

Technology in Social Entrepreneurship Studies: A Bibliometric Analysis (1990-2019)

Angela Dettori¹ & Michela Floris¹

¹ Department of Economics and Business, University of Cagliari, Cagliari, Italy

Correspondence: Angela Dettori, Department of Economics and Business, University of Cagliari, Via Sant'Ignazio 74, 09123 - Cagliari, Italy. E-mail: angela.dettori@unica.it

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Abstract

This paper presents a bibliometric analysis of the academic studies focused on technology in social entrepreneurship, published from 1990 to 2019 and indexed in WoS database. Quantitative evidence supports the idea that this topic has gained increasing attention of scholars, especially recently. However, there are rooms for further studies oriented to analyse social enterprises' ability to adopt technologies to be sustainable and competitive in a hyper-turbulent market in which technology represents a key component. The descriptive statistical analysis identifies the most prolific authors, journals, countries and institutions that have contributed to the development of this topic; and the citation trends reveal a significant consolidation of this field of research that reflects the development of other theories regarding the role that technology has in social entrepreneurship.

Keywords: technology, social entrepreneurship, bibliometric analysis

1. Introduction

A growing body of literature has recently developed around social entrepreneurship and social enterprise concepts (Chell, Nicolopoulou, & Karatas-Ozkan, 2010; Rawhouser, Cummings, & Newbert, 2019; Shaw & de Bruin, 2013). This increasing scholarly attention would seem to suggest that social entrepreneurship is of considerable interest both for the fascinating aspect of the business model (Ashraf, Razzaque, Liaw, Ray, & Hasan, 2019), and for its mission (Muñoz & Kimmitt, 2019) and goals (Yin & Chen, 2019). More in detail, the importance of social entrepreneurship roots on its ability to create social value and social development, also in terms of wealth and job creation (Ana Maria Peredo & McLean, 2006; Ana María Peredo, McLean, & Tremblay, 2019), and on its desire "to trigger a change or social transformation" (Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016, p. 1651). Social entrepreneurship focuses on social value and collective needs rather than on personal interests and expectations (Noruzi, Westover, & Rahimi, 2010), developing its activities on path-break changes or innovation (Munshi, 2010), by retrieving, mobilizing, and combining resources to create products and/or services (Defourny & Nyssens, 2010) to solve social problems and satisfy social needs (Yunus, 2007). To fulfil this mission, social entrepreneurs conceive innovative use and combination of resources (Carragher, Welsh, & Svilokos, 2016) that represent an important source for technology enhancement (Mulloth, Kickul, & Gundry, 2016). Often, social entrepreneurship is an attractive outlet for technology companies and for compassionate researchers that share the goal of this kind of entrepreneurship and aim to collaborate integrating the scientific and the manufacturing capacity (Seelos & Mair, 2005). This is due to social entrepreneurship's needs to create and develop new products, service or market segments, leveraging on innovation and technologies, achieving business goals and addressing social challenges (Wood, 2010). Developing and adopting technologies that yield a competitive advantage and enhance the quality of life becomes a must for social entrepreneurs (Wood, 2010).

Notwithstanding the undoubted practical relevance that technology has in social entrepreneurship and although there is a general scholarly agreement about the relevance of innovation and technology to enhance and improve business performance, these concepts in the field of social entrepreneurship remain still theoretically under-researched (Mulgan, Tucker, Ali, & Sanders, 2007; Phillips, Lee, Ghobadian, O'Regan, & James, 2015). Given the statements above, inspired by the curiosity to underscore whether a new stream of research is being born (Alvesson & Sandberg, 2011), and following the call of Abu-Saifan (2012) to propose theoretical studies in the social entrepreneurship field, this work conducts a bibliometric analysis of academic articles that reference

technology in examinations of social entrepreneurship to orient scholars to know which journals and authors to consult when studying the topic. To accomplish this analysis, the first section of this paper chapter is devoted to the presentation of the literature background underlying this topic, specifically social entrepreneurship, and technology in social entrepreneurship. The second and the third sections describe the method, data and results of the analysis. Finally, the implications and limitations of the bibliometric investigation that is performed in this study are discussed.

2. Theoretical Background

2.1 Social Entrepreneurship: Concept, Mission and Goals

Social entrepreneurship is a relatively new topic, obtaining researchers' attention because of social relevance and the boom of this kind of business. Despite the numerous definitions that turn around the concept of entrepreneurship, what concerns social entrepreneurship is still in progress and determines the proliferation of concepts, definitions and contents sometimes even contrasting with each other (Rey-Martí et al., 2016). Austin, Stevenson and Wei-Skillern (2006) consider social entrepreneurship a section of the entrepreneurship body of literature, with several specificities and commonalities concerning other kinds of entrepreneurship. In line with this perspective, other scholars (Dey, Steyaert, & Hjorth, 2007) are not convinced about the legitimacy of social entrepreneurship as an autonomous domain of inquiry because of the rhetoric that turns around the phenomenon and that concur in considering that as unequivocally positive. Nevertheless, the increasing trend of academic studies suggests that social entrepreneurship is representing a new line of research. Literature, in this sense, has primarily analysed the phenomenon on the individual level, focusing on social entrepreneurs and their intentions (Peredo & McLean, 2006), their values and goals (Stevens, Moray, & Bruneel, 2015), their mission (Dacin, Dacin, & Tracey, 2011), and their social impact (Rawhouser et al., 2019) at the organizational level, scholars define social entrepreneurship as the means that entrepreneurs have to create a society founded on justice and social wellbeing (Zadek & Thake, 1997), to reduce poverty and promote social inclusion (Peredo & McLean, 2006), to combine resources with innovativeness to incentive social change (Carraher et al., 2016), and to promote a source of sustainable competitive advantage for creating social value (Mort, Weerawardena, Sargeant, & Bennett, 2015). Moreover, some authors focused on the mission of social entrepreneurship undervaluing the importance of economic outcomes (Peredo & McLean, 2006), while others underline that economic outcomes are part of the mission of social entrepreneurship (Zahra & Wright, 2016), even if hierarchically is not the primary intention (Dacin et al., 2011; Stevens, Moray, Bruneel, & Clarysse, 2015). This study disentangles these intricacies, building on the definition proposed by Alford, Brown and Letts (2004) that consider social entrepreneurship as the process that creates new solutions for social problems, activating abilities, resources and networks to promote a sustainable social change. This allows considering social entrepreneurship as a multilevel and multistage phenomenon (Saebi, Foss, & Linder, 2019) that affects individuals and society by embodying social and business outcomes, crucial for the long-term survival of social enterprises. This concept appears to represent an important point of departure from classical entrepreneurship and the prevalent non-profit and for-profit enterprises.

2.2 Technology: Concept and Relevance

Technology is a critical component of firms' success, particularly in the current era, which is characterised by a hypercompetitive and turbulent business environment (Dessi, Floris, & Sanna, 2014). Since the 1980s, technology has received increasing attention from academics and practitioners, and scholars have pointed out several definitions, concepts, procedures and considerations (Liao, 2005). Pennings (1975) argue that technology is the means that organizations use to convert inputs into output. This umbrella definition includes several aspects and kinds of technology that, as argued by Brey (2010), are very difficult to define and circumscribe. Valti (2009, p. 6) defines technology as "a system created by humans that uses knowledge and organization to produce objects and techniques for attaining specific goals". Technology, in this view, shows the ability to perform specific function, purpose and contribute to attaining a well-defined goal (Carroll, 2017), and comprehends information technology (Turban, 2008), digital technology (Giones & Brem, 2017), green technology (Chen, Luo, Sato, Wakatsuki, & Masunaga, 2009; Chen, 2013), and other kinds of technology that are linked to business needs (Phaal, Farrukh, & Probert, 2001). In fact, the core characteristic of technology is its applicability to problem-solving. In this paper, innovation is considered as a specific type of knowledge that may also be embodied within a physical artefact, such as a machine, component, system or product (Phaal et al., 2001). It explains its relevance in its practical feasibility to resolve business needs and traits new business perspectives.

2.3 Technology in Social Entrepreneurship

Social entrepreneurship refers to the ability to creating innovative solutions for social concerns, mobilizing resources to pursue social and economic goals. This means that social entrepreneur is an important source of creativity and innovation (Bacq, Ofstein, Kickul, & Gundry, 2015), and social entrepreneurship encompasses an ample range of innovative praxes in social and business domains (Nicholls, 2008), by stimulating the conception and the adoption of new technologies (Mulloth et al., 2016). In addition, social entrepreneurship often represents a push for other firms to develop new technologies and promote social innovations (Surie, 2017). This means that this kind of entrepreneurship promotes technological advancement in order to endorse economic growth, progress and social well-being, and to be competitive in the market (Wilson & Post, 2013), especially in the current globalized world (Zahra, Rawhouser, Bhawe, Neubaum, & Hayton, 2008). Moreover, because of the mission of social entrepreneurship, an increasing attention is oriented to green technologies that involve in energy-saving, waste recycling, green product design, pollution prevention and reduction and on environmental protection (Y. S. Chen, 2013), in line with the suggestions of Bruntland report (1987). In fact, social entrepreneurship acts as a change agent, transforming socially responsible principles into business and commercial ideas (Schwab, 2008) through technologies and innovations to identify both new business opportunities to profit and addressing social challenges (Hadad & Cantaragiu, 2017).

Given the statements above, notwithstanding scholars are generally agreed about the relevance of technology to enhance and improve business performance, this concept in the field of social entrepreneurship remains relatively under researched (Mulgan et al., 2007; Phillips et al., 2015), and it deserves more attention to contribute to a social entrepreneurship theory building. For this reason and to follow the call of Abu-Saifan (2012) which argues that as social entrepreneurship has flourished at the practical level, it lacks theoretical level, this research tries to link social entrepreneurship as a new discipline and research field to technology and innovation theories. To do this, this paper carries out a bibliometric analysis to analyze academic studies that jointly consider technology and social entrepreneurship to understand whether a new stream of research is being born and of addressing interested scholars towards specific authors, journals and articles.

3. Methodology

Bibliometric exploration consists of applying a statistical method to assess both qualitative and quantitative considerations through the investigation of publications in a specific field, detecting tendencies within a discipline (De Bakker, Groenewegen, & Den Hond, 2005). Moreover, this analysis, already used in social entrepreneurship studies (Rey-Martí et al., 2016), provides interesting information for scholars to investigate academic publications (Duque Oliva, Cervera Taulet, & Rodríguez Romero, 2006), to evaluate the influence of journals (Baumgartner & Pieters, 2003), to consider the scientific impact (Van Dalen & Henkens, 2001), to obtain the intellectual structure of a field (Marku, Castriotta, & Di Guardo, 2017), and to observe a specific field evolution (Hung, 2012). In addition, as underlined by De Bakker et al. (2005), this analysis represents an innovation with reference to traditional literature reviews and appears particularly suitable for studying technology in social entrepreneurship studies. To do this, this work retrieved academic articles from Web of Science (WoS) database, as one of the largest databases that include scientific documents from different disciplines. This span of time was 1990-2019 and was chosen because, during these twenty years, an increased number of studies have examined this specific topic. This increased interest is particularly pronounced from 1996 to 2019. To achieve a broader perspective, we extended our retrieval of citations to the ten years before 1990, utilising the keyword combinations detailed below. First, we selected all of the articles that were included and indexed in the WoS database that contained the following keywords: “Social Entrepreneurship” OR “Social Entrepreneur” OR Social Enterprise”. We obtained 3,064 academic articles from this search. Second, we selected all of the academic articles that contained the word “Technology”. Table 1 highlights the top 50 key words resulting from search outcomes.

This search retrieved more than 1,221,286 articles. We then combined the two searches and identified 180 documents that we considered without further refinements. The bibliometric tool search was performed in autumn 2019. From the retrieved list of documents, the different investigative analysis was generated. Various rankings that relate to the publication quantities, citations, countries, institutions, authors and core journals of the articles in the database are presented in the following sections.

Table 1. The top 50 keywords resulting from search outcomes

Keywords
Social Entrepreneurship - Social Entrepreneur - Social Enterprise -Technology - Social Venture - Community Enterprise - Strategic Management Research - Economic Development - Business - Corporate Social Responsibility - Governance - Cognitive Constructivism - Enterprise - Entrepreneurship - Social Constructionism - Social Innovation; Philanthropy; Entrepreneurial Identity; Environmental Entrepreneurship; Literature Review - Community-Based Enterprise - Social Capital - Business Model - Innovation - Performance - Management - Social Change - Small Firms - Positive Theory - Motivation - Paradox - Sustainability - Development - Base of the Pyramid - Corporate Community Relations - Poverty - Waste - Value Creation - Market Failures - Producers - Business and Society - Hybrid Organizations - Mission - Work - Image - Identification - Paradox - Behaviours - Health – Social Goals

4. Results and Discussion

A total of 180 articles were selected for the analysis. Table 2 shows the number of papers that were published between 1990 and 2019 that simultaneously contained at least one of the aforementioned keywords. Since no academic articles were found between 1990 and 1996, in the following tables and figures it is omitted to indicate that time period.

Table 2. The publication years for articles in the WoS database between 1990 and 2019 that examine technology in social entrepreneurship

Publication Years	Article Count	%
2019	22	12.2
2018	23	12.8
2017	24	13.3
2016	29	16.1
2015	19	10.5
2014	14	7.8
2013	13	7.2
2012	12	6.7
2011	5	2.7
2010	10	5.5
2009	1	0.6
2008	1	0.6
2007	2	1.1
2006	2	1.1
2003	1	0.6
2002	1	0.6
1996	1	0.6
1990/1995	0	0

Figure 1 reveals that between 1996 and 2019, an upward trend has been observed with respect to the number of publications that address technology in social entrepreneurship. In particular, this number has risen considerably during the last eight years of the examined time period. Table 1 indicates that since 2015, there has been considerable interest in this topic from scholars, and the number of publications regarding this topic has increased steadily from 2012 to the present day. Notably, this number of publications has almost doubled between 2012 and 2019. The increasing number of articles about technological aspects within social entrepreneurship studies demonstrates the existence of a strong academic interest on this subject (the 2019 data are partial, but the trend appears to demonstrate that this growth is assured).

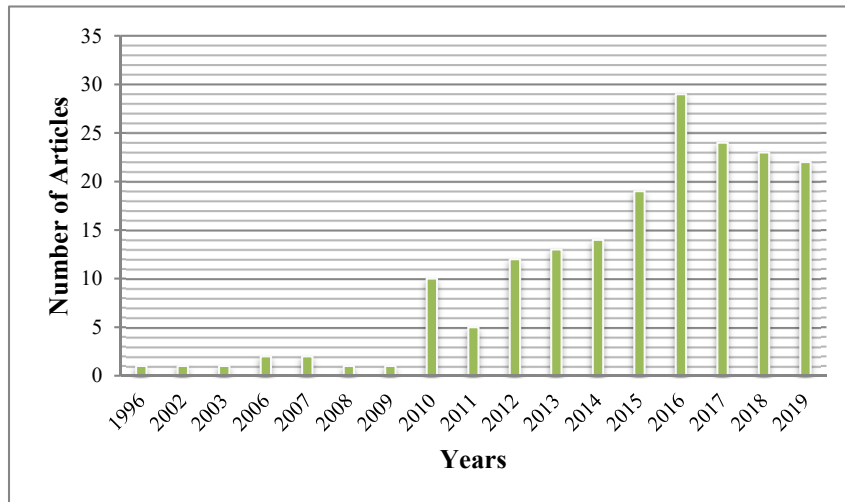


Figure 1. The number of articles in the WoS database between 1990 and 2019 that address technology in family businesses, organised by publication year

Perhaps, a more interesting finding than the number of publications regarding technology in social entrepreneurship is the number of citations by year of these publications, which is depicted in figure 2. These citation trends reveal the rapid development of this topic, particularly since 2014; a marked increase in citations has particularly occurred during the previous two years (2017 and 2018). The enlarged number of citations regarding this topic reveals that scholarly interest is constantly growing, and this suggests that the argument is generating a niche of interest and may engender a new field in the study of social entrepreneurship.

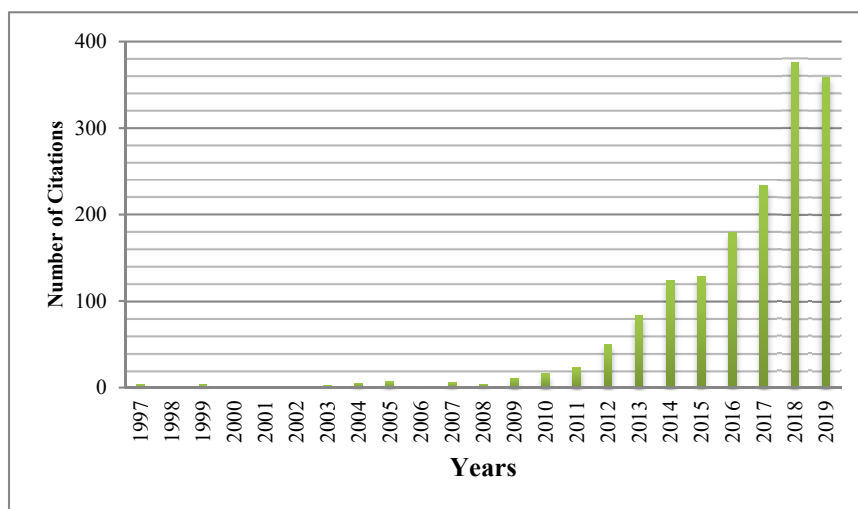


Figure 2. The number of citations between 1997 and 2019 for publications in the WoS database that address technology in social entrepreneurship

Figure 3 compares and summarizes these two trends, which allows us to observe a common trajectory. Unsurprisingly, the trend is more evident for the number of citations than for the number of publications; these trends reveal that the interest of scholars with respect to the topic of technology in social entrepreneurship is increasing in its importance and relevance.

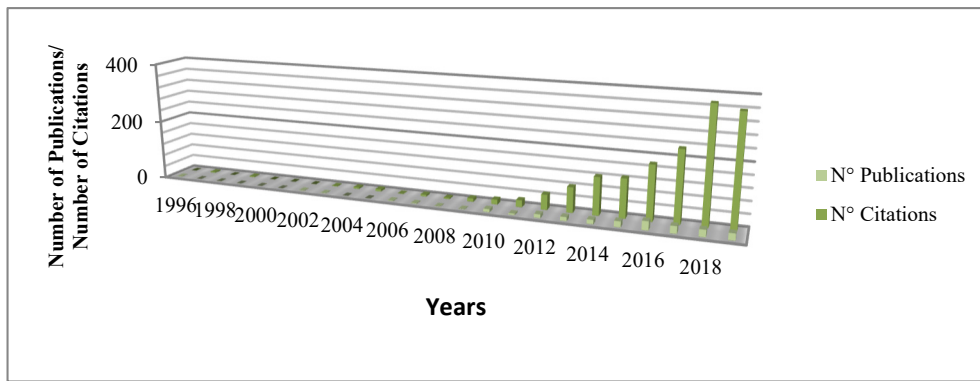


Figure 3. A year-by-year comparison of the trends for the number of publications regarding technology in social entrepreneurship and the number of citations of these publications between 1990 and 2019

Table 3 and Figure 4 depict the number of papers published on this topic in each country. The geographic distribution of scientific production is dominated by the United States of America, which contributed almost 32% of all of the relevant papers that were published during the twenty-three years that are examined in this study. Scholars are also produced high-impact original research in England, Australia, China, Canada, Netherlands, Scotland and Spain. Focusing on European countries, 69 articles were published, around 38% of the whole of articles assessed in this work.

The dominant position of the United States should be interpreted with caution because this may be at least partially related to the bias of the social science publications towards Anglo-Saxon countries. In fact, the U.S. produces nearly 60% of the research output across all of the social science outlets, either singularly or through scientific cooperation (Van Leeuwen, 2006). Moreover, the marked differences among countries with respect to the number of published papers about technology in social entrepreneurship could also be explained in part by differences in population, business models, enterprise size and economic scenario.

Table 3. Rankings of the number of publications between 1990 and 2019 that address technology in social entrepreneurship organised by country/territory.

Country or Territory	Article Count	%
Usa	36	20.0
England	27	15.0
Australia	12	6.7
People’s R. of China	12	6.7
Canada	8	4.5
Netherlands	7	3.9
Scotland	7	3.9
Spain	7	3.9
Germany	6	3.3
India	6	3.3
France	5	2.7
Malaysia	5	2.7
Taiwan	5	2.7
Finland	4	2.2
Indonesia	4	2.2
South Africa	4	2.2
Italy	3	1.7
Portugal	3	1.7
Singapore	3	1.7
South Korea	3	1.7
Sweden	3	1.7
Thailand	3	1.7
U. A. Emirates	3	1.7
Austria	2	1.1
Ireland	2	1.1

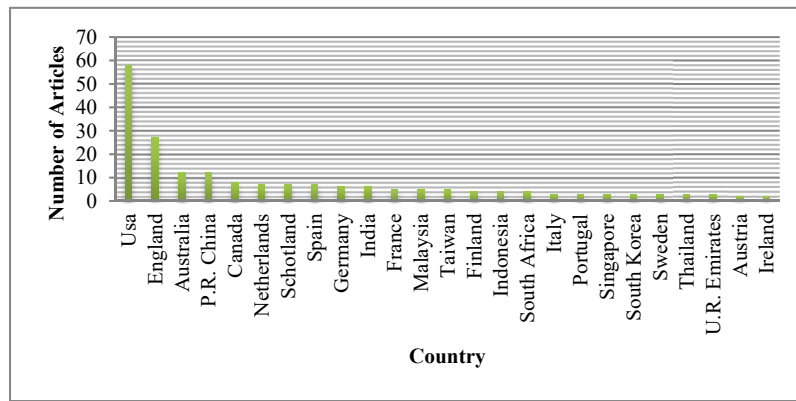


Figure 4. The number of articles that were produced between 1990 and 2019 that addressed technology in the social entrepreneurship, depicted by country/territory

To determine the number of core journals that published articles addressing the specific topic of interest, we can use Bradford’s Law as a general guideline (Bradford, 1934). This principle states that journals within a single field can be divided into three categories, each of which contains the same number of articles: (a) a core of journals on the subject that are relatively few in number but account for approximately one third of all the articles; (b) a second group of journals that accounts for the same number of relevant articles as the first category but includes a larger number of journals; and (c) a third group of journals that accounts for the same number of articles as the second group but includes an even larger number of journals. Although Bradford’s Law is not statistically accurate, it is commonly used as a general rule of thumb.

In this case, as underlined in Table 4 and Figure 5, considering only journals, in total 112 (excluding proceedings paper, review, early access, correction, editorial material) three journals contained 12 relevant articles, and 8 journals contained another 16 relevant articles. In particular, *Technological Forecasting and Social Change*, *Journal of Social Entrepreneurship* and *Entrepreneurship Theory and Practice* published one third of the examined papers. Thirty-three journals published the next third of the papers of interest, whereas sixty-eight journals published the last third of the papers in question.

Table 4. The journals that published only articles between 1990 and 2019 that addressed technology in social entrepreneurship and the number of articles that were published by each of these journals

Journal Publication	Article Count	%
<i>Technological Forecasting and Social Change</i>	5	4.5
Journal of Social Entrepreneurship	4	3.6
Entrepreneurship Theory and Practice	3	2.7
Information Communication Society	2	1.7
Information System Journal	2	1.7
International Journal of Entrepreneurship and Innovation	2	1.7
Science Technology and Society	2	1.7
Sustainability	2	1.7
Technovation	2	1.7
World Development	2	1.7
World Journal of Entrepreneurship Management and Sustainable Development	2	1.7
Academy of Management Journal	1	0.9
Addiction Research Theory	1	0.9
African Journal of Business Management	1	0.9
Archives of Disease in Childhood	1	0.9
Asia Pacific Journal of Management	1	0.9
Asian Journal of Law and Society	1	0.9
Asian Women	1	0.9
Atlantic Law Journal	1	0.9
BMC Pregnancy and Childbirth	1	0.9

Business Peace and Sustainable Development	1	0.9
Cahiers Agricultures	1	0.9
Cogent Business Management	1	0.9
Critical Sociology	1	0.9
International Journal of Knowledge Based Development	1	0.9
Iranian Studies	1	0.9
International Journal of Technology Management	1	0.9
Journal of Business Ethics	1	0.9
Journal of Developing Societies	1	0.9
Journal of Entrepreneurship and Public Policy	1	0.9
Journal of International Management	1	0.9
Journal of Management Organization	1	0.9
Journal of Material Culture	1	0.9
Journal of Sport Management	1	0.9
Journal of the Association for Information System	1	0.9
Journal of the American College Radiology	1	0.9
New Zealand of Educational Studies	1	0.9
Nordicom Review	1	0.9
R&D Management	1	0.9
Research Policy	1	0.9
Resources Conservation and Recycling	1	0.9
Revista de Cercetare si Interventie Sociala	1	0.9
South Asian Journal of Business Studies	1	0.9
Strategic Entrepreneurship Journal	1	0.9
Studies in History and Philosophy of Science	1	0.9
Sustainability Science	1	0.9
Universal Access in the Information Society	1	0.9
University of Illinois Law Review	1	0.9
Current Science	1	0.9
Design and Culture	1	0.9
Education and Training	1	0.9
Educational Technology Society	1	0.9
Ekonomsky Vjesnik	1	0.9
Energy Environment	1	0.9
European Journal for Sport and Society	1	0.9
European Journal of International Management	1	0.9
European Journal of Marketing	1	0.9
European Journal of Sustainable Development	1	0.9
Experimental Agriculture	1	0.9
Forum for Development Studies	1	0.9
Global Business Review	1	0.9
Global Nest Journal	1	0.9
Health Affairs	1	0.9
Health Sociology Review	1	0.9
Hts Teologies Studies	1	0.9
Information Economics and Policy	1	0.9
Information System Frontiers	1	0.9
Innovation Organization Management	1	0.9
International Journal of Entrepreneurial Behaviour Research	1	0.9
International Journal of Entrepreneurial Venturing	1	0.9
International Journal of Indian Culture and Business Management	1	0.9
International Journal of Interactive Multimedia and Artificial Intelligence	1	0.9
International Journal of Productivity and Performance Management	1	0.9
IT Information Technology	1	0.9
Journal of Asia Business Studies	1	0.9
Journal of Cleaner Production	1	0.9

Journal of Economic Issues	1	0.9
Journal of International Development	1	0.9
Journal of Knowledge Management	1	0.9
Journal of Management Studies	1	0.9
Journal of Small Business and Enterprise Development	1	0.9
Journal of Strategic Information System	1	0.9
Media Culture Society	1	0.9
Mis Quarterly	1	0.9
Public Policy and Administration	1	0.9
Qualitative Market Research	1	0.9
Science Education	1	0.9
Small Business Economics	1	0.9
Social Enterprise Journal	1	0.9
Social Inclusion	1	0.9
Sustainable Energy Technologies and Assessments	1	0.9
Studies in Comparative International Development	1	0.9
Supply Chain Management in International Journal	1	0.9
Water	1	0.9
Work Employment and Society	1	0.9

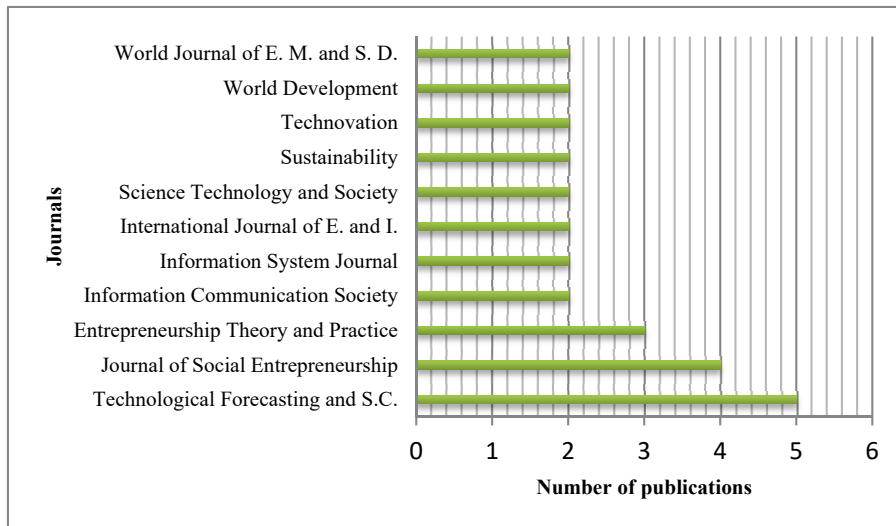


Figure 5. A depiction of the 11 most productive journals between 1990 and 2019 with respect to publishing articles that address technology in social entrepreneurship

Table 5 indicates the authors who published articles in the examined time period regarding the topic of interest. The production of articles about technology in social entrepreneurship is very diversely distributed. There is no single author who dominates this topic through the production of a plethora of articles. The table below shows the 25 most productive authors.

Table 5. A ranking of the 25 most productive authors between 1990 and 2019 with respect to technology in social entrepreneurship

Scholars	N° of Articles	Country
Mehta K.	7	Emory University, Atlanta, Usa
Mulloth B.	4	University of Virginia, Usa
Desa G.	3	San Francisco State University, Usa
Greblikaite J.	3	Inst Business & Rural Dev Res Akademija, Lithuania
Monroe-White T.	3	Berry Coll Campbell Sch Business MT Berry, GA, Usa
Purnomo D.	3	Institut Teknologi Sepuluh Nopember Surabaya, Indonesia
Roundy P.T.	3	University of Tennessee System Dept Mkt & Entrepreneurship Chattanooga, TN, Usa
Carsrud A.L.	2	Abo Akademi University, Finland
Goyal S.	2	Inst Competitiveness Gurgaon, Haryana, India
Howorth C.	2	University of York - UK Sustainable & Eth Entrepreneurship York, N Yorkshire, England
Lee M.	2	NYU Stern Sch Business Dept Management & Org New York, NY, Usa
Lumpkin G.T.	2	University of Oklahoma System Price Coll Business Norman, OK, Usa
Koch J.L.	2	United States Forest Service Usda Delaware, OH, Usa
Kurniawan K.	2	Universitas Negeri Semarang Fac Educ, Gunungpati, Semarang, Indonesia
Meyskens M.	2	University of San Diego Dept Management Law & Eth San Diego, CA, Usa
Mohamed S.	2	Spans M Sdn Bhd, George Town, Malaysia
Sohel M.H.	2	Universiti Teknologi Malaysia Fac Management Skudai, Johor, Malaysia
Yang J.	2	Jilin University Zhuhai Coll Zhuhai, Guangdong, Peoples R China
Zhao Y.	2	Seattle University Albers Sch Business & Econ Seattle, WA, Usa
Abbas Q.	1	CAREC Inst, Urmqhi, Peoples R China
Abrishami P.	1	Maastricht University, Maastricht, Netherlands
Aggarwal S.	1	University of Illinois System, Chicago, IL, Usa
Ahmad A.J.	1	University College London, London, England
Al Abd M.	1	American University of Sharjah, Sharjah, U.A.Emirates
Alfaro F.	1	University of Vermont Burlington, VT, Usa

Table 6 demonstrates that Penn State University and Pennsylvania Commonwealth System of Higher Education PCSHE, which are responsible for 14 of the examined articles, are the most productive institutions in the field of interest, followed by California State University System and State University System of Florida that have produced four of the examined articles. The main institutions with respect to the production of research

regarding the topic of interest are located in the United States; this finding is consistent with the distribution of relevant articles per country.

Tables 6. The ranking of the 15 most productive institutions with respect to publications between 1990 and 2019 that address technology in social entrepreneurship

Institutions	Article Count	%
Penn State University	7	3.889
Pennsylvania Commonwealth System of Higher Education Pcshe	7	3.889
California State University System	4	2.222
State University System of Florida	4	2.222
Georgia Institute of Technology	3	1.667
Massachusetts Institute of Technology Mit	3	1.667
San Francisco State University	3	1.667
Santa Clara University	3	1.667
Sheffield Hallam University	3	1.667
Universitas Padjadara	3	1.667
University of California System	3	1.667
University of East Anglia	3	1.667
University System of Georgia	3	1.667
Aalto University	2	1.111
Abo Akademy University	2	1.111

The following table shows the 50 most-cited articles on the topic of technology in social entrepreneurship. The 10 most-cited articles are published in very different journals; in particular, *World Development* has published about 30% of these articles and *Strategic Entrepreneurship Journal* has published about 20% of them. The remaining articles, including the most-cited article regarding the topic in question, are published in five different journals.

Table 7. A ranking of the 50 most-cited articles that were published between 1990 and 2019 and address technology in social entrepreneurship

Title	Authors	Journal	Publication Year	Tot. Citations
1 Capitals and capabilities: A framework for analyzing peasant viability, rural livelihoods and poverty	Bebbington, A	World Development	1999	814
2 Research in social entrepreneurship: past contributions and future opportunities	Short, Jeremy C.; Moss, Todd W.; Lumpkin, G. T.	Strategic Entrepreneurship Journal	2009	422
3 Entrepreneurial risk taking in family firms	Zahra, SA	Academy of Management Annals	2014	333
4 The Legitimacy of Social Entrepreneurship: Reflexive Isomorphism in a Pre-Paradigmatic Field	Nicholls, Alex	Entrepreneurship theory and Practice	2010	307
5 A Positive Theory of Social Entrepreneurship	Santos, Filipe M.	Journal of Business Ethics	2012	300
6 Social Enterprises as Hybrid Organizations: A Review and Research Agenda	Doherty, Bob; Haugh, Helen; Lyon, Fergus	International Journal of Management Reviews	2014	269
7 Innovation for Inclusive Growth: Towards a Theoretical Framework and a Research Agenda	George, Gerard; McGahan, Anita M.; Prabhu, Jaideep	Journal of Management Studies	2012	189
8 Collective action for smallholder market access	Markelova, Helen; Meizen-Dick, Ruth; Hellin, Jon; et al.	Food Policy	2009	182
9 Social innovation: Moving the field forward. A conceptual framework	Cajaiba-Santana, Giovany	Technological Forecasting and Social Change	2014	139
10 Service innovation in the digital age: key contributions and future directions	Barrett, Michael; Davidson, Elizabeth; Prabhu, Jaideep;	Mis Quarterly	2015	138

	et al.				
11	A literature review and perspectives in reverse logistics	Agrawal, Saurabh; Singh, Rajesh K.; Murtaza, Qasim	Resources Conservation and Recycling	2015	135
12	Soybeans, development and conservation on the Amazon frontier	Hecht, SB	Development and Change	2005	132
13	Do information and communication technologies (ICTs) contribute to development?	Heeks, Richard	Journal of International Development	2010	131
14	Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations	Estrin, Saul; Mickiewicz, Tomasz; Stephan, Ute	Entrepreneurship Theory and Practice	2013	128
15	Impact at the 'Bottom of the Pyramid': The Role of Social Capital in Capability Development and Community Empowerment	Ansari, Shahzad; Munir, Kamal; Gregg, Tricia	Journal of Management Studies	2012	126
16	Organizing for Society: A Typology of Social Entrepreneurial Models	Mair, Johanna; Battilana, Julie; Cardenas, Julian	Journal of Business Ethics	2012	117
17	Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations	Stephan, Ute; Uhlener, Lorraine M.; Stride, Christopher	Journal of International Business Studies	2015	112
18	Innovation for Inclusive Business: Intrapreneurial Bricolage in Multinational Corporations	Halme, Minna; Lindeman, Sara; Linna, Paula	Journal of Management Studies	2012	98
19	Sustainable supply chain management in emerging economies: Environmental turbulence, institutional voids and sustainability trajectories	Silvestre, Bruno S.	International Journal of Production Economics	2015	94
20	Social innovation research: An emerging area of innovation studies?	van der Have, Robert P.; Rubalcaba, Luis	Research Policy	2016	90
21	E-health in low- and middle-income countries: findings from the Center for Health Market Innovations	Lewis, Trevor; Synowiec, Christina; Lagomarsino, Gina; et al.	Bulletin of the World Health Organization	2012	87
22	Social Innovation and Social Entrepreneurship: A Systematic Review	Phillips, Wendy; Lee, Hazel; Ghobadian, Abby; et al.	Group & Organization Management	2015	85
23	When and how far is group formation a route out of chronic poverty?	Thorp, R; Stewart, F; Heyer, A	World Development	2005	83
24	Collective Social Entrepreneurship: Collaboratively Shaping Social Good	Montgomery, A. Wren; Dacin, Peter A.; Dacin, M. Tina	Journal of Business Ethics	2012	81
25	Optimization or Bricolage? Overcoming Resource Constraints in Global Social Entrepreneurship	Desa, Geoffrey; Basu, Sandip	Strategic Entrepreneurship Journal	2013	72
26	Crescive entrepreneurship in complex social problems: Institutional conditions for entrepreneurial engagement	Dorado, Silvia; Ventresca, Marc J.	Journal of Business Venturing	2013	66
27	Digital education governance: data visualization, predictive analytics, and 'real-time' policy instruments	Williamson, Ben	Journal of Education Policy	2016	64
28	Toward a theory of transformative entrepreneuring: Poverty reduction and conflict resolution in Rwanda's entrepreneurial coffee sector	Tobias, Jutta M.; Mair, Johanna; Barbosa-Leiker, Celestina	Journal of Business Venturing	2013	60
29	Social entrepreneurship in Sub-Saharan Africa	Rivera-Santos, Miguel; Holt, Diane; Littlewood, David; et al.	Academy of Management Perspectives	2015	59
30	A hard nut to crack! Implementing supply chain sustainability in an emerging economy	Silvestre, Bruno S.	Journal of Cleaner Production	2015	57
31	Early Challenges of Nascent Social Entrepreneurs	Renko, Maija	Entrepreneurship Theory and Practice	2013	56
32	Business as a development agent: evidence of possibility and improbability	Blowfield, Michael; Dolan, Catherine S.	Third World Quarterly	2014	55
33	Breakthrough without subsidies? PV business model experiments in the Netherlands	Huijben, J. C. C. M.; Verbong, G. P. J.	Energy Policy	2013	55

34	New states, new NGOs? Crises and transitions among rural development NGOs in the Andean region	Bebbington, A	World Development	1997	54
35	Legitimation of New Ventures: A Review and Research Programme	Ueberbacher, Florian	Journal of Management Studies	2014	53
36	Developing a conceptual framework for comparing social value creation	Kroeger, Arne; Weber, Christiana	Academy of Management Review	2014	52
37	Taking Complexity in Food Systems Seriously: An Interdisciplinary Analysis	Foran, Tira; Butler, James R. A.; Williams, Liana J.; et al.	World Development	2014	52
38	An in-depth literature review of the waste electrical and electronic equipment context: Trends and evolution	Perez-Belis, V.; Ibanez-Fores, Bovea V.	Waste Management & Research	2015	50
39	NGOs in a global future: marrying local delivery to worldwide leverage	Edwards, M; Hulme, D; Wallace, T	Public Administration and Development	1999	50
40	The Social and Economic Mission of Social Enterprises: Dimensions, Measurement, Validation, and Relation	Stevens, Robin; Moray, Nathalie; Bruneel, Johan	Entrepreneurship Theory and Practice	2015	49
41	Rural entrepreneurship or entrepreneurship in the rural - between place and space	Korsgaard, Steffen; Muller, Sabine; Tanvig, Hanne Wittorff	International Journal of Entrepreneurial Behaviour	2015	49
42	Local institutions, poverty and household welfare in Bolivia	Grootaert, C; Narayan, D	World Development	2004	49
43	Emergence of green business models: The case of algae biofuel for aviation	Nair, Sujith; Paulose, Hanna	Energy Policy	2014	48
44	Understanding gender dimensions of agriculture and climate change in smallholder farming communities	Jost, Christine; Kyazze, Florence; Naab, Jesse; et al.	Climate and Development	2016	47
45	Electronic waste recovery in Finland: Consumers' perceptions towards recycling and re-use of mobile phones	Yla-Mella, Jenni; Keiski, Riitta L.; Pongracz, Eva	Waste Management	2015	47
46	Competing through service innovation: The role of bricolage and entrepreneurship in project-oriented firms	Salunke, Sandeep; Weerawardena, Jay; McColl-Kennedy, Janet R.	Journal of Business Research	2013	47
47	The double-edged sword of legitimacy in base-of-the-pyramid markets	Kistruck, Geoffrey M.; Webb, Justin W.; Sutter, Christopher J.; et al.	Journal of Business Venturing	2015	46
48	Link, search, interact - The co-evolution of NGOs and interactive technology	Bach, J; Stark, D	Theory Culture & Society	2004	45
49	NGO performance - What breeds success? New evidence from South Asia	Edwards, M	World Development	1999	45
50	Comparing drivers, barriers, and opportunities of business models for renewable energies: A review	Engelken, Maximilian; Roemer, Benedikt; Drescher, Marcus; et al.	Renewable & Sustainable Energy Reviews	2016	44

5. Conclusion

This article presented a bibliometric analysis of the academic studies on technology in social entrepreneurship research to identify the most prolific and most cited scholars, the trend in the number of publications and citations, the most relevant journals, the most engaged institutions, and other aspects that allowed to frame the state of the art and the expected trend. We used diverse graphic and tabular representations to describe the development of scholarly interest in this topic. We first considered the evolution of studies regarding this topic by analysing the number of relevant papers that were published in the examined time period, providing the number of citations of these articles and comparing the trend for publications with the trend for citations. We then outlined the geographic distribution of relevant scientific production by country, identified core journals that have published articles addressing the specific topic of interest, recognised the most prolific authors who have addressed this subject, and revealed the most productive institutions with respect to this topic. Finally, we listed the most-cited articles regarding technology in social entrepreneurship studies and identified the publications that contained these articles, enabling a partial connection between these articles and earlier portions of the study. Quantitative evidence supported the idea that the investigated topic has obtaining increasing attention of scholars, especially recently. However, in light of the positive trend that this argument has pertaining, there are rooms for further studies oriented to analyse the ability of social enterprises to adopt technologies to be sustainable and competitive in a hyper-turbulent market in which technology represents a key component.

Findings offers a useful toolbox to those scholars that are interested in the field of technology in social entrepreneurship, providing interesting information on which journal and authors to check.

This study has some drawbacks mainly referred to the use of WoS as the unique database for the analysis. This database covers the most seminal and impactful academic publications, but other contributions could be ignored, even if equally relevant, because published in journals that are not indexed in WoS database. In this sense, further studies are expected to consult other databases in order to cover a major number of journals, also those with a lower impact factor. Moreover, the analysis presented in this chapter does not consider the fact that recent works are likely less cited than older documents and may not have existed for a sufficient length of time to influence the literature regarding the specific topic of interest. The existing evolutionary phase may be sustained by these investigations, and future research efforts, e.g., the use of additional bibliometric techniques, such as bibliographic coupling or co-citation analysis, may complement these studies by providing a description of technological adoption by social entrepreneurship that draws upon another perspective. These methods could be applied to social network analyses to re-define clusters, measurements and graphic representations.

However, we are reasonably confident that the literature of the chosen time period and of the used database that has been examined in this paper represents the major segment of studies that focus on technology in the context of social entrepreneurship.

In summary, the present study and related investigations offer a quantitative analysis of state-of-the-art research as a complement to (but never a substitute for) traditional qualitative methods of reviewing the existing literature. This method may be used as a tool to recognise the authors, documents, journals, and topics that are most widely disseminated among scholars in a specific field and to identify the relational links among these features of the topic of interest.

References

- Abu-Saifan, S. (2012). Social entrepreneurship: definition and boundaries. *Technology Innovation Management Review*, 2(2). <http://doi.org/10.22215/timreview/523>
- Alford, S., Brown, L. D., & Letts, C. W. (2004). Social entrepreneurship: leadership that facilitates societal transformation. *Working paper. Center for Public Leadership, Kennedy School of Government*.
- Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. *Academy of Management Review*, 36(2), 247-271. <https://doi.org/10.5465/amr.2009.0188>
- Ashraf, M. M., Razzaque, M. A., Liaw, S. T., Ray, P. K., & Hasan, M. R. (2019). Social business as an entrepreneurship model in emerging economy. *Management Decision*, 57(5), 1145-1161. <https://doi.org/10.1108/MD-04-2017-0343>
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both? *Entrepreneurship theory and practice*, 30(1), 1-22. <https://doi.org/10.1111/j.1540-6520.2006.00107.x>
- Bacq, S., Ofstein, L. F., Kickul, J. R., & Gundry, L. K. (2015). Bricolage in social entrepreneurship: How creative resource mobilization fosters greater social impact. *The International Journal of Entrepreneurship and Innovation*, 16(4), 283-289. <https://doi.org/10.5367/ijei.2015.0198>
- Baumgartner, H., & Pieters, R. (2003). The structural influence of marketing journals: A citation analysis of the discipline and its subareas over time. *Journal of marketing*, 67(2), 123-139. <https://doi.org/10.1509/jmkg.67.2.123.18610>
- Bradford, S. C. (1934). Sources of information on specific subjects. *Engineering*, 137, 85-86.
- Brey, P. (2010). Philosophy of technology after the empirical turn. *Techné: Research in Philosophy and Technology*, 14(1), 36-48. <https://doi.org/10.5840/techne20101416>
- Brundtland, G. H. (1987). *Report of the World Commission on environment and development: our common future*. United Nations.
- Carraher, S. M., Welsh, D. H., & Svilokos, A. (2016). Validation of a measure of social entrepreneurship. *European Journal of International Management*, 10(4), 386-402. <https://doi.org/10.1504/EJIM.2016.077421>
- Carroll, L. (2017). A comprehensive definition of technology from an ethological perspective. *Social Sciences*, 6(4), 126. <https://doi.org/10.3390/socsci6040126>

- Chell, E., Nicolopoulou, K., & Karatas-Ozkan, M. (2010). Social entrepreneurship and enterprise: international and innovation perspectives. *Entrepreneurship & Regional Development*, 22(6), 485-493. <https://doi.org/10.1080/08985626.2010.488396>
- Chen, X., Luo, A. C., Sato, K., Wakatsuki, T., & Masunaga, T. (2009). An introduction of a multi-soil-layering system: a novel green technology for wastewater treatment in rural areas. *Water and Environment Journal*, 23(4), 255-262. <https://doi.org/10.1111/j.1747-6593.2008.00143.x>
- Chen, Y. S. (2013). Towards green loyalty: driving from green perceived value, green satisfaction, and green trust. *Sustainable Development*, 21(5), 294-308. <https://doi.org/10.1002/sd.500>
- Dacin, M. T., Dacin, P. A., & Tracey, P. (2011). Social entrepreneurship: A critique and future directions. *Organization science*, 22(5), 1203-1213. <https://doi.org/10.1287/orsc.1100.0620>
- De Bakker, F. G., Groenewegen, P., & Den Hond, F. (2005). A bibliometric analysis of 30 years of research and theory on corporate social responsibility and corporate social performance. *Business & society*, 44(3), 283-317. <https://doi.org/10.1177/0007650305278086>
- Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. *Journal of Social Entrepreneurship*, 1(1), 32-53. <https://doi.org/10.1080/19420670903442053>
- Dessi, C., Floris, M., & Sanna, A. (2014). Technology in family business studies. a bibliometric analysis (1991–2012). *Handbook of Research on Techno-Entrepreneurship: How Technology and Entrepreneurship are Shaping the Development of Industries and Companies*, 39.
- Dey, P., Steyaert, C., & Hjorth, D. (2007). *6. The rhetoric of social entrepreneurship: paralogy and new language games in academic discourse*. Cheltenham, UK, Northampton, MA, USA: Elgar.
- Duque Oliva, E. J., Cervera Taulet, A., & Rodríguez Romero, C. (2006). A bibliometric analysis of models measuring the concept of perceived quality in providing internet service. *Innovar*, 16(28), 223-243.
- Giones, F., & Brem, A. (2017). Digital technology entrepreneurship: A definition and research agenda. *Technology Innovation Management Review*, 7(5).
- Hadad, S., & Cantaragiu, R. (2017). Corporate social entrepreneurship versus social intrapreneurship: same idea, different trajectories? *Management & Marketing*, 12(2), 252-276. <https://doi.org/10.1515/mmcks-2017-0016>
- Hung, J. I. (2012). Trends of e-learning research from 2000 to 2008: Use of text mining and bibliometrics. *British Journal of Educational Technology*, 43(1), 5-16. <https://doi.org/10.1111/j.1467-8535.2010.01144.x>
- Liao, S.-h. (2005). Technology management methodologies and applications: A literature review from 1995 to 2003. *Technovation*, 25(4), 381-393.
- Marku, E., Castriotta, M., & Di Guardo, M. C. (2017). Disentangling the intellectual structure of innovation and M&A literature. *Technological Innovation Networks: Collaboration and Partnership*, 47.
- Mort, G. S., Weerawardena, J., Sargeant, A., & Bennett, R. (2015). Social entrepreneurship and value creation in not-for-profit organizations. In *Marketing in transition: scarcity, globalism, & sustainability* (pp. 372-376): Springer.
- Mulgan, G., Tucker, S., Ali, R., & Sanders, B. (2007). *Social innovation: what it is, why it matters and how it can be accelerated*. Skoll Centre for Social Entrepreneurship. London: Young Foundation.
- Mulloth, B., Kickul, J. R., & Gundry, L. K. (2016). Driving technology innovation through social entrepreneurship at Prezi. *Journal of Small Business and Enterprise Development*, 23(3), 753-767. <https://doi.org/10.1108/JSBED-08-2015-0111>
- Muñoz, P., & Kimmitt, J. (2019). Social mission as competitive advantage: A configurational analysis of the strategic conditions of social entrepreneurship. *Journal of Business Research*, 101, 854-861. <https://doi.org/10.1016/j.jbusres.2018.11.044>
- Munshi, N. V. (2010). Value creation, social innovation, and entrepreneurship in global economies. *Journal of Asia-Pacific Business*, 11(3), 160-165. <https://doi.org/10.1080/10599231.2010.500569>
- Nicholls, A. (2008). *Social entrepreneurship: New models of sustainable social change*. Oxford: OUP.
- Noruzi, M. R., Westover, J. H., & Rahimi, G. R. (2010). An exploration of social entrepreneurship in the entrepreneurship era. *Asian Social Science*, 6(6), 3.

- Pennings, J. M. (1975). The relevance of the structural-contingency model for organizational effectiveness. *Administrative Science Quarterly*, 20(3)393-410. <https://doi.org/10.2307/2391999>
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of world business*, 41(1), 56-65. <https://doi.org/10.1016/j.jwb.2005.10.007>
- Peredo, A. M., McLean, M., & Tremblay, C. (2019). Indigenous social innovation: what is distinctive? And a research agenda. *Handbook of Inclusive Innovation: The Role of Organizations, Markets and Communities in Social Innovation*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing, 107-128.
- Phaal, R., Farrukh, C., & Probert, D. (2001). *Technology Roadmapping: linking technology resources to business objectives*. University of Cambridge: Centre for Technology Management, 1-18.
- Phillips, W., Lee, H., Ghobadian, A., O'Regan, N., & James, P. (2015). Social innovation and social entrepreneurship: A systematic review. *Group & Organization Management*, 40(3), 428-461. <https://doi.org/10.1177/1059601114560063>
- Rawhouser, H., Cummings, M., & Newbert, S. L. (2019). Social impact measurement: Current approaches and future directions for social entrepreneurship research. *Entrepreneurship theory and practice*, 43(1), 82-115. <https://doi.org/10.1177/1042258717727718>
- Rey-Martí, A., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2016). A bibliometric analysis of social entrepreneurship. *Journal of Business Research*, 69(5), 1651-1655. <https://doi.org/10.1016/j.jbusres.2015.10.033>
- Saebi, T., Foss, N. J., & Linder, S. (2019). Social entrepreneurship research: Past achievements and future promises. *Journal of management*, 45(1), 70-95. <https://doi.org/10.1177/0149206318793196>
- Schwab, K. (2008). Global corporate citizenship: working with governments and civil society. *Foreign Affairs*, 107-118. <https://www.jstor.org/stable/20020271>
- Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business horizons*, 48(3), 241-246. <https://doi.org/10.1016/j.bushor.2004.11.006>
- Shaw, E., & de Bruin, A. (2013). Reconsidering capitalism: the promise of social innovation and social entrepreneurship? *International Small Business Journal*, 31(7), 737-746. <https://doi.org/10.1177/0266242613497494>
- Stevens, R., Moray, N., & Bruneel, J. (2015). The social and economic mission of social enterprises: Dimensions, measurement, validation, and relation. *Entrepreneurship theory and practice*, 39(5), 1051-1082. <https://doi.org/10.1111/etap.12091>
- Stevens, R., Moray, N., Bruneel, J., & Clarysse, B. (2015). Attention allocation to multiple goals: The case of for-profit social enterprises. *Strategic management journal*, 36(7), 1006-1016. <https://doi.org/10.1002/smj.2265>
- Surie, G. (2017). Creating the innovation ecosystem for renewable energy via social entrepreneurship: Insights from India. *Technological Forecasting and Social Change*, 121, 184-195. <https://doi.org/10.1016/j.techfore.2017.03.006>
- Turban, E. (2008). *Information technology for management*: John Wiley & Sons, Inc.
- Van Dalen, H., & Henkens, K. (2001). What makes a scientific article influential? The case of demographers. *Scientometrics*, 50(3), 455-482. <https://doi.org/10.1023/a:1010510831718>
- Van Leeuwen, T. (2006). The application of bibliometric analyses in the evaluation of social science research. Who benefits from it, and why it is still feasible. *Scientometrics*, 66(1), 133-154. <https://doi.org/10.1007/s11192-006-0010-7>
- Volti, R. (2009). *Society and Technological Change*. New York: Worth.
- Wilson, F., & Post, J. E. (2013). Business models for people, planet (& profits): exploring the phenomena of social business, a market-based approach to social value creation. *Small Business Economics*, 40(3), 715-737. <https://doi.org/10.1007/s11187-011-9401-0>
- Wood, D. J. (2010). Measuring corporate social performance: A review. *International journal of management reviews*, 12(1), 50-84. <https://doi.org/10.1111/j.1468-2370.2009.00274.x>
- Yin, J., & Chen, H. (2019). Dual-goal management in social enterprises: evidence from China. *Management Decision*, 57(6), 1362-1381. <https://doi.org/10.1108/MD-02-2017-0170>

- Yunus, M. (2007). Credit for the poor: Poverty as distant history. *Harvard International Review*, 29(3), 20-24.
- Zadek, S., & Thake, S. (1997). *Practical people, noble causes*. London: New Economics Foundation.
- Zahra, S. A., Rawhouser, H. N., Bhawe, N., Neubaum, D. O., & Hayton, J. C. (2008). Globalization of social entrepreneurship opportunities. *Strategic entrepreneurship journal*, 2(2), 117-131. <https://doi.org/10.1002/sej.43>
- Zahra, S. A., & Wright, M. (2016). Understanding the social role of entrepreneurship. *Journal of Management Studies*, 53(4), 610-629. <https://doi.org/10.1111/joms.12149>

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