectiveness and efficiency of promotion programs [19]. Co-promotion, a.k.a., co-launch is a key form in service innovation [17]. Co-promotion involves harnessing social media networks to increase service reach, utilizing shares and hashtags to increase awareness about the organization's services, running social media campaigns and advocacies, etc.

Co-delivery of services involves collaboration activities that bring actors together to employ resources,

individually as well as collectively to enhance service consumption [16]. Service delivery would encompass aggregate activities such as co-financing and co-implementation, gathering people to get involved in the organization's events, attracting voluntary support, etc. For nonprofits, service consumers and the public at large could play the roles of productive resource and contributor to quality (relevance), satisfaction, and value.

Co-experiencing emerges as actors integrate resources over time and across multiple encounters to create shared experiences. Service experiences may occur as a process through multiple phases, an outcome of other elements of the service, or a phenomenon based on individuals' subjective interpretations of a service [22]. Co-experiencing is believed to influence the actor's overall co-creation experiences [23]. Social media provides a space for collective experiences gathered through sharing stories and experiences, engaging in similar events, deducing from others experiences and stories.

Social media creates a collaborative space for resource integration [24]. Social media posts, likes, feedback, etc., have thus enabled nonprofits to involve and engage the public in resource mobilization and integration [5]. It has enabled nonprofits to mobilize and integrate material resources such as donations and social resources such as networks and emotional support, thereby supporting the co-creation of nonprofit services. Besides, tangible or material donations, social media posts, comments, and feedback are key resources for service co-creation in nonprofits [6].

3. Generativity – as an Organisation Attribute

Generativity, also referred to as generative capacity, is "the ability to originate, produce or procreate" [11, 12]. It is the productive capacity that focuses on creating something beneficial and desirable [10]. Generativity is an ability driven by task, context, and goal [10-12].

The notion of generativity is rooted in the seminal work of Erikson and is fruitfully applied to social psychology [25], educational science [26], information systems [10], etc. In this study, we examine generativity through the social sciences perspective, where we recognize generativity as "a characteristic that can provoke and transform social reality and social action" [10].

Generativity involves "rejuvenating and reconfiguring, reframing the way we see and understand the world challenging status quo and generating fresh alternatives for social action [10, 11, 27]. It is a key characteristic of explorative creativity and innovation because it allows organizations to uncover new possibilities in the social world [10, 28]. We identify four potential dimensions of *organizational generativity* that would support sociomaterial interactions on social media.

(1) *Adaptive capability* refers to the organization's ability to sense and respond to opportunities for action [29]. Sensing is the organization's ability to detect, capture, and interpret opportunities, while responding is the ability to reconfigure resources to react to the opportunities it senses [29]. Adaptive capability is also concerned with the organizational abilities of reactiveness, resilience, and incremental innovation [30]. Adaptivity is an important aspect of a generative organization because it allows the organization to identify emerging opportunities and respond to such opportunities by reconfiguring processes and resources to seize such opportunities towards new outcomes [29, 31].

(2) *Learning capability*, related to the view of generative learning, "emphasizes continuous experimentation and feedback in an ongoing examination of the very way organizations go about defining and solving a problem, surfacing assumptions and challenging beliefs and operating values" [28]. It is a cyclic and iterative process through an individual, a group, and the organization [32, 33]. The two key aspects of organization learning capability are; (a) openness to new ideas and experimentation, (b) acquisition, transfer, and integration of knowledge [28, 33].

(3) *IT-business synergy* is a key aspect of the organization's array of IT capabilities. IT capability is the ability to acquire, deploy, combine, or reconfigure IT resources to support strategy and work processes [34]. We particularly derive IT-business synergies from two aspects of IT capability – i.e., IT-business spanning capability, which is the ability to "envision and exploit IT resources to support business objectives" and IT proactive stance which is the ability to "search for new ways to embrace IT innovations to create new opportunities" [34]. IT-business synergies would then refer to the organization's ability to identify, select, and leverage IT opportunities to support creativity, innovativeness, and productivity in the organization's activities.

(4) *Relational capability* relates to the organization's ability to scope and realize opportunities embedded in its relationships and networks [35]. Relational capabilities involve key abilities such as relationship learning and relationship behavioral capability. Relationship learning is the ability to generate knowledge and stimulate cognitive activity that allows the organization to appropriately manage its relations, improve its network oriented practices as well as predict and prepare for future relationship needs [36].

Relationship behavioral capability is the ability to foster collaboration, adjust to new relationships and changes – relationship collaboration, flexibility, and change [36]. These aspects of relational capability "capture the output of adaptive and generative learning, verifying both the dissemination of new relationship management knowledge and resulting action" [36].

4. Theoretical Underpinnings and Research Model

This study adopts the technology affordances lens to empirically analyze the role of social media materiality in nonprofits and generally explain the sociomateriality of social media in the way nonprofits act and interact with the public on social media, and with social media. The technology affordances perspective is rooted in the sociomateriality theoretical lens [12, 37] and therefore exploring social media affordances allows us to provide some insights into the interactions between a nonprofit organization – as an actor – and social media – as an artifact.

The sociomaterial lens explains the relationship between humans and artifacts by arguing that the social and the material are constitutively entangled in practice [9]. The sociomaterial lens privileges neither the techno-centric approach, which focuses on how technology affects human actions nor the human-centric approach that focuses on human interpretation of, and interaction with, a technology. It advocates for the recognition of a constitutive entanglement of the social and the material, which represents the assortment of human and material agencies [9].

The theory of affordances is rooted in ecological studies of [38]. Affordances are "opportunities for action" offered by a technology artifact [39]. Actions being the things that we intentionally do, and such these things – i.e., actions – have physical and social consequences or associated outcomes [39]. Now, because "affordances are opportunities for action, then they mirror the structure of actions … in all kinds of descriptions" [39]. Technology affordances, in particular, are "action possibilities and opportunities that emerge from actors engaging with a focal technology" [37]. Considering technology affordances is a promising approach to rectify the short-comings of the techno-centric and human-centric approaches [37, 40, 41] and a useful approach to analyzing social interactions in the technology world [37].

However, the structure of technology in sociomaterial interactions, not only offer opportunities for action but also communicates meaning and values to the user, which is conceptually referred to as *symbolic expressions (SE)* about the functionality of a technology

[41-43]. Symbolic expressions are "communicative possibilities offered by a technical object for a specific user group" [41, 43]. Although less attention is given to SE, they shape the *functional affordances (FA)* of a technology towards the user's ultimate actions [41, 43]. Symbolic expressions of a technical object will emerge in two ways – by communication of meaning and communication of values.
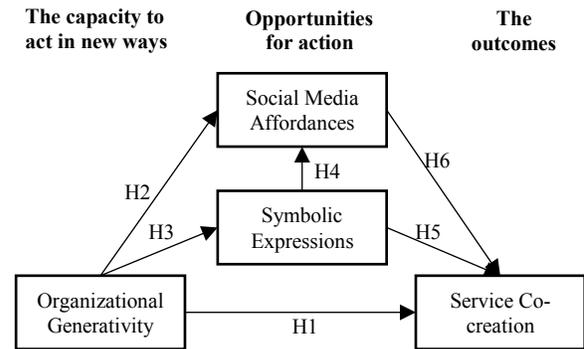

Figure 1. Research Model

Generativity involves openness to ideas, experimentation, and risk-taking actions [28]. It supports exploration and exploitation of creativity and innovativeness in collectives [10, 11, 28]. This could be because it involves continuous learning, inquiry and dialogue, collaboration, and collective vision [44]. Ultimately, generativity shapes collective outcomes [11].

H1: Organizational generativity is positively related to social media enabled service co-creation in nonprofits.

Generativity shapes collective acts and patterns of conduct [11]. It shapes social reality and social action [10, 11, 27]. It builds the drive to revitalize one's possibilities in a given context [10-12]. In technology-supported environments or sociomaterial interactions, for example, generativity is associated with perception and realization of the designed, improvised, and emergent technology affordances [12]. We, therefore, hypothesize that,

H2 – 3: Organizational generativity is positively related to social media affordances for, and its symbolic expressions to nonprofits.

Social media, as an artifact, shapes how we conceive this technology during sociomaterial interactions [45]. Symbolic expressions could be positively related to the object function [43]. Symbolic expressions as communicative possibilities of social media convey symbols recognizable and identifiable by users, which enable the user to understand and interact with its functions [43]. Communicative possibilities of an artifact, such as communication of object-related values, shape – and are themselves shaped by – the action

possibilities afforded by the object [41-43]. We, therefore, hypothesize that,

H4: The symbolic expressions (communicative possibilities) of social media are positively related to social media affordances (useful and perceived functions)

Social media shapes how we conceive it and apply its functions to achieve our social and economic goals [45]. Users conceive and understand social media functionality through its symbolic expressions, which not only shape its affordances for the user but also the user's ultimate actions [41, 43]. Social media conveys some meaning and values that could shape the actions for all actors involved in collective or collaborative action. Moreover, social media is inherently a system of symbols and signs [46] and will thus evoke a user's interest in collaborative, creative, co-creative, and innovative activities [47, 48].

H5: The symbolic expressions (communicative possibilities) of social media are positively related to service co-creation in nonprofits

Technology affordances are a foundation for ultimate social outcomes [43]. Because social media

affordances relate closely to collective acts, they could be key to the overall collective outcome [11]. Social media particularly allows nonprofits to mobilize resources from the public [5], which is a step towards service co-creation [48]. It also supports public involvement, participation, and engagement [49], which are key pillars of service co-creation [13].

H6: Social media affordances (useful and perceived functions) are positively related to service co-creation in nonprofits.

5. Research Method and Data Analysis

We took a positivistic outlook to investigate our research question. Adapting a quantitative and deductive approach, we operationalised our variables basing on existing theoretical underpinnings and existing empirical evidence. This was important in providing valid evaluation and hypothesis testing using structural equation modeling [50]. The variables of this study were operationalized as shown in Table 1 below.

Table 1. Theoretical and Empirical Basis of Measurement Items used in the Questionnaire

Construct	Sub-constructs	No. of measurement items	Theoretical and Empirical Basis
Social Media Affordances (SMA)	Socialising (SOC)	3	[51-53]
	Information Sharing (ISH)	3	[54-56]
	Visibility (VIS)	3	[51, 53, 57]
Symbolic Expressions of Social Media (SESM)	Communication of Value (COV)	3	[41, 43]
	Communication of Meaning (COM)	3	[41, 43]
Organizational Generativity (OG)	IT-Business Synergies (IB)	3	[58]
	Relational capability (RC)	3	[35, 59]
	Adaptivity (AD)	3	[29, 60]
	Learning capability (LC)	4	[61, 62]
Service co-creation (SCC)	Co-ideation	3	Self-developed items basing on [13, 17]
	Co-initiation	3	
	Co-progression	3	
	Co-promotion	3	
	Co-delivery	3	
	Co-experiencing	3	Self-developed items basing on [22, 23]

The objective of the study largely informs the sampling method, sample size, and the extent to which one can make statistical inference and generalization [63]. To apply structural equation modelling for model estimation and evaluation, we had to ensure that 'each of the units or cases in the population has an equal probability of being included in the sample to be studied' [50]. This makes a simple ransom sample the most

appropriate method of sampling for our study. We, therefore, generated a random sample of seventy-three (73) nonprofit organizations. We developed a sampling frame of nonprofits in Uganda published on HelloUganda.com and commonwealthofnation.org. Our sampling frame comprised of 295 organizations. We selected and contacted 169 organizations using random numbers generated using Ms. Excel. We determined that

169 nonprofits were sufficient basing on sampling tables by [64]. We sought organizational consent, and seventy-three organizations agreed to participate in our study. Individual participants were recruited through management.

We gathered 289 usable responses resulting in 72.2% response rate. The surveyed organizations were operating in education and research services (42.5%), social services (54.8%), and health services (13.7%). Majority of organizations have been in operation 2 – 10 years (50.7%) or over 10 years (34.2%). Many were medium sized (43.8%), while others were large organizations (32.9%) or small organizations (23.3%).

We applied covariance-based structural equation modeling to test our research model. We applied ML estimation with bootstrapping and item parceling to minimize the biases associated with multivariate non-normal distribution [65, 66]. We concluded model fit based on the 2-index strategy (CFI ≥ 0.95 and SRMR < 0.08) by [67], which is recommended for minimizing type I errors [65, 67]. We also considered RMSEA < 0.08 to detect misspecified models [65, 67].

6. Results

6.1. Measurement Model and Reliability

By running a confirmatory factor analysis (CFA), we derive the measurement model for organizational generativity, social media affordances, symbolic expressions, and service co-creation. We assessed the reliability and validity of constructs using Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). We applied the Fornell Larcker Criterion and concluded convergent validity when AVE > 0.5 or not significantly less than 0.5 with CR > 0.7, and concluded discriminant validity when AVE > square correlation between two constructs. Tables 1 – 4 present the reliability analysis for measurement models.

Table 2. A Second-Order Model of Organization Generativity (OG)

Measures of OG	Factor Loading	Cronbach	CR	AVE	Square Correlation			
					IB	RC	AD	LC
IT-Business Synergies (IB)	0.71	0.74	0.96	0.60	-			
Relational capability (RC)	0.81	0.82	0.98	0.61	0.34	-		
Adaptivity (AD)	0.82	0.80	0.97	0.57	0.35	0.44	-	
Learning capability (LC)	0.74	0.77	0.95	0.63	0.28	0.35	0.37	-
Model fit: CFI = 0.951; SRMR = 0.05; RMSEA = 0.8; χ^2 = 89, *df* = 31, χ^2/df = 2.89, *Bollen-Stine p* = .02								

Table 3. A Three-Factor Model of Social Media Affordances (SMA)

Measures of SMA	Cronbach	CR	AVE	Square Correlation		
				VIS	ISH	SOC
Visibility (VIS)	0.74	0.96	0.51	-		
Information sharing (ISH)	0.70	0.95	0.50	0.03	-	
Socializing (SOC)	0.72	0.96	0.50	0.14	0.28	-
Model fit: CFI = 0.953; SRMR = 0.05; RMSEA = 0.8; χ^2 = 74.8, *df* = 24, χ^2/df = 3.11, *Bollen-Stine p* = .06						

Table 4. A Two-Factor Model of Symbolic Expressions of Social Media (SESM)

| Measures of SESM	Cronbach	CR	AVE	Square Correlation	
				COM	COV
Communication of meaning (COM)	0.70	0.87	0.61	-	
Communication of values (COV)	0.68	0.87	0.48	0.16	-
Model fit: CFI = 1; SRMR = 0.01; RMSEA = 0; χ^2 = 0.8, *df* = 1, χ^2/df = 0.82, *Bollen-Stine p* = .37					

Table 5. A Five-Factor Model of Service Co-creation (SCC)

Measures of SCC	Cronbach	CR	AVE	Square Correlation				
				COI	COL	COP	COG	COX

Co-ideation (COI)	0.67	0.95	0.51	-				
Co-delivery (COL)	0.87	0.99	0.72	0.00	-			
Co-promotion (COP)	0.81	0.97	0.70	0.40	0.06	-		
Co-progression (COG)	0.71	0.93	0.56	0.08	0.20	0.14	-	
Co-experience (COX)	0.66	0.94	0.49	0.41	0.00	0.30	0.17	-

Model fit: CFI = 0.951; SRMR = 0.04; RMSEA = 0.79; χ^2 = 90.9, *df* = 34, χ^2/df = 2.68, *Bollen-Stine p* = .01

According to Tables 1 to 4, all measurement models achieved sufficient internal consistency with the majority of Cronbach's alpha values above the recommendable value of 0.7 and composite reliability values above 0.75. The measurement models also achieved sufficient convergent validity with AVE greater than or close to 0.5, and discriminant validity with all AVE greater than the square correlations between constructs.

6.2. Structural Model and Hypothesis Testing

The structural model yielded satisfactory model fit at CFI = 0.997; SRMR = 0.02; RMSEA = 0.059; χ^2 = 3.9, *df* = 2, χ^2/df = 1.94, *Bollen-Stine p* = 0.224. The regression weights, significance levels and squared correlations are shown in Figure 2.
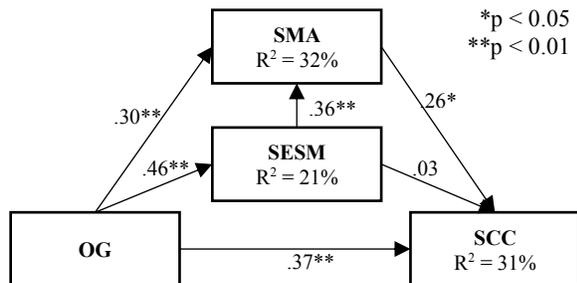
Figure 2. Structural Model

Table 5 below provides a summary of hypothesis testing by indicating hypothesized paths with corresponding standardized regression weights and commenting on whether or not the hypothesis is supported by the data.

Table 6. Hypothesis Tests

Hn	Relations	β	Supported?
H1	OG → SCC	0.37**	Yes
H2	OG → SMA	0.30**	Yes
H3	OG → SESM	0.46**	Yes
H4	SESM → SMA	0.36**	Yes
H5	SESM → SCC	0.03	No
H6	SMA → SCC	0.26*	Yes
*p < 0.05; **p < 0.01			

We found that organizational generativity is positively related to service co-creation (β=0.37; p < 0.01), social media affordances (β=0.30; p < 0.01) and symbolic expressions of social media (β=0.46; p < 0.01), which supports H1, H2 and H3. Symbolic expressions are positively related to social media affordances (β=0.36; p < 0.01) but not significantly related to service co-creation (β=0.03; p > 0.05). In turn, social media affordances are positively related to service co-creation (β=0.26; p < 0.05). We, therefore, found evidence to support H4 and H6 but not H5. We note that there is a stronger relationship between organizational generativity and symbolic expressions than with social media affordances.

7. Discussion

With regard to our research question, we note that organizational generativity is positively and significantly related to service co-creation on social media and the organization's social media structure defined by its affordances and symbolic expressions. First, our results suggest that organizations ought to build the capacity to rejuvenate and reframe the way they view the world or the environment within which they operate as a way towards (1) expanding the organization's action possibilities of social media. (2) Enhancing their interpretation and understanding of social media functionality to enable its goals, and (3) shaping the organization's standards of judgment about its goals and behavior on social media. Such capacity would include IT-business synergy, relational capability, adaptivity, and learning capability.

Secondly, we observed five forms of nonprofit service co-creation that emerge through social media. Our results suggest that nonprofits can attract and involve the public in service co-creation forms such as co-ideation, co-promotion, co-delivery, co-progression, and co-experiencing of nonprofit services through using social media. It is important to note that, the capacity to rejuvenate and reframe the way the organization views the world or the environment within which it operates contributes towards service co-creation on social media. Additionally, the organization's action possibilities of social media are also crucial in enabling service co-creation. Such action possibilities mainly include information

sharing, socializing and increasing visibility and building a reputation.

Lastly, like other technologies, social media conveys some meaning about its functionality that is perceived uniquely by nonprofits; for example, understandability of certain functions. It also communicates certain values, such as transparency and consistency, which induce specific behaviors among nonprofits. Such perceived meaning and values may not directly shape the organization's co-creative activities, but it will certainly shape the apparent and actual action possibilities of social media to the organization. Moreover, such action possibilities, in turn, shape service co-creation.

8. Limitations and Directions for Future Research

This study focused on nonprofit use of social media for service co-creation, with particular reference to the role of organizational generativity. All evidence provided explains the effects of organizational generativity on social media use for service co-creation. Since co-creation processes are multi-actor engagements, further studies may investigate the role of the public, and other actors, in social media enabled service co-creation among nonprofits. Second, other studies may contribute by investigating and drawing comparisons basing on evidence from for-profit organizations. Such comparisons could present differing forms of service co-creation enabled by social media in for-profit organizations. Lastly, other studies may also show the distinctive social media affordances in for-profit organizations. Social media affordances in the for-profits could differ because affordances are shaped by the organization's aims and desired goals, which are certainly different from those of nonprofits. The effects of social media affordances on ultimate outcomes of using social media could differ across individuals, organizations, and sectors.

9. Conclusion

In this paper, we present the link between organizational generativity, social media possibilities and co-creation of nonprofit services as an explanation aimed at improving our understanding of social media use in nonprofits as well as offering additional insight to sociomaterial interactions. We examine this link by applying quantitative approaches to data collection and data analysis. Overall, our results are largely consistent with the hypothesized model and mainly demonstrate that IT-business synergy, relational

capability, adaptivity and learning capability support social media affordances and service co-creation as an ultimate goal of social media use in nonprofits. It is important to note, however, that this study focused mainly on organization-social media interaction. It could be insightful if future research considered the organization-public patterns of interaction on social media, as alternative shapers of service co-creation on social media.

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