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Building Organisation-Community Relationships in Co-Creative Social Networking Platforms: An Ecological Systems Perspective

Kyeong Kang and Fatuma Namisango

Abstract

Nonprofit organisations use social networking platforms to interact, engage, and build productive relationships with target audiences for co-created outcomes. This chapter pursues two interrelated objectives: First, it identifies key stages in the growth of organisation-community relationships on co-creative social networking platforms. Second, it discusses the multi-levelled factors influencing these relationships at the respective stages. To achieve these objectives, we make a general review of scholarship on nonprofit use of social media, social networking platforms for co-creation, and organisation-public relationships on social media. We used the ecological systems perspective to identify the internal and external environmental influences on organisational relationships in social networking platforms. This chapter presents three abstract stages of organisation-community relationships: emergence, growth, and collapse, based on existing empirical observations and theoretical perspectives. We reveal four levels of ecological-based factors that influence different stages of organisation-community relationships on co-creative social networking platforms. We indicate the potentially strong and weaker influences on organisational relationships.

Keywords: Social Media, Organisation-Community Relationship, Co-creation, Services, Social Networking platform, Nonprofit Organisations, Ecological systems

1. Introduction

Nonprofit organisations (NPOs) co-create services and social value through public participation in resource integrating activities such as donations, advocacy, social support, and recognition. The need for public participation has prompted the adoption of social networking platforms (SNPs) to allow supporters, donors, and volunteers, who act as "free agents", to work jointly with organisations [1]. SNPs, often called social media, "employ mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss and modify user-generated content" ([2], p. 241). The power of SNPs for organisations remains in the opportunities for public participation,

involvement, and engagement in organisational activities. For NPOs, Twitter enables strategic engagement of stakeholders through dialogic and community-building practices better than company websites [3]. Broadly, SNPs are recognised for organisational visibility, information sharing, community, relationship building, and taking action [3, 4]. Beyond such basic capabilities, SNPs are increasing getting recognised for their interactive resources that enable collaboration [5], co-creation [6], and innovation [7].

The many opportunities afforded by SNPs are not just an end in themselves but mechanisms for the co-creation of nonprofit services [8]. Co-creation involves interactions between the community and organisations in creative activities [9]. SNPs have become instrumental in public *participation*, *involvement*, and *engagement* in nonprofit services [10]; moreover, the three activities are critical pillars of service co-creation [11]. Similarly, collaborative networked organisations and communities enable co-innovation and value co-creation [9]; but such outcomes are driven by the platform capabilities and the relationships between actors [12, 13]. Collaborative networked organisations often seek to build productive and sustainable relationships with a target community, and such relationships are here coined as organisation-community relationships (OCRs). OCRs are seemingly productive at the start, especially when NPOs pursue advocacy-based goals [14]; but, the relationships slowly collapse and become unproductive in due course [10, 15]. This trend can be attributed to the limited use of SNP interactive capabilities, which reduces the organisation's network activity [16, 17]. Particularly, the use of SNPs as co-creative platforms calls for a thorough understanding of the properties, structure, or types of OCR [13].

Most NPOs have a social media page, but such presence does not in itself advance OCR, create awareness of the organisation's activities, or trigger an influx of community participation [18]. Similarly, information sharing is a common practice but does not directly facilitate community engagement [17] and service co-creative activities [8]. Conversely, research, planning, and focused implementation of SNPs could pave the way for productive OCR [18]. NPOs could succeed in SNP implementation if two considerations are met [19], i.e., understand how to build online relationships and establish an ongoing positive and valuable bond with their audience. Increasing online network activity (involvement) is the first step to generating significant returns for NPOs and building long-term support from their community (ibid). Undeniably, "cultivating supporter relationships" is crucial and is the next best step to enabling collaboration and building affinity in stakeholder communities [20]. However, the dynamics of surrounding these relationships are often lost in translation, for instance the nature of such relationships, influencing factors, and associated outcomes. Responding studies, e.g., [21–25] have articulated relationship types and characteristics but the factors for productive OCR are yet to be explained. Responding to the issues and research gap mentioned above, this chapter seeks to address the question that what factors influence the organisation-community relationships in CoSNPs and how can such factors be classified?

This chapter discusses the co-creative potential of SNPs coined as co-creative social networking platforms (CoSNPs), the cultivation of OCR on these platforms, and the influencing factors. We discuss the potential of such platforms to drive productive OCR in the co-creation of nonprofit services and draw on the ecological systems perspective [26] to identify the influencing factors. The ecological systems perspective draws our attention to how organisations operate with their environment, internal and external [27]. Based on this perspective, the chapter illustrates multi-level influences shaping OCR in CoSNPs. The rest of the chapter is divided into six sections. In Section 2, we provide related work on the characteristics of CoSNPs and OCR and articulate the emergence, growth, and collapse of OCR in

CoSNPs. Section 3 introduces the ecological systems perspective into the organisational context to classify multi-level influences of OCR in CoSNPs. In Section 4, we deduce four theoretical propositions and present a model of multi-level ecological influences of OCR in CoSNPs. In Section 5, we discuss our observations and provide implications for practice. Lastly, in Section 6, we conclude our discussion and provide some directions for future research.

2. Related work

In this section, we review SNPs, co-creation, and organisation-public relationship literature to; (1) explain the potential characteristics of CoSNPs, not just SNPs, and (2) the key stages that ought to be recognised in building OCR in SNPs. With such insights in hand, we can then trace the shapers of OCR in CoSNPs.

2.1 Characteristics of co-creative social networking platforms

Social Networking Platforms are also known as social networking sites, social networking services, social networking systems, or simply social media. These platforms represent "websites that encourage social interaction through profile-based user accounts" ([28], p. 439). SNPs allow users to create social presence, navigate relational connections, and co-create [2, 29, 30]. With technological advances, the "boundedness of [SNPs] is diminishing as these sites extend their functionalities beyond the confines of a website" ([29], p. 278). Recently, SNPs have translated into collaborative co-innovation platforms [31] and service co-creation systems [32, 33] that enable open innovation. CoSNPs in service contexts are also coined as service co-creative systems and known to support cooperative, coordinative, and collaborative activities [32]. While SNPs possibilities for open innovation and social product development are anticipated, the structure of these platforms for different organisational processes must be understood.

Today, customer-centric or community-centric approaches are believed to be more successful than organisation-centric approaches. The practice of co-creation has become popular due to its customer-centric approach. However, we must understand the enabling technology (SNP) structures to leverage the hidden potential of these platforms. Frow, Payne, and Storbacka ([34], p. 1) have defined co-creation as "*an interactive process, involving at least two willing resource integrating actors, which are engaged in a specific form(s) of mutually beneficial collaboration, resulting in value creation for those actors*". From this definition, one can infer that interaction, engagement, collaboration, resource integration, and mutual benefit are the key aspects sought. Therefore, for organisations to co-create with customers, they should adopt or build not just SNPs but CoSNPs that drive the aspects mentioned above.

CoSNPs provide far-reaching capabilities that present a promising paradigm on co-creation networks, platforms, and systems [9]. Their potential has attracted interest in SNP-enabled collaboration, co-creation, and innovation, and the enabling capabilities or characteristics for such outcomes are notable. For "networked nonprofits", SNPs offer conversation starters, collaboration capabilities, and network builders [1]. For collaboration and co-creation, opportunities for information sharing, socialisation, and visibility are crucial [8]. Otherwise, in general, co-innovation platforms provide the opportunity for ideation, collaboration, and communication to develop social products [35]. The characteristics of CoSNPs that distinguish them from "regular" SNPs are discussed below, starting with foundational attributes towards interactive attributes.

2.1.1 Conversation drivers

The conversation features support content creation and two-way discussions between people and between the organisation and people; therefore, NPOs listen and engage in lots of conversation to build their networks and spread their activities through the community [1]. SNPs not only facilitate conversations but enable socialisation for knowledge sharing because they create a larger content space for users to express their opinion, experiences, and findings [36]. Socialising involves integrating into a community by learning the norms, values, and roles to enable an entity to function as a member of that community [37]. By socialising, organisations improve their communication with the community and pave the way for community-based problem-solving, which is a key tenet of co-creation [38]. Enabling organisations to connect, be present, and create groups are key SNP capabilities that facilitate socialisation for co-creation [37].

2.1.2 Network builders

Network builders are functionalities that allow users to establish relational connections, communicate and share content. Such tools are common on public social media such as Facebook and Twitter. Networking opportunities are vital in co-creation because they transition organisations towards a customer-centric and network-centric approach [32]. Networks allow multiple actors to form alliances and mobilise resources through various channels to achieve the desired goals [39]. Resource mobilisation is central to service co-creation activities [11, 40]. Networks provide a rich ground for cultivating interest in a group of people, informal knowledge practices and locating expertise [41, 42]. In SNPs, engaging in informal knowledge sharing practices is a critical component of co-creation [43].

2.1.3 Ideation forum

Ideation is a central component of collaborative and innovative platforms because such platforms allow actors to submit, evaluate, and refine new ideas [35]. Ideation in collaborative communities results in the co-creation of new product ideas [35] and has been noted as a key component in the co-creation of nonprofit services on public social media [30]. In the public sector, online citizen communities play the role of ideators in co-creating public services by defining problems and conceptualising solutions [44].

2.1.4 Collaborative energy

Collaboration involves encouraging contribution from a community such as thoughts, questions, suggestions, ideas and opinion; receiving feedback through commenting, rating, reviewing, and liking; building collective judgement and assessment of community contributions and feedback; and creating change [41]. SNPs that foster collaborative activities provide functionalities participation, collectiveness, transparency, independence in points of view, the persistence of contributions, and the emergence of community-driven results [41]. In NPOs, the collaborative functionalities of SNPs facilitate volunteer enrolment, group coordination, and a sustained virtual community [39]. Increasingly, such collaborative power and creativity of SNP-enabled communities are associated with the formation of OCR for co-creative activities [13], several forms of nonprofit service co-creation [30] and the development of social products in innovation processes [35].

While the above characteristics are vital for CoSNPs, the power of SNPs lies not only in the technology wizardry (i.e., functionalities) but in the ability to connect people and build strong, resilient, and trusting relationships [1]. Thus, we must understand how organisations can build productive relationships for co-creation using SNPs, and this is our focus in the next section.

2.2 Social networking platforms and organisation-community relationships

SNPs are about the technology, and the relationships between users (or social networks), as recent studies [12, 45, 46] have confirmed. Such studies emphasise that organisations use SNPs to build organisation-public relationships (OPR) though the evolution of such relationships remains unexplained. Public relations literature is dominant in this area, and the determinants, types and properties, and consequences of OPR are emphasised. In this section, we define OPR (or OCR) and utilise the community-cultivation cycle mentioned by Bradley and McDonald [41] to explain the crucial stages that must be assessed in building OCR.

2.2.1 Defining organisation-public relationship

OPRs are "the patterns of interaction, transaction, exchange, and linkage between an organisation and its publics" ([47], p. 18). From a managerial perspective, OPR refers to "the development, maintenance, growth, and nurturing of mutually beneficial relationships between the organisation and its significant public" ([48], p. 14). While OPR has been used in relation to organisation-public wide interaction and relationships, we use OCR to indicate organisational relationships with specific or targeted groups or communities. Building OCR may vary depending on the platform of engagement and purpose – i.e., offline versa online platforms. One should not naturally assume circumstances under which offline or formal interactions thrive when organising online and informal interactions such as those we see on SNPs. Building OCR using online platforms requires openness, information sharing, interactivity, and involvement [49], while leadership, networking, legitimacy, and positivity are required in offline settings [50]. Moreover, openness (transparency), information, and interactivity are vital for collaborative activities on SNPs [41], while interactivity and involvement are core standards for co-creation [11].

2.2.2 The community-cultivation cycle

The Community-cultivation cycle [41] presents three crucial steps in online collaborative activities between organisations and target communities. These stages involve launching, guiding, and refining. Firstly, organisations will have to *launch* community engagement towards a defined purpose, *guide* the community towards creating value for members and the organisation and *refine* the community purpose to direct ongoing interaction and lasting relationships. This cycle is useful for SNPs that support the following collaborative and social principles [41].

1. Enable participation.

2. Promote collective effort.

3. Allow independent contributions.

4. Ensure transparency.

5. Enable persistence of other's contributions to be viewed, shared, and judged.

6. Allow the emergence of behaviour, new ways, and solutions to intractable problems.

Previously, in paragraph 2.1.4, we mentioned the collaborative power of CoSNPs, and it is such power that drives the six principles mentioned here. Conversational starters will attract and steer participation. Ideation forum will promote the independent, transparent, and voluntary contribution of ideas, while network builders will facilitate the persistence of ideas and discussions across the entire community. Also, network builders are vital for reaching out and fostering collective effort towards defined outcomes.

3. An ecological systems perspective in building OCR on CoSNPs

The ecological systems perspective is adopted from Bronfenbrenner [26]'s bio-ecological theory of human development. The theory is applied to study human behaviour – e.g., C.-H. Lee [51]; but we find this theory useful to understanding the environmental constituents in the development and functioning of organisations. The approach bridges the technological, organisational, and environmental aspects surrounding organisation-public interaction and relationships. The general premise of Bronfenbrenner's theory is that there are different layers of human environmental that influence a person's wellness and development. In a nutshell,

> The ecological perspective builds our "understanding of social processes like, social learning and social memory, mental models and knowledge–system integration, visioning and scenario building, leadership, agents and actor groups, social networks, institutional and organizational inertia and change, adaptive capacity, transformability and systems of adaptive governance that allow for management of essential ecosystem services" ([52], p. 263).

The ecological system contains five systems, including the individual, microsystem, mesosystem, exosystem, and macrosystem in that order. The individual is at the centre of these systems, and their behaviour is influenced by their traits and the ecological environment in which they interact (C.-H. [51]). The ecological systems perspective or ecological embeddedness is a social construct that can explain how individuals and organisations build and maintain relationships across their environment [53]. In OCR, for instance, there are three interacting actors – i.e., the organisation, the individuals, and the community. On social media, the NPO community is built by fans, followers, supporters, promoters, fundraisers, well-wishers, and other publics. Entities (i.e., individuals or organisations) are ecologically embedded within an ecosystem when they understand the interactive effects of the environment around them; and, are ecologically disembedded when they bear no knowledge of the interactive effects of their ecosystem [53]. An NPO's ecological system stops not at its SNPs community but extends to its governing bodies, volunteers, society send industry of operation, governments, and the world. In the organisational context, this perspective offers a unique opportunity for multi-level analysis of SNPs and organising with more emphasis on OCR and how organisations as entities are influenced by several institutional, social, and environmental forces.

Microsystem refers to "a pattern of activities, roles, and interpersonal relationships experienced by the children" (C.-H. [51], p. 1667). The microsystem represents influences from the organisation's structural elements such as employees,

business processes, and technologies. At this level, organisational characteristics such as size and the nature of services offered play a significant role in attracting social media engagement and relational outcomes [54]. Then the organisational leadership, such as executive directors, board members, and employees, determines the strategic focus, financial commitments, budget limitations, and those attached to SNPs use [55]. Besides organisational characteristics and leadership, microsystem influences will relate to organisational resources and capabilities. IT capabilities, networking competencies, adaptiveness, and absorptive capacity have been identified in enabling OCR [5, 13, 56]. Recent studies [30, 40] have emphasised that organisations should consider capabilities with generative properties when interacting with SNPs. Nonetheless, organisational culture and strategy are considered shapers of social media use [41].

Mesosystem refers to "interconnections among two or more microsystems, and the [organization] actively participate in this setting", such as relationships between individuals, community, and other organisations (C.-H. [51], p. 1667). Influences at this level emerge from the interaction between organisations and online communities and will range from cognitive, affective to conative aspects such as perceptions, emotions, and behaviour. During such interaction, NPOs face pressures for assurance of social legitimacy from supporting bodies such as boards, committees, or society [57]. Other mesosystem influences will be defined by the needs and expectations of such stakeholders [58]. On the platform side, the social media conversation, i.e., content, topics, comments, discussions, criticism, and demands from stakeholders, influence network structures [59]. And on the relational side, relationship quality, including relational commitment, trust, satisfaction, and control mutuality [21, 50, 60] and perceptions of mutual benefit are fundamental [21]. Also, organisations engage in different types of OCR such as communal, exchange, covenantal, exploitive, and symbiotic relationships [22], which could be associated with different determinants and outcomes. SNPs, in particular, enable strong, cohesive and symmetrical interaction, which drive communal, symbiotic, and exchange relationships [45].

Exosystem refers to "the social setting in which [organisations] can be influenced, but they do not necessarily actively participate" (C.-H. [51], p. 1667). The exosystem represents the layer of a broader system in which CoSNPs based OCR do not exist directly, such as the industry or sector of operation and the regulatory authorities or institutions involved. The type of industry, size of partnering organisations, duration and type of industry alliances indirectly influence relational outcomes through the operating structure and functioning of the organisation [60]. Also, the degree of market orientation, such as attainment of competitiveness on social needs or services, may play a central role [61]. Market orientation also shapes NPO outcomes and fulfils the mission and social value [61]. Vázquez et al. [61] found that NPOs must specify their target community, develop activities deep-rooted in societal needs, and nurture relationships with donors and service consumers. Social structures inherently influence behaviour and resource flow in a relationship [62]. From a technological perspective, social media diffusion within a sector can build institutional pressures which influence how organisations use social media and the overall impact [63].

Macrosystem refers to "consistencies found at the level of the culture, which includes belief system, norms, or ideology" (C.-H. [51], p. 1667). The macrosystem represents the largest and wider layer of the organisation's environment, which comprises socio-cultural systems, trends in technology adoption, legal and political systems, and socio-economic forces. The underlying mechanisms for cultivating OCR in CoSNPs will exceed organisational factors or resource commitments to several policy issues in the greater SNP landscape [64]. For instance, competition

intensity shapes technology use and adoption decisions among NPOs [57]. Sometimes, it's the political and socio-economic factors such as loci and population demographics [65]. From the perspective of the organisation-environment relationship, environmental capacity, environmental dynamism, and environmental complexity tend to influence organisational structures [66], such as the organisation's technology use capabilities and functional performance [67]. Environmental capacity, dynamism, and complexity are defined and explained further in Section 4.2.

4. Theoretical propositions on OCR in CoSNPs

To understand the phenomena of OCR in CoSNPs, we must understand; (1) the stages through which OCRs develop and (2) classify the factors that influence these relationships. With these two aspects, organisations can better build and utilise OCR for co-created outcomes. The theoretical propositions developed are based on the theoretical perspectives of the ecological systems and empirical evidence on SNPs and organisation-public relationships.

4.1 The three key stages in building OCR: emergence, growth, and collapse

Previously, in paragraph 2.2.2, we identified three important stages in community cultivation, which we now draw on to define three stages of OCR. When launching community engagement, organisations initiate and attract involvement and participation from the community, which indicates the *emergence* of OCR. Progressively, the community may grow and serve a purpose for community members and the organisation. The organisation will guide its community through purpose and structured content towards individual contributions for co-created outcomes, and we anticipate that OCR function productively to achieve those outcomes. Such productive functioning relationships indicate the *growth* of OCR. However, growing a community does not sustain it over time. Thus, organisations will need a purpose roadmap to redefine their relations with the community [41], or the relationship may *collapse*. A "purpose is a specific and meaningful reason for collaboration that will motivate members of a community to interact and contribute" ([41], p. 80). OCR should be redefined in purpose, or they will fizzle. Nonetheless, SNP-enabled collaborative activities (such as co-creation) will not produce anything of value without a clear purpose, positive value perceptions of SNPs, organisational culture, systems, processes, and policies for relations and community functioning [41].

Looking at the four basic features that drive interaction and relations on SNPs – likes, shares, comments and posts [10], posting content, inviting and accepting follower requests, receiving and offering feedback facilitates the emergence of OCR. Such relationships grow with increasing likes, comments, and replies, steering two-way communication and community feedback. Relationships may also grow as followers respond to event notifications and requests for collective action. However, they may collapse, die, disappear, become unproductive, or be refined in purpose into renewed relationships. NPOs are often faced with collapsing or unproductive relationships when they use SNPs [10, 15], but rebuilding those relationships remains a huge challenge that is worthy of consideration [68]. Learning from the community-cultivation cycle and the basic modes of interaction on SNPs, **Figure 1** below illustrated the core stages that one should expect when building OCR on CoSNPs.

Figure 1 adds to existing studies on OCR on SNPs, such as Namisango and Kang [45], Qin and Men [46], and Sisson [25], by articulating three stages of relationship building that could guide relationship planning and strategy. Additionally, this
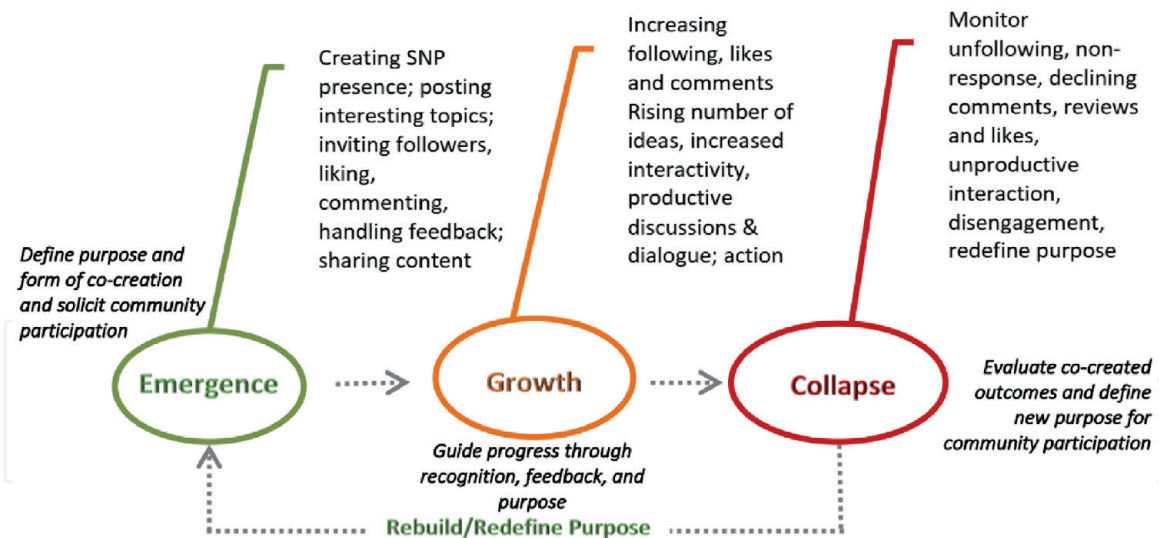
Figure 1.
Three stages in building OCR on CoSNPs.

chapter examines what influences the emergence, growth, and collapse of OCR on CoSNPs based on the organisation's ecological system. The ecological systems perspective allows us to classify and understand the multi-level influences of organisational relationships. Recognising the different levels involved allows the organisation to understand the priority areas and to respond to these influences efficiently and effectively.

4.2 Ecological system influences on OCR in CoSNPs

Using the ecological systems perspective, empirical studies on social media use in NPOs, and public relations literature, we develop propositions of the multi-level factors influencing the OCR on CoSNPs.

The microsystem is internal and includes organisational characteristics, resources, and capabilities. Organisational leadership drives decisions about SNPs, co-creation activities, and resources. Equitable resource allocation facilitates relationship management [23] and the organisation's resource width influences the formation of multiplex ties (S. [69]). Organisational dynamic capabilities, such as technology and relational capabilities, enable relationships for co-creation [30]. Other capabilities, such as the adaptive capability, allow the organisation to sense opportunities and reconfigure resources to respond to environmental dynamism [70]. Adaptiveness also improves the ability to utilise SNP opportunities for service co-creation [40].

Also, organisational culture plays a key role because it manifests in its social media governance, management support for SNPs, and recognising of SNPs as valuable rather than risky [70]. While the perception of benefit improves SNP outcomes, perception of security risks inhibits anticipated outcomes [71]. The social media policies and strategy balance the privacy concerns against high interactivity, and the latter is known to facilitate social media use and success [63]. Privacy concerns are common risks associated with SNPs, and these prompt users to control their interactions with others. Privacy concerns present a social issue and therefore shape online interactions [72] and could undermine relationship growth and result in relationship failure [13]. The challenge for organisations is to find ways to preserve privacy while promoting productive and long-lasting OCR. The non-profit sector has a complex stakeholder portfolio (i.e. multiple publics or audiences) that includes donors, volunteers, consumer communities of nonprofit services

[58, 73] and often organisations are expected to meet the service expectations for all stakeholders [61].

> **Proposition 1:** *Microsystem relates to the organisation's internal influences ranging from its characteristics to capabilities. These will include organisational characteristics, leadership, culture, social media strategy, dynamic capabilities, absorptive capacity, and adaptiveness to technological and dynamic environments. Organisational characteristics and leadership will facilitate the emergence of OCR, while its culture, resources and capabilities will facilitate the growth or collapse of its relationships.*

At the mesosystem, influential factors are mainly relational and shared between the online community and the organisation. This implies that such influences could be community-driven or organisation-oriented but are based on either entity's evaluation of the interaction or relationship. These influences will include a sense of control mutuality, relationship trust, relational commitment, satisfaction, and perceived benefit. Control mutuality is the degree to which actors can influence relational goals and routines [74]. A sense of control mutuality is critical for relational stability [74] and improves the organisation's ability to achieve the intended benefits in social media relationships [25]. Additionally, trust or distrust, relational satisfaction and relational commitment drive OCR [24]. Relational commitment is the extent to which parties involved in a relationship believe it is worth spending time and energy to maintain the relationship [75]. On the other hand, relational satisfaction is the extent to which the parties feel that their expectations are met [75].

Nonetheless, ideal relationships and patterns of interaction are essential for co-creation in SNPs [13]. Relationship types that offer win-win situation – such as communal, covenantal, and exchange, could build trust and relational satisfaction, thus promote the growth of OCR. From a technological perspective, privacy concerns often influence online interaction and relationships [13, 72] and ultimately affect social capital needs [76]. Also, social media conversation is key. When organisations tweet topics of interest to audiences and replies to followers, they tend to attract interconnected, decentralised and reciprocal networks [59]. Also, related to trust issues and the uncertainties of the online setting, people will want to interact and collaborate with organisations they consider socially legitimate [77].

> **Proposition 2:** *Mesosystem influences relate to organisation-public interaction on Co-SNPs, and these are primarily relational factors shared between the organisation and its online community. Such influences will include patterns of interaction, types of relationships, relational commitment, benefits and satisfaction, trust, control mutuality, social media conversation, privacy concerns, and social legitimacy. Since mesosystem factors are interaction-oriented influences, they will affect the growth and collapse of OCR rather than the emergence of OCR; but social legitimacy will influence the emergence of OCR.*

Sectoral and industry drivers of exosystem influences and may often not directly affect OCR in CoSNPs. Community demands and expectations, community orientation, social capital, market dynamics, beliefs and regulations, and social media diffusion are important influencers at the sector level. Community orientation relates to the concept of market orientation in business firms [78, 79] and NPOs [61]. Community orientation reflects the degree to which an organisation generates intelligence and responsiveness on a specific community group's current and future needs and the forces that affect that group, e.g., women in entrepreneurship or youth employment program. Communities expect NPOs to be responsive to social

service needs; but, achieving value and meeting service expectations of multiple stakeholders are visibly challenging [73] but important in fostering stronger community relationships.

Alternatively, SNPs are recognised as an avenue for maintaining and solidifying existing offline relationships [80, 81]. SNPs, therefore, strengthen relational capital [82], structural [80, 81] and cognitive capital [83]. They also build a sense of connectedness, increase members knowledge of others, which facilitates reciprocity and trust and creates opportunities for collective action [84]. Norms of reciprocity and trust often result in productive relationships [50, 60].

> **Proposition 3:** *Exosystem influences relate to the sector or industry dynamics, which include community demands, community orientation, social capital, and industry or sectoral characteristics, beliefs and regulations, and social media diffusion with the sector. These will indirectly influence the emergence, growth, and collapse of OCR in CoSNPs through the mesosystem (P2) and microsystem (P1).*

Under the macrosystem, countrywide ICT laws and regulations, global advances in social media, socio-cultural systems, and environmental dimensions, i.e., capacity, complexity, dynamism, internet adoption, and political and socio-economic factors, are reported. The socio-cultural system is a set of large-scale beliefs, values, and norms as forces within society that support the formation of social structures. The socio-cultural system presents multiculturalism, diversity, individualism, or collectivism; moreover, multiculturalism and diversity influence social cohesion [85]. Cohesive relationships foster a sense of connectedness between individuals or groups, strengthening the social network [86]. In SNPs, cohesiveness fosters communal and symbiotic relationships [45], and such relationships could drive co-creation [13]. Moreover, national cultures will influence organisational culture and ultimately shape social media adoption and use [87].

Country-wide internet adoption promotes emerging technologies such as SNPs [88]. Emerging technologies create many social affordances that promote, threaten, or constrain relationships [89]. Internet evolution may decrease, transform, or supplement a community [89]. Similarly, studies [13] have noted several types of SNP affordances for OCR, but technologies not only afford but also constrain outcomes. Therefore, advances in SNPs may promote or constrain OCR in CoSNPs. Also, environmental capacity, complexity and dynamism, influence organisational structures; for instance, environment dynamism heightens uncertainty [66, 67]. Such environmental dimensions also affect the organisation's technology capability [67]. Environmental capacity is the extent to which the environment can support the flow of relational resources for the sustained growth of OCR. Environmental complexity, on the other hand, means the extent of heterogeneity and variation in relational activities enabling OCR. Environmental dynamism relates to the absence of patterns and the unpredictability of change. In other cases, country-level factors such as internet adoption, human development, and ICT laws and regulations facilitate the adoption and use of social networking systems [88, 90].

> **Proposition 4:** *Macrosystem influences relate to the countrywide or global environment. Such influences emanate from the socio-cultural system, environmental capacity, complexity and dynamism, political and socio-economic factors, ICT laws and regulations, internet adoption and advances in social media. They will indirectly influence OCR but directly influence the exosystem (P3), such as industry regulations, market dynamics, and social media diffusion. They are also likely to influence the microsystem (P1), particularly organisational culture, strategic focus, and dynamic capabilities.*
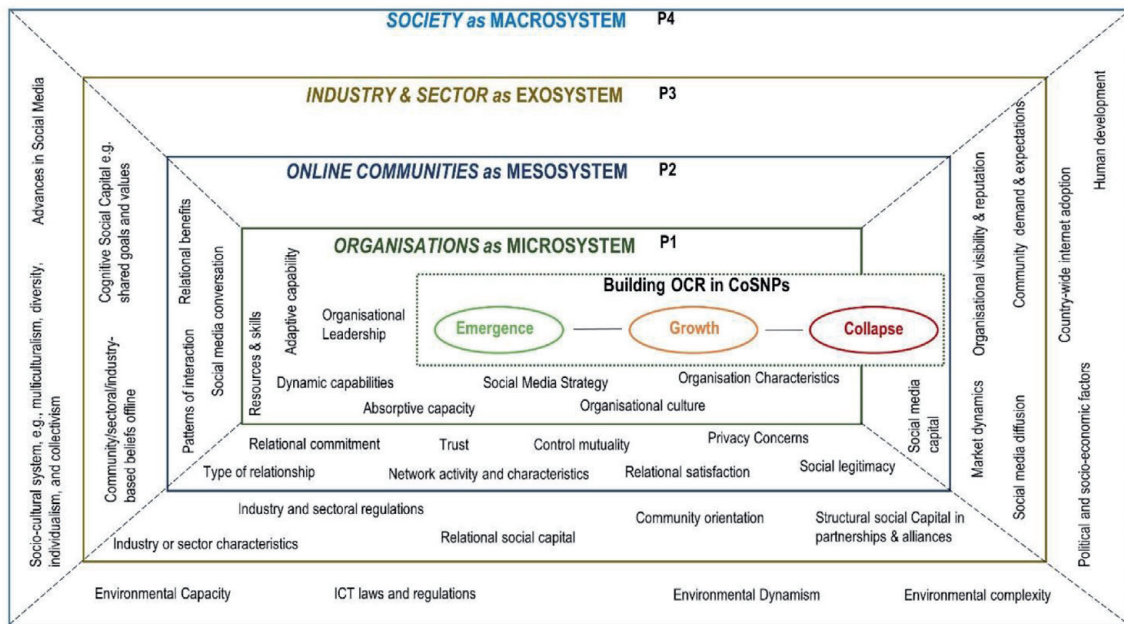
Figure 2.
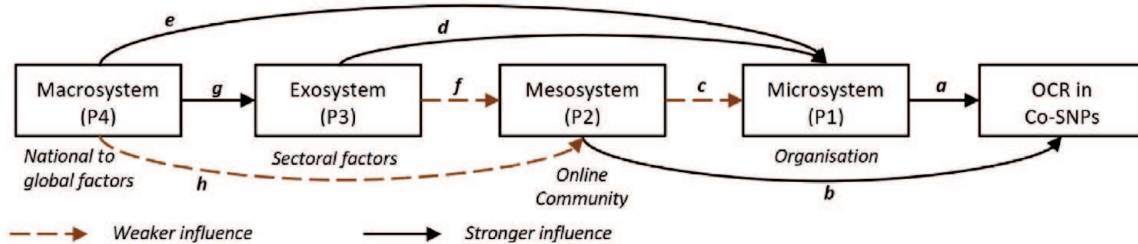*An ecological system based model of factors influencing OCR in CoSNPs.*

Figure 3.
Strength of influences between ecological systems surrounding OCR in Co-SNPs.

The propositions on multi-level influences of OCR in CoSNPs are visually summarised in the model below. The model provides a basis for examining and predicting OCR on CoSNPs.

The model in **Figure 2** presents the proposed scope of factors that influence the emergence, growth, and collapse of OCR in CoSNPs. For each of the four ecological systems, we derive a proposition that identifies the factors involved and the nature of influences anticipated, i.e., direct or indirect influences on other ecological systems and OCR. The microsystem and mesosystem will directly influence OCR (that is why the OCR dashed box appears in both system boxes in **Figure 2**). The exosystem and macrosystem will indirectly influence OCR through their influences on the meso and microsystems. Certain microsystem and mesosystem influences are more apparent at a given stage of the relationships. For instance, organisational characteristics and leadership (at microsystem level) and social legitimacy (at mesosystem level) would influence the emergence of OCR than their growth. In contrast, patterns of interaction (at the mesosystem level) would influence the growth and collapse of OCR. Such potential differences have been pointed out in the propositions provided above. We also considered how strong these influences could be when examined in a path model (see **Figure 3** below).

Based on the studies in **Table 1**, the effects observed varied in strength and between contexts. Using **Figure 3**, we summarise the potential strength of influences proposed in P1 to P4. Arguably, the micro and meso systems are directly involved in the cycle of OCR on Co-SNPs and will strongly influence these

Ecological system	Influencing Factors	Related sources
Microsystem	• *Organisation culture,* e.g., management values & goals, management approval and support, entrepreneurial orientation, innovativeness & creativity, aggressiveness, and people-orientation	Faber, Budding, and Gradus [65]; Schlagwein and Prasarnphanich [87]; Sharif, Troshani, and Davidson [71]; Siamagka, Christodoulides, Michaelidou, and Valvi [91]; Tajudeen, Jaafar, and Ainin [63]
	• *Organisation characteristics,* e.g., size, age, and type of organisation, and services offered	Adjei, Annor-Frempong, and Bosompem [92]; Beier and Früh [93]; Bhati and McDonnell [54]; Hu and Shi [94]
	• *Organisational resources and skills,* e.g., annual budget (and financial allocation to social media), social media competencies (skills and knowledge)	Bhati and McDonnell [54]; Faber et al. [65]; Hu and Shi [94]; Sihi [55]
	• *Strategic use of social media (social media strategy),* e.g., goals and objectives, content management, monitoring and control, social media analysis, and time commitments	Hu and Shi [94]; Shahin and Dai [59]; Swart [58]
	• *Organisational leadership and governance – i.e.,* directors, board members and committees' background, experience, age, education, and outlook on SNPs	Aspasia and Ourania [95]; Sihi [55]
	• *Organisational dynamic capabilities,* e.g., social technology capabilities, social networking competencies, absorptive capacity, adaptive capability	McLaughlin [56]; Schlagwein and Hu [5]; Namisango et al. [30]
Mesosystem	• *Relationship quality*, i.e., trust, perceptions of control mutuality, relational commitment, relational satisfaction, and perceived benefits, cost-effectiveness, relational value, or worthiness	Hon and Grunig [75]; Huang [96]; Jo et al. [48]; Sharif et al. [71]; Shen [24]; Siamagka et al. [91]; Sisson [25]; Swart [58]; Zhou and Ye [77]
	• *Network activity and characteristics* – network position, network size, and structure, audience engagement, the types of relationships and patterns of interaction	Bhati and McDonnell [54]; Kusumaningdyah and Tetsuo [12]; Shahin and Dai [59]
	• *Social media capital, legitimacy, and reputations*	Guo and Saxton [97]; Saxton and Guo [98]; Sisson [25]; Zhou and Ye [77]
	• *Social media conversation* – message content, topics discussed, comments, criticisms, communication style, and tone	Shahin and Dai [59]; Wukich and Khemka [99];
	• *Privacy issues,* i.e., uncertainties, concerns, preferences, and privacy behaviour	Acquisti, Brandimarte, and Loewenstein [72]; Sharif et al. [71]
	• *Perceived Security risks*	
Exosystem	• *Community demands* in terms of social value and service expectations.	Botha [60]; Sharif et al. [71]
	• *Sector or industry forces,* e.g., community or market orientation, sector type, regulations, market dynamics, competition, and targeted audience	Beier and Früh [93]; Hu and Shi [94]; Sihi [55]
	• *Sector-wide social capital and organisational visibility, identity or publicity,* particularly structural capital such as industry-based alliances, network, and partnerships	Beier and Früh [93]; Botha [60]; Wukich and Khemka [99]
	• *Social media diffusion* and institutional and stakeholder pressures.	Larosiliere, Meske, and Carter [88]; Siamagka et al. [91]; Tajudeen et al. [63]

Ecological system	Influencing Factors	Related sources
Macrosystem	• *National level ICT laws and regulations* • *Advances in social media,* e.g., social media trendiness • *Country-level internet adoption,* e.g., digital divide issues	Alhassan, Adam, and Nangpiire [90]; Wukich and Khemka [99]
	• *Technological–to–service environmental considerations,* e.g., environmental capacity, dynamism, and complexity	Kumar and Bhatia [100]
	• *Socio-cultural systems,* e.g., multicultural-ism and diversity, individualism, and collectivism	Schlagwein and Prasarnphanich [87]
	• *Political and socio-economic factors,* e.g., locations and population demographics such as age and education, national resources • *Level of human development*	Alhassan et al. [90]; Faber et al. [65]; Larosiliere et al. [88]; Wukich and Khemka [99]

Table 1.
Deducing ecological system-based influences for OCR in CoSNPs.

relationships (*a* and *b*). Online communities present a range of interaction influences that may strongly influence OCR. Still, such factors may not necessarily reshape the organisation and thus have weak influences on the microsystem (*c*). National (macrosystem), industry, and sectoral (exosystem) factors will strongly influence organisational structures, processes, and other value-creating activities because they provide the organisation's external operating environment (*d* and *e*). Sector-wide aspects may not strongly affect online communities except for community-oriented factors such as community demand and expectations, community orientation, and organisational visibility, reputation, or recognition in that sector. Therefore, the exosystem would have a weak influence on the mesosystem (*f*). National and global aspects shape the functioning of sectors. Hence, the macrosystem factors in this context will strongly influence the exosystem (*g*); however, the influence could be weaker on the mesosystem (*h*). The weak influence would be because only a few influences such as advances in social media, internet adoption, and socio-cultural systems could influence organisation-public interaction (mesosystem).

5. Discussion and implications of the study

While many studies have indicated the need for organisations to build OCR, they rarely explain how these relationships can be cultivated nor their influencing factors. This study proposes an OCR analysis, particularly in CoSNPs, driven by an ecological systems assessment. Such an assessment extends beyond the organisation, individual, and community who are the central actors in CoSNPs. The chapter delves into the factors that could influence OCR in CoSNPs, and such factors have been categorised based on four layers of the ecological system.

This chapter pursued two overall objectives. The first objective was to determine the stages of OCR cultivation in CoSNPs. We indicate that the cultivation of OCR in CoSNPs can be traced in three stages, similar to community cultivation. First is the emergence of OCR, which relates to connection and initiation of community relationship defined by purpose. Second is the growth of OCR fostered by

guiding the interaction and achieving the purpose of relationships. Lastly, OCRs will collapse after achieving their purpose when organisations do not redefine future activities.

The second objective was to develop a multi-level analysis of the factors influencing OCR in CoSNPs based on the four ecological systems, including the microsystem, mesosystem, exosystem, and macrosystem.

The microsystem forces are *organisational* and emerge from organisational structures, processes, and capabilities, while mesosystem forces are *interactional* and emerge from organisation-public interaction on the platforms. At the micro-level, organisations should focus on the organisation's nature, resources, capabilities, and leadership. At the same level, the organisational culture and strategic emphasis are vital. At the meso level, interactions, relationships, and networks are central points of reference, while social media conversations amidst concerns about privacy and social legitimacy influence organisational networks. Mesosystem influences may have a direct but moderate to weak influence on organisational structures, process and capabilities (microsystem). However, focusing solely on the microsystem and mesosystem forces overlooks broader environmental dynamics, which are vital in the functioning of communities and organisations [66].

The exosystem and macrosystem present broader environmental forces that indirectly influence OCR on CoSNPs through the meso and microsystems. The exosystem forces are *sectoral* or industry dynamics reflected in the nature of the industry and its operations in the offline environment. Such influences will relate to social capital resources at a sectoral level, such as the nature of partners and alliances in service delivery, community demand, orientation, and market dynamics, organisational representations, as well as technical considerations such as the diffusion of social media technology in that sector. On the other hand, the macrosystem forces are *national* or global, emerging from the greater operating environment. They constitute socio-cultural contexts, environment capacity, complexity, dynamism, countrywide internet adoption and global advances in social media, national ICT laws and regulations, and the political and socio-economic forces such as human development. Macrosystem factors naturally influence the exosystem causing sector-wide effects; but, they will indirectly influence the meso and microsystems. It is also possible that macrosystem factors (such as socio-cultural contexts, socio-economic factors, and advances in social media technology) will directly influence the organisation as a microsystem, particularly its culture, resources, and capabilities.

The first managerial implication is that CoSNPs offer several capabilities such as conversation, collaboration, networking, and ideation that allow NPOs to co-create services through co-ideating, co-promoting, co-evaluating, and co-delivery [30]. Such service co-creation activities are facilitated by the nature of OCR and the capabilities of SNPs. Still, the emergence, growth and collapse of OCR on SNPs are associated with several environmental forces. Recognising the role of the ecological system in different operations of the social sector promotes shared values and improved collective impact [101]. Collective impact "does not, of course, require that all participants do the same things. Instead, diverse stakeholders engage in mutually reinforcing activities" ([101], p. 8). Participants engage in voluntary and independent contributions to achieve collaborative outcomes [41].

Secondly, OCRs emerge, grow, and collapse. OCR will organically emerge when the organisation creates a social media presence, initiates interaction, and defines a co-creative focus. However, such relationships will grow by guiding the community through a defined co-creative activity and showing progress towards co-created outcomes. OCR will potentially collapse when the goal is achieved; hence, organisations must redefine the purpose of interaction (a new form of co-creation) for

the SNP community. Based on the patterns of interaction on the platform, OCR will emerge in different types, and these can be defined based on how resources are exchanged between the organisation and the community. Organisations must pay attention to the quality of these relationships reflected by commitment, trust, satisfaction, control mutuality, and mutual service benefits. Such relational elements will shape the growth of current service relationships and define future relationships. The growth and collapse of OCR rely on relational outcomes and organisational dynamics such as organisational resources and capabilities dedicated to building community relationships on CoSNPs. Other organisational factors will include organisational policies and culture around the use of CoSNPs. Besides the organisational aspects, online settings raise privacy and social legitimacy questions that often undermine relational and network prospects.

Lastly, OCR in CoSNPs, not only emerge, grow, and die because of organisational and interactional influences, but also the seemingly distant sectoral, national, or global forces. Inherently, these provide the operative environment for organisation and interactions. Organisations should consider social beliefs running in the offline communities and how they affect interactions in CoSNPs. Organisations should also consider promoting shared beliefs and values with target communities, establishing sectoral based social capital (i.e., partnerships and alliances), and using CoSNPs community intelligence to identify and respond to service needs. Other studies [58] have emphasised the need for organisations to meet stakeholder needs, consider stakeholders as partners, consider a stakeholder-oriented approach, and continuously review their relationships. NPO practitioners must recognise that running a funding model (as opposed to a business model) may attract a different set of socio-cultural, political, and socio-economic issues in co-creative activities, SNPs use, and OCR. Nonetheless, understanding advances in social media and the complexities, capacity, and dynamism will be key in building OCR. These issues could imply that CoSNPs may not function uniformly across all contexts (e.g., countries).

6. Conclusion and direction for future research

In conclusion, this chapter introduced an ecological systems perspective to argue that forces will influence the possibilities for building OCR in CoSNPs from four layers of the organisation's operating environment. These layers include the microsystem, mesosystem, exosystem and macrosystem forces. These systems affect each other in shaping OCR on CoSNPs, and such influences will be direct, indirect, strong, or moderate-to-weak. The ecological systems perspective is essential to engaging a multi-level analysis of the mechanisms driving OCR on CoSNPs. The chapter also argued that OCRs are affected at three stages – i.e., emergence, growth, and collapse, which are transformed through purpose, progress, and goal attainment. Overall, the chapter provides a basis for an ecological prediction model of OCR in CoSNPs and offers a foundation for future studies on SNPs, organisational relationships, and co-creation. Future studies should consider examining the influences discussed in this chapter using a quantitative approach using the explorative and robust partial least squares structural equation modelling (PLS-SEM) technique. This approach would confirm the most significant and high priority influences that the organisations must consider. Such studies could isolate the factors that are more influential at different stages of OCR. Future studies should also examine the properties of OCR that are specifically affected by the factors identified. Nonetheless, the model provided should be tested in different contexts (e.g., in different business models, sectors, countries, and socio-cultural contexts) to establish how such influences could differ.

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