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Social Media Platforms and Social Enterprise: Bibliometric Analysis and Systematic Review

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Abstract

A considerable number of contributions at the intersection of social media platforms and social

entrepreneurship has been witnessed over the past decade. The multi-disciplinary nature of current

literature necessitates integrative insights on the topic. We thus undertake a two-pronged approach –

bibliometric analysis followed by systematic review - to map the extant literature in a structured,

objective, and quantitative way. We contribute to the literature as we (i) offer a classification of the

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literature in three clusters, namely 'social media platforms, social collaboration and social marketing', 'social media platforms and crowdsourcing'; (ii) analyze recent research development in each cluster, methodological development, countries co-authorship and evolution of research in the area; and (iii) propose a conceptual framework - accompanied by research propositions- that provides an overview of the literature at the intersection of social media platforms, various social entrepreneurial practices and their influence on the social enterprise performance. Our review culminates with numerous impactful research avenues for scholarly progression in the area. From a practical standpoint, this review integrates scattered findings into one body, allowing the practitioners and policymakers to discern the role of social media platforms in dealing with emerging societal problems and increasing operational efficiencies of social enterprises (SEs). To the best of our knowledge, this is the first review of its kind, offering unique perspectives at the nexus of social media platforms and SE's performance.

Keywords: Social entrepreneurship; Social media platforms; bibliometric analysis; Literature review

1. Introduction

A World Bank report shows that around 3.3 billion of the world's population lives below the \$5.50 per day line and nearly half of the world's population cannot access essential health services (World Bank, 2020). The current Covid-19 pandemic, along with the global recession, is projected to further push the poverty, unemployment and income inequalities (Weaver, 2020). The growing poverty curve, alongside unemployment and continuous growth in the world's population, prompts critical social issues wherein marginalized and vulnerable groups are often worst affected (World Bank, 2020). The emerging societal problems have led to considerable growth in social enterprises (SEs) to support the poor and vulnerable segments of society. Subsequently, a growth in scholars' interest in the role of an

SE to deal with growing social challenges is evident (Granados Maria et al., 2011; Zahra & Wright, 2016).

A SE could be a for-profit or not-for-profit organization that is created with its main mission being to help overcome local or global societal issues (Dart, 2004; Kickul & Lyons, 2020; Low, 2006). Nonprofits mostly raise money through fundraising from governments and/or donors in the general public (Kickul & Lyons, 2020). A for-profit SE earns money by selling a product or service to the public but reinvesting profit to solve social issues, rather than to maximize the profit of shareholders or owners (Luke & Chu, 2013). For example, TOMS Shoes, a California based shoe retailer, was driven by the problem that many children in developing countries lack shoes. With every pair of shoes, you buy from them, they would donate a pair to a child in need. Warby Parker was created to address the challenges of poor people who live without eyewear. For every pair of glasses, you buy they would donate the same amount of money for glasses to people in need. Second Shot, an Australian mobile coffee shop, employs young homeless and disadvantaged people to operate their vans. Other examples of SEs include Blanket American (address issues of domestic poverty) and Breadwinners and Migrateful (UK based SE supporting refugees, migrants and asylum seekers). SEs, thus, use the entrepreneurial processes with an explicit and central focus on social mission (Judita, 2019; Pankaj & Seetharaman, 2021; Saebi et al., 2019), mainly aiming to solve social issues, unlike commercial enterprises CEs' that mainly focus on profit maximization for stakeholders or owners.

CEs reinvest profit to scale up the business, thus having more capital gain than SEs (Ebrahim et al., 2014; Kickul & Lyons, 2020). This allows CEs to have better access to investors and equity capital; whereas SEs often face challenges in identifying and accessing funders – like-minded donors (Calic & Mosakowski, 2016; Certo & Miller, 2008). SEs face challenges in finding and employing like-minded volunteers with relevant skills compared to CEs where jobs are paid. In terms of communication with

clients/consumers, CEs usually have established networks of buyers and suppliers. For example, if a CE is a supplier of raw material, it should interact with manufacturers or producers in the network. Likewise, producers often sell products to e.g. wholesalers or distributors. The buyers/ consumers approach/contact the sellers and vice versa, meeting their needs. By contrast, SEs must reach out to diverse community groups, identify their needs, and offer customized solutions for burgeoning social problems. Research has identified variance in the capital structure of SEs and CEs (Siqueira et al., 2018).

Recent research, however, suggests that social media can enormously help SEs in dealing with operational challenges in a more cost-effective way, such as fundraising, finding volunteers, reaching out to the diverse community, identifying, and solving various social issues. Some commonly used social media platforms are Facebook, Twitter, YouTube, LinkedIn, Snapchat, blogs (El-Den et al., 2017). While such social media platforms have been long used by CEs (Misirlis & Vlachopoulou, 2018; Srinivasan & Venkatraman, 2018), recent studies establish that these platforms can also serve as a key lever to effectively and efficiently achieve the goals of SEs (Abedin et al., 2019; Calvo et al., 2020; Thackeray et al., 2008). For instance, social media platforms, with over 3.96 billion active users across the world, can facilitate SEs to develop social networks and integration with vulnerable people in society, understand their social needs and provide solutions with minimum cost and time (Abedin et al., 2019; Cheung et al., 2019). Using social media platforms, SEs can more effectively raise funds from diverse crowds and thereby deliver greater value to the disadvantaged segment of a population (Presenza et al., 2019). Also, social media platforms can greatly support SEs to educate the community about protection from fatal diseases (e.g., HIV and pandemics) and conservation of the natural environment (Lefebvre, 2011; Lin & Huang, 2018). Given the significance of social media platforms in SE, a noticeable growth in literature in this domain is evident, covering a variety of disciplines, such as business, management and accounting (Cheung et al., 2019), environmental science (Ridley-Duff & Bull, 2021), decision science (Yearworth & White, 2018), engineering (Corradini et al., 2006), arts and humanities (Lin & Huang, 2018), among others. The scattered and emergent nature of the extant literature in this important research domain necessitates a rigorous and systematic review to consolidate the current knowledge base, explore knowledge trajectories, key research clusters and opportunities for more fruitful future research.

Over the past decade, some insightful reviews have been conducted in the SE domain. For example, review of definitional issues of SE (Bacq & Janssen, 2011), SE as a hybrid organization (Doherty et al., 2014), the measurement of SE construct (Rawhouser et al., 2019), research gaps at three levels (individual, organizational, institutional) of analysis in SE literature (Saebi et al., 2019), broad overview of past research (2007 – 2018) on commercial entrepreneurship (Gupta et al., 2020). However, their focus remains on different issues within SE, and hence a review of the literature at the nexus of social medial platforms and SE is yet to be done. Moreover, most past studies (Doherty et al., 2014; Gupta et al., 2020; Rawhouser et al., 2019; Saebi et al., 2019) build upon narrative literature reviews, which are often criticized for manual coding of themes or classification of literature in different dimensions based on authors' own interpretation (Ali & Gölgeci, 2019). Given the existing gap, our paper offers a review of the literature at the nexus of social media platforms and SE by combining the benefits from both bibliometric analysis (automatic identification of research clusters/themes) and systematic review (structured evaluation of extant studies). Our review is driven by five main research questions:

- 1. What are key research clusters and recent development in each cluster around social media platforms and SE?
- 2. What are the countries' co-authorship patterns for research on the topic?
- 3. What are the main methodological approaches used by the existing research?
- 4. How has SE evolved through social media platforms?

5. What are the avenues for more impactful future research at the nexus of social media platforms and SE?

To answer the above research questions, the rest of the paper is organized as follows. Section 2 preset review methodology employed by this study. Section 3 offers bibliometric analysis and systematic review of the literature around each research cluster, journal's co-citation pattern, most prolific authors and countries. Section 4 presents descriptive analysis including methodological approaches and evolution of research on the area. Section 5 presents the theoretical and practical implications, whereas the paper concludes with limitations and future research directions in section 6.

2. Review methodology

In line with the research objective and research questions, our review method adopts the two-pronged approach: bibliometric analysis and systematic review (Ali & Gölgeci, 2019; Donthu et al., 2021). First, with the aid of visual tools (i.e., VOSviewer software), bibliometric analysis is employed to generate several useful outputs such as key research clusters, co-citation pattern of sources, and countries' co-authorship. While bibliometric analysis produces valuable research clusters in a quantitative and objective manner, it is unable to describe the recent development in each cluster. To overcome this shortcoming, we integrated bibliometric analysis with a systematic review of the literature. The combination of the two approaches helped our review not only retrieve key research clusters in an objective and biased free manner, but also to discuss the recent research trajectories and opportunities for further research in each cluster.

The selection of appropriate set of keywords is a preliminary step in an inclusive review (Kapoor et al., 2021). A robust set of most relevant keywords was developed based on constant search and review of the articles around the topic. First, we read the literature to understand the commonly discussed social medial platforms. Second, we searched the literature on SE to understand frequently used key

terms/words. Third, we searched articles at the nexus of social media platforms and SE and collected keywords. Finally, we reviewed our collection of all keywords and developed a raw set of keywords: "social enterprise*", "social entrepreneur*", "digital technolog*", "digital innovate*", "digital platform", "innovate entrep*", social media", "Facebook, Instagram, Twitter, LinkedIn, internet, YouTube, blog*. This set of keywords produced numerous irrelevant articles around the topic. We repeatedly used various combinations of keywords and reviewed the resulting articles. Ultimately, we found that the following set of keywords retrieved maximum relevant articles on the topic: "social enterprise*", "social entrepreneur*", "digital platform", "social media", "Facebook, Instagram, Twitter, LinkedIn, internet, YouTube, Snapchat, blog*. An asterisk sign (*) was placed over the enterprise, entrepreneur, and blog to broaden the search and retrieve variation of terms such as entrepreneurship, entrepreneurial, blogger, blogging etc. A question mark ("") was used on a few words so that these are retrieved together by the search system. The dataset of articles was retrieved from three widely used databases: Scopus, Web of Science (WoS) and Google Scholar. The dataset was searched from 10 to 12 February 2021. We did not limit the time to allow maximum retrieval of articles; however, our search string suggested 2002 as the time for the emergence of research on the topic (Table 1). Given that Scopus is the largest database, first, the keywords were applied in Scopus, producing 131 articles. The articles were downloaded in .csv file format. The title and abstract of each article were carefully read. This led to the exclusion of 4 articles that discussed SE but did not focus on social media platforms. Further, two articles were excluded which were written in a non-English language. To ensure that our review covers maximum relevant articles and retain content/face validity, the same set of keywords was tried in WoS and Google Scholar. This has resulted in the inclusion of 5 articles, which were absent from the Scopus dataset (review process is presented in Fig.1).

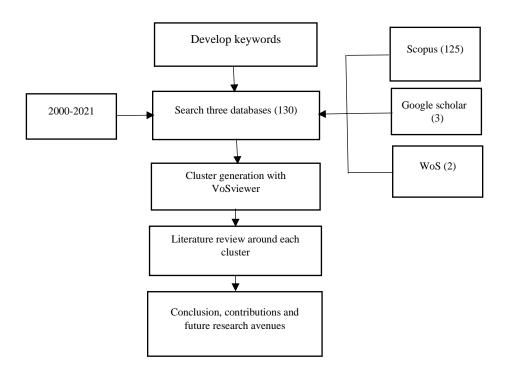


Fig.1. Review process

Table 1. Delimitations

Delimitation	Explanation
Keywords search	"social enterprise*", "social entrepreneur*", "digital platform", "social
query	media", "Facebook, Instagram, Twitter, LinkedIn, internet, YouTube,
	Snapchat, blog*.
Databases	Scopus, Google Scholar, Web of Science
Criteria	Document type: Given that the research on the topic is still at an early stage
	of development, we reviewed all published sources such as: journal
	publications, conference papers, book chapters.
	Time: 2002-2021
	Language: English
	Quality: peer-revied articles

Given that the research on the topic is still at an early stage of development, we reviewed all sources such as journal publications, conference papers, and book chapters to consolidate scattered knowledge and explore key research clusters in the field. Our inclusion and exclusion criteria resulted in a final set of 130 articles from 12 subject areas (Table 2). The recovery of articles from multiple subject areas

suggests that social media platforms in SE is a multi-disciplinary topic aiming to solve diversified social problems and offer innovative solutions.

Table 2. Classification of articles by each subject area

Subject area	Articles	Subject area	Articles
Business Management and	35	Arts and Humanities	6
Accounting			
Computer science	30	Energy	5
Social science	20	Medicine	4
Engineering	11	Psychology	3
Environmental Science	7	Biochemistry, Genetics Molecular	2
		Biology	
Mathematics	6	Immunology and Microbiology	1

3. Analysis and key findings

This section presents bibliometric analysis using VOSviewer. The first section presents keywords cooccurrence analysis, key research clusters and a systematic review of the literature around each cluster. This is followed by the journals' co-citation pattern and countries' co-authorship analysis.

3.1 Keyword's co-occurrence analysis and review of literature

The keywords co-occurrence analysis is one of the useful functions of VOSviewer software. The tool generates clusters of keywords based on their association strength, which is calculated using a natural language processing algorithm as follows:

$$AS_{ij} = \frac{c_{ij}}{w_i w_j'},\tag{1}$$

In equation 1, "*cij* denotes the number of co-occurrences of items *i* and *j* and where *mi* and *mj* denote either the total number of occurrences of items *i* and *j* or the total number of co-occurrences of these items. It can be shown that the similarity between items *i* and *j* calculated using (1) is proportional to the ratio between on the one hand the observed number of co-occurrences of *i* and *j* and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of *i* and *j* are statistically independent" (van Eck and Waltman, 2009, p. 531).

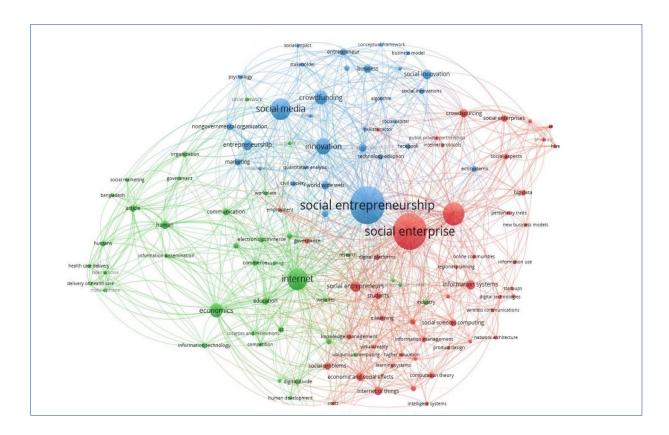


Fig.2. Keywords' co-occurrence analysis

Using the above index, the software identified the links between similar keywords and grouped them into clusters with different colors. The keywords within a cluster focus on a similar or closely related issue/theme (Ali & Gölgeci, 2019; van Eck & Waltman, 2009). As such, a cluster represents a theme or domain of research in an area, in this case, social media platforms and SE. The keyword co-occurrence analyses of 130 articles generated three major research clusters (Fig.2). Building upon the

basic information from these clusters, we have carefully reviewed our sampled articles (130) to generate major research themes, explore the development of literature in each theme/cluster, and identify the main theoretical approaches and theories used (Table 3).

Note that VOSviewer has automatically created key clusters (Fig.2, Table 3) based on the association strength/similarities of keywords, which is calculated by software through the natural language processing algorithm process mentioned in section 3.1.

Table 3. Major research themes/clusters in the area.

Themes	Articles	Author
Social collaboration	58	Primecz (2021); Conn et al. (2021); Bisbee et al. (2020); Kročil et al. (2020); Rombe (2020); Cho and Cho (2020); Calvo et al. (2020); Noor et al. (2020); Pettersen (2020); Popov et al. (2020); Zulli et al. (2020); Xiao et al. (2020); Tortia et al. (2020); Cheung et al. (2019); Wahyono E. et al. (2019); Waghid (2019); Judita (2019); Yearworth and White (2018); Trevathan and Johnstone (2018); Best et al. (2018); Lee and Jung (2018); Reid et al. (2018); Gao et al. (2018); Tay et al. (2018); Keane et al. (2017); Kumar et al. (2017); Shah (2017); Forstner and Nedbal (2017); Woodward (2017); Salim Saji and Ellingstad (2016); Krige and Sutherland (2016); Pettersen (2016); Kavoura and Andersson (2016); Kim and Kim (2016); Shafigullina and Palyakin (2016); Maamar et al. (2015); Lin et al. (2015); Haron and Mara (2015); Buregio et al. (2015); Doherty et al. (2014); Aruch et al. (2014); Bhatti et al. (2013); Liu (2013); Oprica (2013); Ratten (2013); Franz et al. (2012); Van den Broek et al. (2012); Holt (2012); Bacq and Janssen (2011); Fish et al. (2011); Boje and Smith (2010); Broadbent and Papadopoulos (2009); Mair and Schoen (2007); Ellison et al. (2007); Corradini et al. (2006); Rangaswamy (2006); Schalick (2006); Bach and Stark (2002).
Social marketing	41	Lipparini and Phillips (2021); Kao and Luarn (2020); Matzembacher et al. (2020); Cho and Cho (2020); Bhagwat and Jijina (2020); Irfan and Salam (2020); Bandyopadhyay and Ray (2019); De

Themes	Articles	Author
		Bernardi et al. (2019);Saunders and Truong (2019); Masiero and Ravishankar (2019); Christopher Michael Homan et al. (2017); Jumin et al. (2017); Zebryte and Jorquera (2017); Zhang (2016); Purtle and Roman (2015); Chirozva (2015); Hsu and Jiang (2015); Singh Singh et al. (2015); Mukhebi and Kundu (2014); Gupta (2014); Martin et al. (2013); Lefebvre (2013); Tarafdar et al. (2013); Arora and Predmore (2013); Wu et al. (2013); Estapé-Dubreuil and Torreguitart-Mirada (2013); Kayingo (2012); Tse et al. (2012); Fish (2011); Lefebvre (2011); Kennedy (2010); Martin and Novicevic (2010); Roberts (2010); Amine and Staub (2009); Datta and Jessup (2009); Madill and Ziegler (2012); Thackeray et al. (2008); Andreasen (2003); Neiger et al. (2003); Andreasen (2002); McKenzie-Mohr (2000).
Crowdfunding	17	Ridley-Duff and Bull (2021); Langley et al. (2020); Troise et al. (2020); Sparviero (2020); Presenza et al. (2019); (Laurell et al., 2019); Popkova and Sergi (2019); Borst et al. (2018); Tomita (2018); Lin and Huang (2018); Bergamini et al. (2017); Partzsch (2017); Banhatti (2016); Lukkarinen et al. (2016); Buregio et al. (2015); Mollick (2014); Thies et al. (2014).
Crowdsourcing	14	Bakici (2020); Abedin et al. (2019); Cappa et al. (2019); Tung. and Jordann (2017); C. M. Homan et al. (2017); Havas et al. (2017); Olberding (2016); Dissanayake et al. (2015); Tung. and Jordann (2015); Baka (2014); Amtzis (2014); Saxton et al. (2013); Gao et al. (2011); Rosen (2011).

3.2.1 Cluster 1: Social media platforms, social collaboration, and social marketing

The main keywords in cluster 1 (green color) included, for instance, communication, information dissemination, information technology, social networking, and social marketing. Referring to the articles behind the keywords, this cluster was classified as 'social collaboration and social marketing' to describe the powerful tools to interact with a diverse audience, identify their social problems and offer sustained solutions. We noticed slightly different perspectives of the articles discussing social

collaboration compared to those talking about social marketing. As such, to reduce ambiguities, cluster 1 was further sub-divided and discussed under two sub-clusters: 'Social collaboration' and 'social marketing.'

With a share of 44.61% (58 of 131) articles, social collaboration was identified as the most popular topic surrounding social media platforms and SE's performance (Table 3). Social collaboration refers to online communication, information exchange, social networking, and integration to jointly understand societal problems and provide reliable solutions. Social media platforms appeared to be a cost and time effective, quick, and efficient platform to foster social entrepreneurs' interaction and networking with both staff and society (Abedin et al., 2019). For example, Facebook and WhatsApp platforms enable real-time connection with a diverse audience, thereby quickly understanding their social problems such as poverty, healthcare, education and offering solutions (Kumar et al., 2017; Woodward, 2017). Instagram can be used to share the pictures and videos of staff to show what social workers are doing in the field or what kind of social services are available (Bandyopadhyay & Ray, 2019). Online blogs offer an incredible platform to share meaningful stories and reports on social activities and instigate productive discussions between social workers and community members (Waghid, 2019). Corradini et al. (2006) and Schalick (2006) suggested internet-enabled communication as an effective source for SEs involved in the education sector to offer online education and training to the community. Huang and Cox (2016) observed that engagement through social media platforms effectively allow us to alleviate poverty among disadvantaged people in Taiwan. Building upon a case study from Canada, Keane et al. (2017) found that senior staff of SEs use LinkedIn to communicate across space and access updated knowledge sources. LinkedIn communication networks also offer communities quick access to jobs (Ellison et al., 2007). Salim Saji and Ellingstad (2016) found that frequent communication and collaboration help exploit tacit and non-tacit knowledge which in turn instigates social innovation - new ways of understanding and solving critical social problems. Rangaswamy (2006) examined the role of web-based kiosks as communication booths to enhance healthcare, housing and education in rural areas. Corradini et al. (2006) and Schalick (2006) suggested internet-enabled communication as an effective source for SEs involved in the education sector to offer online education and training to the community. Yearworth and White (2018) noted that social media-driven collaborative awareness campaigns significantly reinforce a community's empowerment and citizenship behavior. Best et al. (2018) recognized the significance of the Facebook platform for interaction amongst community and SE thus supporting long-term identity change in people. Cheung et al. (2019) further added that social media platforms plays a critical role in enhancing cooperation, value co-creation, and delivery of social ventures.

In our sample (130), social marketing was ranked the second most important concept with 31.54% of articles stressing the significance of social media platforms for social marketing in SEs. Social marketing refers to marketing activities, mainly through social media platforms, by SEs aiming to launch campaigns for instance about health, education and natural resource conservation, sustainability, and employment (Andreasen, 2003; Shafigullina & Palyakin, 2016). Compared to traditional social media platforms marketing, which aims to economically benefit the marketer (Dwivedi et al., 2021), social media marketing of SEs seeks to benefit the socially vulnerable segment of the population (Bandyopadhyay & Ray, 2019; Jumin et al., 2017; Lefebvre, 2013). Social media platforms are invaluable tools for the social marketing activities of SEs. For instance, Thackeray et al. (2008) observed the use of Web 2.0 by healthcare practitioners for online medical services to disadvantaged remote people. Lefebvre (2011) explicated the role of social marketing campaigns in SEs of the healthcare sector reducing the risk of HIV, childhood diarrhea and water sanitization for the marginalized community. Madill and Ziegler (2012) demonstrated the usefulness of social media platforms supported social marketing campaigns of SEs for water conservation and ecosystem protection. Irfan and Salam (2020) examined the use of social media-enabled social marketing by SEs

in the female entrepreneurship sector in developing the entrepreneurial skills of rural female entrepreneurs in Pakistan. In turn, these female entrepreneurs were able to market and sell handicrafts and other products through purpose build websites (Irfan & Salam, 2020). Through a case of SE in India, Singh et al. (2015) argued that social marking through social media platforms incredibly supports the labour skills of a socially vulnerable group of society. Amine and Staub (2009) noted that social marketing promotes women's involvement in self-entrepreneurship and reduce gender discrimination in sub-Saharan Africa. Chirozva (2015) underscored that the SEs of the tourism industry employ social media platforms in social marketing to promote ecotourism in Africa. Purtle and Roman (2015) found a positive influence of health awareness campaigns by SEs in the reduction of health-related issues such as viral and bacterial infections. Zhang (2016) examined that SEs in the agriculture sector use Webchat and Facebook to educate and motivate farmers towards organic farming. Reid et al. (2018) studied how SEs use social media supported social marketing to promote the use of probiotics in the segment of the population facing malnutrition and health issues. Masiero and Ravishankar (2019) noted that SEs of India use social marketing through social media platforms to run a campaign of microloans for vulnerable members of society. Kao and Luarn (2020) argued that the application of social media is a superior marketing approach for social innovation. Lipparini and Phillips (2021) underlined that SEs are increasingly using social media platforms to support social projects aiming to improve healthcare services, school education, and the labour market.

In a nutshell, social media platforms have become the most vibrant information sharing, networking, social collaboration, and social marketing platform in SEs. The literature on the use of social media platforms in SEs for collaboration and social marketing has received a great deal of attention from scholars. Social media platforms have a far-reaching influence on the way of collaboration and social marketing in SEs. The data posted on social media platforms is a rich, fast, and free of cost source of internal and external collaboration in SEs. The massive volume of information exchange on social

media platforms makes it a significant source of text mining and thereby making more informed decisions for service offerings. Likewise, a new model of SE marries social media platforms with social marketing to launch effective campaigns to improve the quality of healthcare, education, ecosystems conservation, sustainable consumption, and social solidarity. The application of social media platforms in social services does not only solve social problems, but also establishes unique social values. However, most studies still focus on the benefits of such approaches mostly through conceptual frameworks or country-specific case studies, thus leaving a gap for broad empirical evidence in this important domain.

3.1.2 Cluster 2: Social media platforms and crowdfunding

The main keywords in cluster 2 (blue color) include e.g. social media, crowdfunding, social impact, social capital, stakeholder, and innovation. Looking at the articles related to these keywords, this cluster was classified as 'Social media platforms and crowdfunding'.

Crowdfunding can be ranked the third most emerging concept at the intersection of social media platforms and SE, where 17 out of 130 (13.07%) articles highlight its significance at the intersection of social media platforms and SE. Crowdfunding enables entrepreneurs to raise funds or donations through collaborative contributions from diverse crowds (Mollick, 2014; Troise et al., 2020). The success of crowdfunding hinges on two main factors: how well the campaign is presented and how many people are approached (Troise et al., 2020). Social media platforms have revolutionized the way social entrepreneurs undertake crowdfunding campaigns (Mollick, 2014; Presenza et al., 2019). Social media platforms applications (Facebook, LinkedIn, Instagram, Twitter, YouTube, Blogs etc.) can go a long way in reaching masses of people and increasing the success of crowdfunding campaigns. It positively influences crowdfunding by creating and maintaining large social networks (Borst et al., 2018; Palmer & Verhoeven, 2016). Kaur and Gera (2017) argued that social media is a mediator

between the funder and the creator. Laurell et al. (2019) explicated the positive role of social media platforms in the interplay between social sustainability and crowdfunding. Borst et al. (2018) underlined that engagement through social media platforms provides quick conversation and information richness leading to crowdfunding success. For example, Facebook offers a massively social medium with millions of daily users (Lukkarinen et al., 2016). It can be used to create a crowdfunding page and involve the entire community around it. Considering the significance of Facebook, Thies et al. (2014) argued that the success of crowdfunding depends on the number of likes and shares on Facebook. Mollick (2014) further added that social entrepreneurs with 1000 Facebook friends will have 40% chances of success in a crowdfunding campaign. In addition to Facebook, a positive link between crowdfunding and resource generation through Twitter has also been noted (Hughes et al., 2012; Kao & Luarn, 2020). However, the mechanism of information exchange on Twitter is slightly different from Facebook. Twitter supports follower-following relationships and offers an ideal social medium to spread information (Hughes et al., 2012), whereas Facebook covers all aspects of an active conversation.

In summary, social media platforms provide a fertile ground to augment crowdfunding campaigns and collect donations or funds from large community groups in a small amount. However, still much remains to be learnt. For example, the UK innovation agency for social goods, Nesta (2016) introduced four crowdfunding approaches, including donation-based, reward-based, equity-based, lending-based. However, our understanding of how different social media platforms would influence crowdfunding in SEs is limited. Identification of appropriate crowdfunding approaches and associated social media platform(s) will help to enhance funding opportunities amid social media channels' crowdfunding. Also, some social media platforms such as Instagram and LinkedIn have received relatively scant attention, despite their relevance in a crowdfunding campaign. For instance, Instagram

can be used to share visual content and increase the success of the campaign. LinkedIn is often used to raise funds from like-minded and professional audiences.

3.1.3 Cluster 3: Social media platforms and crowdsourcing

Cluster 3 (red colour) presents the keywords around the key concept of crowdsourcing. Interestingly, 14 of 130 (10.76%) articles highlighted the significance of social media platforms in crowdsourcing for SE. Crowdsourcing is the practice of soliciting contributions from a crowd or outsourcing an activity to a large group of people for social service, needs and new societal problems (Bakici, 2020). SEs harness social media platforms to empower crowdsourcing by reaching a crowd of volunteers in a fast, cheap, and efficient way (Paniagua & Sapena, 2014; Tung. & Jordann, 2017). A unique feature of social media platforms is its ability to engage with a geographically dispersed network of individuals and gain their physical and intellectual support to solve societal problems (Saxton et al., 2013). For instance, Facebook and Twitter provide a robust platform to share social causes with crowds and thereby tap the audience's knowledge and cooperation to develop an innovative solution (Tung. & Jordann, 2015). Once a campaign is launched, its success is defined by the frequency of social interactions between SE and the crowd. Here the number of links and shares on social media sites provides a unique source to connect with a diverse community, popularize crowdsourcing campaigns and engage volunteers in a social project (Cappa et al., 2019). Tung and Jordann (2017) examined the positive influence of crowd participation in blogs, Facebook and Tweets on the success of crowdsourcing in SEs. O'Reilly and Battelle (2009) further added that collaborative work, through crowdsourcing platforms, such as YouTube, Facebook and Twitter, can create value that exceeds the value offered by individuals. Dissanayake et al. (2015) argued on the positive impact of social media platforms to build trustworthy relationships between social crowds and SE thus enhancing crowdsourcing. Gao et al. (2011) asserted that social media crowdsourcing campaigns go hand in hand

with community feedback on loopholes in existing services and help introduce incremental improvement in services. Rosen (2011) note that digital platforms, such as Web 2.0, can help control crowds of social workers, negotiate contracts and monitor performance in real-time.

In summary, social media platforms made crowdsourcing more practicable for a wider group of people and at a large scale with greatly enhanced speed. Advances in social media networks allow SEs to tap into the virtual social workforce that was not possible in the past. These platforms are more interactive, cheap, easy to use and greatly help obtain services, new ideas, the innovative solutions from a large yet vibrant group of society. Despite this, broad empirical evidence at the intersection of social media platforms and crowdsourcing is nascent.

3.4. Conceptual framework

From our review of the literature surrounding three clusters, this study provides an integrative framework (Fig.3) and associate propositions aiming to explore the emerging concept of SE from multidisciplinary perspectives, namely social collaboration, social marketing, crowdfunding, and crowdsourcing. The framework improves our understanding of four underlying mechanisms or capabilities (social collaboration, social marketing, crowdfunding, and crowdsourcing) through which various social media platforms influence SE performance.

The literature suggests that social media platforms improve social collaboration which in turn positively influence SE performance. Facebook, for example, facilitates coordination and engagement with like-minded and skillful volunteers from different locations, enhancing the delivery of solutions for social problems in remote areas (Kumar et al., 2017; Woodward, 2017). Instagram is used to share pictures and videos of services offered to the community, increasing interest of and connections with funders thereby augmenting the financial performance of SEs (Bandyopadhyay & Ray, 2019). Corradini et al. (2006) and Schalick (2006) further added that collaboration with groups via social

media is among the effective means for SEs to offer online education and training to the community. Moreover, LinkedIn is used to communicate across space, access updated knowledge and offer jobs to needful people (Ellison et al., 2007; Keane et al., 2017). Yearworth and White (2018) noted that social media-driven collaborative awareness campaigns enhance their performance in terms of community empowerment and citizenship behavior. Facebook and WhatsApp platforms enable real-time connection with a diverse audience, thereby quickly understanding their social problems such as poverty, healthcare, education and promptly delivering solutions (Kumar et al., 2017; Woodward, 2017). Given the discussion it is plausible to propose the following proposition:

P1: Social media platforms positively influence SE's performance through social collaboration.

The extant research also establishes that social media platforms could support social marketing, improving the functioning of SEs such as campaigns about healthcare issues, education and natural resource conservation, sustainability, employment, and others (Andreasen, 2003; Shafigullina & Palyakin, 2016). For instance, social media platforms, through social marketing, reduce the risk of HIV, childhood diarrhea and water sanitization for the marginalized community (Lefebvre, 2011). SEs in the tourism industry employ social media platforms for social marketing to promote ecotourism in Africa (Chirozva, 2015). Masiero and Ravishankar (2019) noted that SEs in India use social marketing through social media to run a campaign of microloans for vulnerable members of society. Kao and Luarn (2020) argued that the application of social media platforms is a superior marketing approach for social innovation. Lipparini and Phillips (2021) underlined that SEs are increasingly using social media to support social projects aiming to improve healthcare services, school education, and the labour market. Drawing upon the past scholarship, we posit that:

P2: Social media platforms positively influence SE's performance through social marking.

Social media platforms have also revolutionized the way SEs undertake crowdfunding campaigns (Mollick, 2014; Presenza et al., 2019). Social media platforms, such as Facebook, LinkedIn, Instagram, Twitter, YouTube, Blogs, enable SEs to approach masses of people and raise funds for social causes (Borst et al., 2018; Palmer & Verhoeven, 2016). Borst et al. (2018) underlined that engagement through social media provides quick conversation and information richness leading to the crowdfunding success of SEs. For example, Facebook can be used by SEs to create a crowdfunding page and involve the entire community around it (Lukkarinen et al., 2016). Considering the significance of Facebook, Thies et al. (2014) added that the success of crowdfunding depends on the number of likes and shares on Facebook. Studies have also argued a positive influence of Twitter on crowdfunding thereby improving in SEs' performance towards fund collection (Hughes et al., 2012; Kao & Luarn, 2020). Building upon the literature, we propose the following proposition at the intersection of social media platforms and SEs performance:

P3: Social media platforms positively influence SE's performance through crowdfunding.

Social media platforms appeared a key lever to augment crowdsourcing activities of SEs - soliciting contributions from a crowd or outsourcing an activity to a large group of people for social service, needs and new societal problems (Bakici, 2020). SEs, for instance, harness Facebook and Twitter to empower and facilitate crowdsourcing by reaching a crowd of volunteers in a fast, cheap, and efficient way (Paniagua & Sapena, 2014; Tung. & Jordann, 2017). Social media platforms support SEs work through crowdsourcing - engage with a geographically dispersed network of individuals and gain their physical and intellectual support to solve societal problems (Saxton et al., 2013). Facebook, Twitter, Instagram, for example, provide a robust platform to share social causes with crowds and thereby tap the audience's knowledge and cooperation to develop an innovative solution (Tung. & Jordann, 2015). Tung and Jordann (2017) examined the positive influence of crowd participation in blogs, Facebook,

and Twitter on the success of crowdsourcing in SEs. YouTube, Facebook, and Twitter can create value that exceeds the value offered by individuals (O'Reilly & Battelle, 2009). Gao et al. (2011) asserted that social media crowdsourcing campaigns go hand in hand with community feedback on loopholes in existing services and help introduce incremental improvement in services offered by SEs. Dissanayake et al. (2015) argued on the positive impact of social media platforms to build trustworthy relationships between social crowds and SE in delivering solutions for diverse societal problems. Given the discussion, it is plausible to suggest the following proposition:

P4. Social media platforms positively influence SE's performance through crowdfunding.

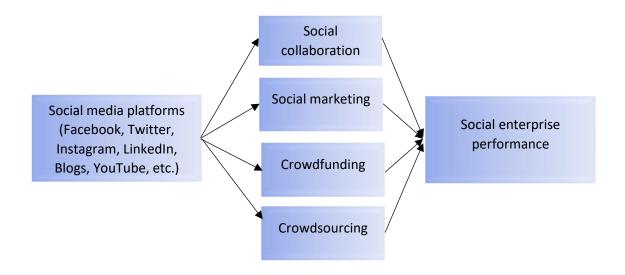


Fig.3. Conceptual framework on social media platforms and SE performance

3.1.4 Countries' contribution and co-authorship

In response to the second research question, this section offers analysis on countries' contribution and co-authorship which is an effective way to uncover which countries are more productive (in terms of the amount of research in the area) and what cooperative networks exist among various countries

across the globe. The holistic understanding of divergent social problems and solutions by SEs using social media platforms would need multiple perspectives involving various country/regional contexts. This has driven our attention to the evaluation of the share of various countries and their pattern of collaboration and country contexts of past scholarship, thereby recognizing the space for future studies to understand holistically this promising research topic.

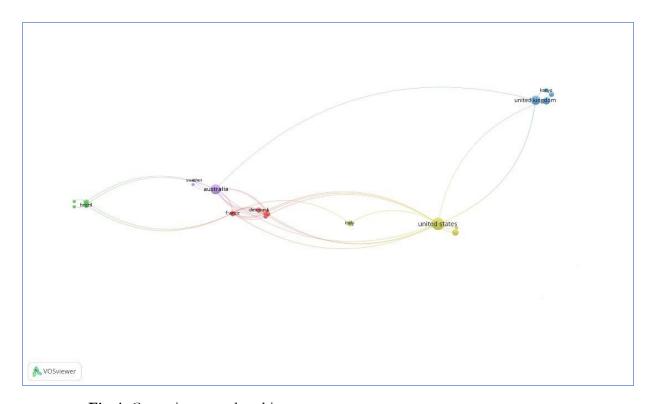


Fig.4. Countries co-authorship pattern

Our analysis revealed that 130 articles were published by researchers from 41 countries. The countries with little to no contributions and negligible co-authorship with other countries are automatically excluded by the software (Ali et al., 2021). The analysis produced five major clusters (Fig.4). The size of a circle or node shows the number of publications, and the distance between two countries shows the level of co-authorship (van Eck & Waltman, 2009). The three major nodes represent the United Kingdom (blue colour), USA (yellow colour), and Australia (violet colour) being major research contributors. Two small nodes represent France, Denmark (orange) and Brazil (green colour), being

relatively low research contributors on the topic. In terms of countries' co-authorship, it appears that researchers from the UK and USA have more mutual collaboration, whereas researchers from Australia seem more connected to France, Sweden, Germany, and Brazil.

Overall, these findings show somewhat geographical silos or colonial patterns of current research work on social media platforms and SE. Given the globalization, enhanced connectivity, and rising travel among developing and developed economies, the social issues of developing countries may have domino effects in the developed world. Visible examples include the proliferation of viruses (HIVE, Covid-19), lack of quality education, unemployment, and rising social crimes. Such social perils need collaborative efforts to be addressed globally. In this outlook, we highlight the need for more research collaboration from the USA, the UK, Australia, Europe with Asian and African countries, which are more exposed to divergent social and economic challenges.

4. Descriptive analysis

4.1 Methodological approaches

The review of existing research methods could improve researchers' understanding of current research methods applied and opportunities for further research, contributing to the methodological development of a research area.

The content analysis of 130 articles (Table 4) revealed that the past research employed three main methods to investigate the relationship between digital platforms and the performance of SEs. These methods include *Qualitative with mostly case study approach*, *Quantitative methods encompassing survey-based single method, mixed methods, data mining, analytical modeling, and conceptual framework*.

Table 4. Review of methodological approaches

Methodological approaches Art	ticles Au	ıthor
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Primecz (2021); Ridley-Duff and Bull (2021); Qualitative 64 (49%) (Case studies, interviews) Conn et al. (2021); Rombe (2020); Irfan and Salam (2020); Bhagwat and Jijina (2020); Zulli et al. (2020); Matzembacher et al. (2020); Noor et al. (2020); Cheung et al. (2019); Wahyono E. et al. (2019); Abedin et al. (2019); Gao et al. (2018); Masiero and Ravishankar (2019); (Lin & Huang, 2018); Bergamini et al. (2017); Kumar et al. (2017); Zebryte and Jorquera (2017); Shah (2017); Forstner and Nedbal (2017); Havas et al. (2017); Woodward (2017); Krige and Sutherland (2016); Huang and Cox (2016); Kavoura and Andersson (2016); Pettersen (2020); Banhatti (2016); Zhang (2016); Purtle and Roman (2015); Maamar et al. (2015); Lin et al. (2015); Chirozva (2015); Haron and Mara (2015); Hsu and Jiang (2015); Singh Singh et al. (2015); Mukhebi and Kundu (2014); Baka (2014); Gupta (2014); Tarafdar et al. (2013); Lefebvre (2013); Liu (2013); Estapé-Dubreuil and Torreguitart-Mirada (2013); Franz et al. (2012); Van den Broek et al. (2012); Kayingo (2012); Madill and Ziegler (2012); Tse et al. (2012); Fish (2011); Lefebvre (2011); Rosen (2011); Boje and (2010); (Kennedy, 2010);(Martin Novicevic, 2010); (Roberts, 2010); Amine and Staub (2009); Thackeray et al. (2008); Mair and Schoen (2007); Ellison et al. (2007); Rangaswamy (2006); Corradini et al. (2006); Andreasen (2003); Andreasen (2002); Bach and Stark (2002); McKenzie-Mohr (2000). 41 (32%) Quantitative Survey-based single methodology Bakici (2020); Kročil et al. (2020); Troise et al. 6 (2020). De Bernardi et al. (2019); Martin et al. (2013).Mixed methods 3 Calvo et al. (2020); Pettersen (2016); Aruch et al. (2014).Data mining 26 Bisbee et al. (2020); Kao and Luarn (2020); (Analysis of data from social Langley et al. (2020); Popov et al. (2020); Xiao et networks) al. (2020); Bandyopadhyay and Ray (2019); Cappa et al. (2019); Presenza et al. (2019); Waghid (2019); (Laurell et al., 2019); Popkova and Sergi (2019); Best et al. (2018); Borst et al. (2018); Lee and Jung (2018); Reid et al. (2018); Keane et al. (2017);

Christopher Michael Homan et al. (2017); C. M.

		Homan et al. (2017); Salim Saji and Ellingstad (2016); Huang and Cox (2016); Lukkarinen et al. (2016); Dissanayake et al. (2015); Mollick (2014); Amtzis (2014); Wu et al. (2013); Saxton et al. (2013).
Analytical models	6	Lipparini and Phillips (2021); Saunders and Truong (2019); Trevathan and Johnstone (2018); Yearworth and White (2018); Thies et al. (2014); Bhatti et al. (2013).
Conceptual/review framework	25(19%)	Tortia et al. (2020); Sparviero (2020); Judita (2019); Tay et al. (2018); Tomita (2018); Jumin et al. (2017); Tung. and Jordann (2017); Partzsch (2017); Olberding (2016); Kim and Kim (2016); Shafigullina and Palyakin (2016); Tung. and Jordann (2015); Buregio et al. (2015); Doherty et al. (2014); Arora and Predmore (2013); Oprica (2013); Ratten (2013); Holt (2012); Bacq and Janssen (2011); Fish et al. (2011); Gao et al. (2011); Datta and Jessup (2009); Broadbent and Papadopoulos (2009); Schalick (2006); Neiger et al. (2003).

Overall, qualitative case studies have the highest contribution with around 49% (64 of 130) share in sampled articles. Most of these studies focus on the single case in a specific country's context and hence present geographical limitations — little bases for generalization of findings to a broad population. Also, qualitative case studies have limitations in terms of statistical generalization due to the limited sample size. Quantitative studies stand third (41/130) in terms of percentage of contributions (31.5%). However, a vast majority of the quantitative studies (26 articles) builds upon data mining. Furthermore, survey-based research is considered an effective method allowing researchers to collect data from a larger set of the population with minimum time and cost. However, we could find only 6 or 4.6 % survey-based quantitative studies in our sampled articles. Likewise, the portion of solution methods (simulation or modelling) is just 4.6%, calling for more research on such methods. Surprisingly, we could find only 2.3% (3 out of 130) studies on the mixed-methods approach.

Given the nascency of the topic, conceptual studies received a substantial (19%) share in research. These studies provide a good ground for the conceptualization of key relationships and constructs; however, empirical validation of these conceptualizations is needed.

4.2 Evolution of research over time

This section presents the evolution pattern of the extant literature in four different periods: 2000-2004, 2005-2009, 2010-2014 and 2015-2021. As evident in Fig.5, the subject of social media platforms in SE is relatively new. From 2000 to 2004, we could find only five articles mainly focusing on social collaboration (1 article) and social marketing (4 articles).

A fair growth in the literature can be seen between 2005 and 2009 with 10 publications on social collaboration and social marketing. Interestingly, compared to the previous period (2000-2004), in this period the amount of research on social collaboration was greater (6 articles) than social marketing. From 2010 to 2014, a significant increase in research on the topic is evident. In this period, research on crowdfunding and crowdsourcing emerged in addition to social collaboration and social marketing. A sharp increase in research is witnessed between 2015 and 2021 with 80 publications on four major concepts: social collaboration (39 articles), social marketing (18 articles), crowdfunding (14 articles), and crowdsourcing (9 articles).

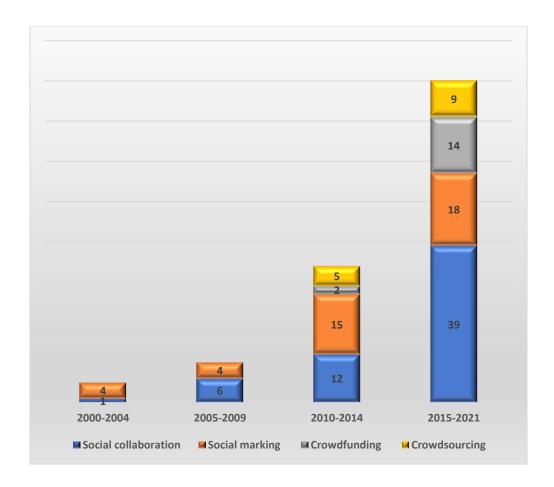


Fig.5. Evolution on research in the area

Overall, we observed that the topic of social collaboration received the highest attention in research with 58 articles published between 2000 and 2021. Social marketing research can be ranked second with 41 articles, from 2000 to 2021. Research on crowdfunding and crowdsourcing is relatively new – appeared around 2011. Encouragingly, the increase in the number of articles on all four themes in the past five or six years depicts a high acknowledgement and popularity of research on social media platforms and SE.

5. Discussion

The use of social media platforms in enhancing SEs' operations and performance witnessed considerable attention in recent times. As a result, growth in literature on the topic is evident across various subject areas such as business, management and accounting, environmental science, decision

science, engineering, arts, and humanities, among others. To consolidate the disjoined knowledge base, explore knowledge trajectories, key research clusters and opportunities for more fruitful future research, we applied a two-pronged approach – bibliometric analysis followed by systematic review (Donthu et al., 2021; Gölgeci et al., 2022). The combination of the two approaches helped our review not only to retrieve key research clusters in an objective and biased free manner but also to discuss the recent research trajectories and opportunities for further research in each cluster. That is, our approach blends the benefits of objectiveness (bibliometric analysis) and inclusiveness (systematic review), offering more reliable findings. The bibliometric analysis, with the co-occurrence function of VOSviewer, has automatically and objectively classified scattered literature into three major clusters/themes based on the association strength/similarities of keywords through the natural language processing algorithm. The first themes covered 'social collaboration and social marketing'. Social collaboration appeared as the most popular topic (44.61%) surrounding social media platforms and SEs' performance (Table 3). Social media platforms, such as Facebook and WhatsApp, facilitate real-time connection with a diverse audience, thereby quickly understanding their social problems such as poverty, healthcare, education and offering solutions (Kumar et al., 2017; Woodward, 2017). Instagram, on the other hand, appears like an incredible platform for sharing pictures and videos of staff to show what social workers are doing in the field or what kind of social services are available, thereby attracting volunteers. Online blogs offer an incredible platform to share meaningful stories and reports on social activities and instigate productive discussions between social workers and community members. With a share of 31.54% of articles, social marketing was found the second most popular topic at the nexus of social media platforms and SEs. Social media platforms are used by SEs for social marketing activities campaigns around healthcare, education and natural resource conservation, sustainability, and employment. For instance, SEs in the healthcare sector use social marketing campaigns about viruses, diarrhea, malnutrition, etc. (Reid et al. 2018; Madill and Ziegler

2012). The third important theme in our sample included crowdfunding, with 17 out of 130 (13.07%) articles underlining its significance at the intersection of social media platforms and SE. Social media platforms provide strong premises for crowdfunding campaigns and collecting donations from large community groups. Facebook, for example, provide a massively social medium with millions of daily users to create a crowdfunding page and attract donation from a diverse community of donors. Besides, a positive link between crowdfunding and Twitter has been noted (Hughes et al., 2012; Kao & Luarn, 2020). Social media platforms also appeared as a fast, cheap, and efficient way for crowdsourcing in SEs - soliciting outsourcing an activity to a large group of people for social service, needs and new societal problems. Through social media platforms -for instance Facebook, Instagram, Twitter- SEs can engage with a geographically dispersed network of individuals and gain their physical and intellectual support to solve societal problems (Saxton et al., 2013).

While social media platforms offer an array of benefits to SEs, our analysis of methods used by past studies uncovered that the research on the topic is yet at the embryonic stage. A major share of studies still accounts for qualitative and conceptual frameworks. Albeit survey-based research and solution models (modelling methods) could offer comprehensive and rigorous findings for informed decision-making, their share in the current literature remains negligible. Astoundingly, we could not find studies with longitudinal approaches, action research or experimental designs.

Our findings on co-authorship indicate geographical silos or colonial patterns of current research work on social media platforms and SEs, with major collaborations among the USA, the UK, Australia, Europe. Despite rising social issues in developing regions (Africa, Asia), little to no evidence of joint research between these regions and the developed world appeared. Overall, our synthesis of the literature shows that social media platforms can enormously improve SEs operations, such as collaboration with the community, social marketing, fundraising, finding volunteers, reaching out to

the diverse community, identifying, and solving various social issues. However, research on this promising topic is still at early stages of development.

5.1 Theoretical contributions and implications

Our review contributes to the theoretical development of research on social media platforms in SE in different ways. Firstly, we consolidate the dispersed literature and map varied research findings. Secondly, through our two-pronged analysis, we categorize the literature into three major research clusters: 'role of social media platforms in social collaboration and social marketing', 'crowdfunding', and 'crowdsourcing'. By reviewing the literature in each of the clusters, we do not only offer conceptual clarity on the topic, but also recognize future research avenues for scholarly progression in the area. Thirdly, our proposed conceptual framework (Fig.3) offers the opportunity to test the relationships among constructs and thereby add empirical findings to the existing body of knowledge in the field. The framework demonstrates that social media platforms could positively influence SE performance through four key capabilities (Fig.3). Thus, our framework offers a promising opportunity and starting point to prospective studies to integrate multidisciplinary knowledge towards Fourthly, as current research shows that some commercial innovative practices in SEs. entrepreneurship has been increasing transforming to fully automated digital technologies, also known as Industry 4.0 technologies, future research could focus on the impact of these technologies on business performance. Some examples of automated technologies include blockchain (Chen, 2018), big data analytics (Ranjan & Foropon, 2021), internet-of-things (Yu et al., 2017), artificial intelligence (Arslan et al., 2021; Chen & Lin, 2021), and cloud computing (Nambisan, 2017). Hence, future research could expand/adapt our framework to examine the role of these automated technologies alongside social media platforms to enhance SE's performance. For instance, unstructured or semistructured data generated by users on social media platforms can be processed into a more structured and cleaned big data set. Analysis of big data with computational intelligence (e.g., swarm intelligence, text mining, modeling sentiment analysis, social network analysis) could help understand patterns of problems, opinions of the community and make a more informed decision in SEs (Ghani et al., 2019). Furthermore, artificial intelligence with social could decode human communication and behaviors thereby predicting future actions through cognitive computing (Bechmann & Bowker, 2019). As such, future research in this direction is highly solicited to reap the full benefits of social media platforms for SEs. Recent research highlighted the significance of automated technologies in maintaining the performance of commercial enterprises amid COVID-19 crises (Papadopoulos et al., 2020). Drawing upon the knowledge on commercial enterprise, our framework can be advanced to understand the role of automated technologies to deal with COVID-19 induced disruptions and rebound performance of SEs.

5.2. Implications for practice

From a practical standpoint, our review gathers a bunch of past research findings and help improve the understanding of social entrepreneurs and policymakers about the role of different social media platforms in augmenting SE's performance. This, in turn, would help transform the traditional models of SEs into more innovative ones. While SEs are already involved in social marketing, crowdfunding, and crowdsourcing for a long time now, the information on the useability of social media platforms can help them enormously improve these practices. More specifically, we draw the attention of SEs' managers to social media platforms as relatively cheaper and convenient sources to achieve the pertinent goals of social collaboration, social marketing, crowdfunding, and crowdsourcing. Social media platforms such as Facebook, Instagram, WhatsApp are today massively used by diverse community groups. SEs can exploit these platforms to develop social networks and integration with vulnerable people in society, understanding their social needs and providing solutions at minimum

cost and time. With around 3 billion active users, we believe that Facebook offers a promising platform to SEs' executives or social workers to raise funds from donors, thereby delivering greater value to the disadvantaged segment of a population. Additionally, social media platforms like Twitter, blogs, Facebook, and Snapchat could be used by the SEs' management to educate the community about fatal diseases (e.g., pandemics, HIV), women's rights, domestic violence, conservation of the natural environment (carbon emission, food waste, deforestation), and resources (water and energy). While tapping into volunteers with different skills has been a challenging task for SEs, social media platforms like Facebook and Instagram offers an incredible solution to this problem. SEs could create a Facebook page to advertise or promote the social causes and thereby employing volunteers. Furthermore, Instagram can be used to share pictures and videos of ongoing social problems and then grab the attention of like-minded volunteers. Such platforms also provide space for a feedback loop system allowing continuous improvement in SEs operations and productivity. Social media platforms appeared a key lever to augment the crowdsourcing activities of SEs. SEs can solicit support from a large group of people for social service. Specifically, Twitter and Facebook facilitate crowdsourcing activities by engaging with a geographically dispersed network of individuals and gaining their physical and intellectual support to solve societal problems. In a nutshell, SEs can re-invigorate their current business model and practices by carefully looking at the repertoire of benefits and value offered by social media platforms towards SE's performance.

5.3 Limitations and future research directions

In this paper, we set off to discuss the literature on the intersection of social media platforms and SE over the past decade. We undertook a study based on a bibliometric analysis followed by a systematic review. Our review suggested that social media platforms can enormously support collaboration/community engagement, social marketing, crowdfunding, and crowdsourcing in SE

(Abedin et al., 2019; Madill & Ziegler, 2012; Mollick, 2014; Paniagua & Sapena, 2014; Tung. & Jordann, 2017). Although SEs are increasingly driven to social media platforms, our understanding of how the implementation of different social media platforms influences entrepreneurial ventures and what are the potential intervening factors is yet limited.

While scanning through the literature we could not find a universal definition of SE or social enterprise, our findings are in line with the previous literature review on the definition of SE (Bacq & Janssen, 2011). Given this limitation, SE can prompt different meanings for different people. The lack of a unified definition could also create heterogeneity in a unit of analysis and thereby tension in relevant research implications. We also found confusion in the literature on whether SEs are merely non-for-profit social entities or have both non-for-profit and for-profit goals (Dacin et al., 2011; Folmer et al., 2018). Furthermore, the co-citation pattern of sources or outlets suggests that research on social media and SE has vast coverage with a wide variety of sources. We believe this is a good sign for this important yet emerging area of research. Finally, our year-wise analysis of publications revealed that the literature on social media in SE emerged around 2002. From 2002 to 2010, the pace of research was slow with an uneven pattern of contributions. The research realized considerable momentum from 2011 to 2015. Encouragingly, a sharp increase in literature is witnessed in the past five years, demonstrating a surge in the interest of researchers in this promising field. Since the literature on the topic is still in its infancy, we were constraint to include literature from academically non-ranked sources (conference papers, book chapters, research reports etc.). Nonetheless, we believe that our efforts in integrating scattered literature into main research themes provide a strong premise for more impactful and high-quality research on an interesting yet underexplored research domain.

Therefore, the following future research directions are proposed:

- (i) Large-scale empirical research that investigates the nexus of social media with SE and their underlying mechanisms. Currently, there is a lack of balance in current studies on different social media tools. We, thus, suggest further research in this direction to enrich the knowledge base of the field which is necessary to address growing challenges associated with a social issue.
- (ii) Research that discusses the role of social media platforms in supporting social marketing and the significance of the latter to SE. The literature increasingly underlines the significance of social marketing in SE through the application of marketing mix principles (Andreasen, 2002; Madill & Ziegler, 2012) and further illuminates the pivotal role of social media platforms in supporting social marketing (Irfan & Salam, 2020). However, research that undertakes holistic and empirically driven models on the influence of various platforms on social marketing is yet missing.
- (iii) Research on the potential challenges and/or impediments intertwined in the use of social media in social marketing of social causes. As impediments are often inter-connected and an impediment may have a domino effect when it materialises, future research can rank various impediments and explore which one is the most influential and needs to be addressed. For instance, we highlight the need for comprehensive research on social media platforms, crowdfunding, and crowdsourcing in SEs.
- (iv) Research focusing on collaboration between developed and developing or under-developed countries from Asia and Africa. Our findings establish that major research in the area has been predominantly conducted by the USA, the UK, and Australia with some European countries such as France, Denmark, and Sweden. These geographical silos can undermine the diversity and development in the literature on SE. We suggest a holistic view of SE research through strong collaboration between developed and developing economies. This approach can help universally map social issues and develop solutions that are more reliable and applicable worldwide.

- (v) From a methodological point of view, it is somewhat surprising that existing research in the area is dominated by conceptual frameworks and case studies together their share is about 63%. The relative share of survey-based approach, simulation/solution model and mixed methods research is very low. We, therefore, suggest future research adopting these methods to ensure methodological development of the area. A survey-based study could enhance the generalizability of findings. Mixed-methods research supports triangulation of analysis and thereby ensures rigour and generalizability of findings. Simulation or mathematical modeling could help in devising solutions, statistically and quantitatively. Future research can also use action research to examine transformative changes of intervention through action, evaluation, and critical reflection.
- (vi) While a theory grounded study advances our understanding of the phenomenon in a more logical and structured manner, a vast majority of studies (97%) on the topic of SE are still atheoretical. Our review could identify only four theory-based studies, including: grounded theory (Zulli et al., 2020); dynamic capability theory (Lin et al., 2015); social movement theory and SE theory (Van den Broek et al., 2012); and Gidden's Structuration theory (Pettersen, 2016). To enrich the theoretical knowledge of the area, we suggest more theory grounded studies. Several promising theories, which have been successfully employed to study commercial entrepreneurship, can also be extended to investigate SEs, for example, social capital theory (Portes, 1998; Troise et al., 2020), social network theory (Sigfusson & Chetty, 2013), dynamic capability theory (Teece, 1997) and resource-based view (Barney et al., 2001; Kellermanns et al., 2016). For example, dynamic capabilities to integrate, build and reconfigure internal competence to address changes in the business environment (Teece, 1997). To this end, dynamic capability theory could provide useful insights on if and how social media platforms help create dynamic capabilities and how such capabilities influence SE's competitiveness. Likewise, resource-based theory can be used to help understand whether social media platforms can serve as a

source of value to secure competitive advantage for a SE. Social capital theory can be used to examine how and what kind of social capital (e.g., cognitive, relational, and structural) can be generated through social media platforms to improve SE's performance.

Further testing of our suggestions may build new knowledge and robust theories (Corley and Gioia, 2011). We, hence, believe that we have provided food for thought for both academics and practitioners that would like to explore further the impact of social media platforms on SE.

6. Conclusion

This review was set out to map the literature at the nexus of social media platforms and SE's performance and suggest avenues for insightful future research. Combining bibliometric analysis with a systematic literature review, we recognize that current research on social media platforms and SE's performance falls into three key clusters: 'social media, social collaboration, and social marketing', 'social media and crowdfunding, and 'social media and crowdsourcing'. The review of the literature around each cluster led to a conceptual framework and four propositions at the intersection of social media platforms, various social entrepreneurial practices, and their influence on social enterprise performance. Drawing upon literature, we argue that social collaboration, social marketing, crowdfunding, and crowdsourcing mediate the impact of social media platforms on SE's performance. Our analysis infers that, despite several contributions, the research on the topic is still dominated by qualitatively and conceptual studies. A visible gap for studies, including survey-based, mathematical/simulation modelling, longitudinal studies, action research, experimental designs, has been recorded. Our review also underlines most research on the topic is clustered around the USA, the UK, Europe, and Australia, leaving a significant gap for research in developing or underdeveloped regions (Africa and Asia), which are more exposed to societal problems. We argue that it is timely to

re-imagine the SEs operations by reaping the full potential of social media platforms in tackling formidable social issues in a fast and cheaper way.

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