Corporate Entrepreneurship and ICT: Trends and Future Research Agenda

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Abstract. *Despite the breadth in the scope of scholarly literature concerning both Corporate Entrepreneurship (CE) and Information and Communication Technologies (ICT) respectively, intersectional research of these two domains is scarce. This paper explores whether and to what extent ICT and digital transformation (DT) are recognized within the CE research domain. Based on the analysis of articles indexed in the Web of Science Core Collection database - considered one of the most influential sources, with various records offering citation for numerous different academic areas - this study reveals six predominant research trends: Entrepreneurial Orientation, Digital transformation (DT), Innovation, Performance, Entrepreneurship, and Technological Change.*

Keywords. Entrepreneurship; artificial intelligence; corporate entrepreneurship; bibliometric; literature review.

1 Introduction

The increasing need for innovation and the development of new products and services in response to the challenges derived from the global financial crisis has enhanced the need for companies to engage in more entrepreneurial behaviour. The economic shock in 2020, caused by the global COVID-19 pandemic, forced organizations to rethink their information and communications technology (ICT) competences - their ability to adequately use ICT for business (Parida & Örtqvist, 2015).

Corporate Entrepreneurship (CE) as an individual field of study began to develop more rapidly from the 1980s onwards (Glinyanova et al., 2021) but under different terminology for the CE domain, such as corporate entrepreneurship (Zahra, 1993), corporate venturing (Brazeal, 1993; Sykes, 1986), intrapreneurship (Pinchot III, 1985), strategic renewal (Guth & Ginsberg, 1990), and strategic entrepreneurship (Hitt et al., 2011). The extensive literature opus under CE umbrella term sees CE as an enhancement aiding **s**uperior organizational performance for both private and public sector enterprises (Kearney et al., 2009), improved financial performance (Covin & Slevin, 1991; Wiklund, 1999; Zahra, 1993), and innovation activities (Trestl, 2016).

Another "tool" for the promotion of development and growth across numerous levels is ICT. ICT supports organizations in terms of their productivity and competitiveness. Through investment in ICT, positive impacts surpass the direct influence of return on investments for enterprises, impacting upon the growth of the economy as a whole (OECD, 2003).

Over the past 20 years, ICT has appeared to be the single-most predominant general purpose technology, incorporating growing possibilities of "contemporary technolog[y] integration" with smart, efficient, optimized, and even personalized processes and methodologies for countless industries' needs (*Technology Innovation Productization*, 2017). The revolutionised technologies developed through and within the ICT 'sphere' have resulted in the new industrial revolution: the Fourth Industry Revolution. So called 'Industry 4.0' encompasses innovative technologies orientated towards 'dealing' with increasingly complex tasks using Big Data, artificial intelligence (AI), machine learning (ML), the Internet of Things (IoT), and Cloud and Blockchain technologies (Zeba et al., 2020).

The entire technological sphere within Industry 4.0 - not limited to only ICT - has paramount importance on manufacturing, industry progress, and expansion (Obradović et al., 2021). Research on possible crossroads within the field are thus needed and are welcomed. The scholarly literature for each of the separate domains (CE and ICT) is extensive. However, the aim of this study is to explore whether and to what extent ICT and DT are part of the CE research domain and to provide an overview of existing findings from within the field of inquiry.

The remainder of the article consists of three sections: an explanation of the sampling and data collection methods are given, followed by a

bibliometric analysis within the methodology section. The fourth section discusses main findings, presents key facts about the data, and gives a journal distribution and intellectual structure overview. The conclusion is given in the last section, where limitations and future research implications are also discussed.

2 Methodology

2.1 Articles Sampling and Data Collection

This study intends to explore the extent to which ICT, DT, and pertaining elements, such as AI and ML, are researched as a part of the CE domain. The increasing degree of interest in the field of ICT and different "elements" of the domain, including AI, ML, and DT in general, is well recognized. However, deeper research on the intersection of AI and other fields is needed (Vlačić et al., 2021).

This research was carried out on the articles from the Web of Science Core Collection database, using methodology from Dabić et al. (2021). The Web of Science has been considered, together with Scopus (established in 2004), to be the most prevalent database (Guz & Rushchitsky, 2009). However, the Web of Science's dominant coverage originates from 1900 and the majority of the articles are in English (Chadegani et al., 2013). Until 2004, it was "the only international and multidisciplinary database available to obtain the literature of technology, science, medicine and other fields" (Chadegani et al., 2013, p. 24). Additionally, the potential bias towards the selection of the Web of Science database can be explained and rationalised owing to the significant journals comprised within the database that are notable in CE research, such as: the *International Business Review*, the *Journal of World Business*, the *Journal of Business Research*, and the *Journal of Business Venturing* (Dabić et al., 2015; Dabić et al., 2020).

The bibliometric analysis conducted followed four main phases: keyword search, refinement of results, conversion to descriptive metrics, and results illustration (Caputo et al., 2021; Dabić et al., 2020; Dabić et al., 2021).

After setting the search framework to the fully available timespan (from 1955 to 2021) and limiting it to the Science Citation Index Expanded and Social Sciences Citation Index, the search was executed. The search was conducted using string: "TITLE-ABS-KEY". The operator steered a Boolean search of the enquiry of the nominated terms in titles, abstracts, and keywords (Manesh et al., 2020), limited to articles and reviews in the English language.

The first step of the search was the query of articles related to the "corporate entrepreneurship" domain and related keywords ("corporate entrepreneur*" OR "strategic renewal" OR "strateg* entrepren*" OR "intrapreneur*" OR "entrepreneur* orientation" OR "corpo* vent*" OR "intern* entrepreneu*" OR "firm-level entrepreneur*"). This resulted in 3,768 articles.

Following the same approach, a similar query was conducted for the "digitalisation" domain ("digitalisation" OR "digit* transfor*"), resulting in 1,757 articles.

The third step was a query for the keywords "artificial intelligence (AI)" or "machine learning (ML)" ("AI" OR "artif* intel*" OR "machin* learn*" OR "ML"), which found 873,943 articles for the searched topic.

From the query for the search of literature for the "Industry 4.0" domain ("industry* 4*"), a total of 3,325 articles were found, whereas the query for the ICT domain ("ICT" OR "infom* comm* tech*") resulted in 17,048 articles. Despite a fruitful response of each separate query, an intersectional joint search of "corporate entrepreneurship" and each of the aforementioned queries resulted in a negligible number of articles (see Fig. 1). Results of the queries (Corporate Entrepreneurship & Digitalisation: 11; Corporate Entrepreneurship & AI and ML: 12; Corporate Entrepreneurship & Industry 4.0: 6; Corporate Entrepreneurship & ICT: 33) suggested a sizable literature gap, confirming the need for this paper and further research on this topic. However, in an attempt to provide a bibliometric analysis of the searched literature, boolean operator "OR" was used to unite individual queries, resulting in 60 articles in total.

For the selection of 60 articles, two external experts and experienced researchers were consulted to review papers (Graneheim & Lundman, 2004) prior to the further analysis. Details of the Search Query are available in the Supplementary Material (see Table 2).

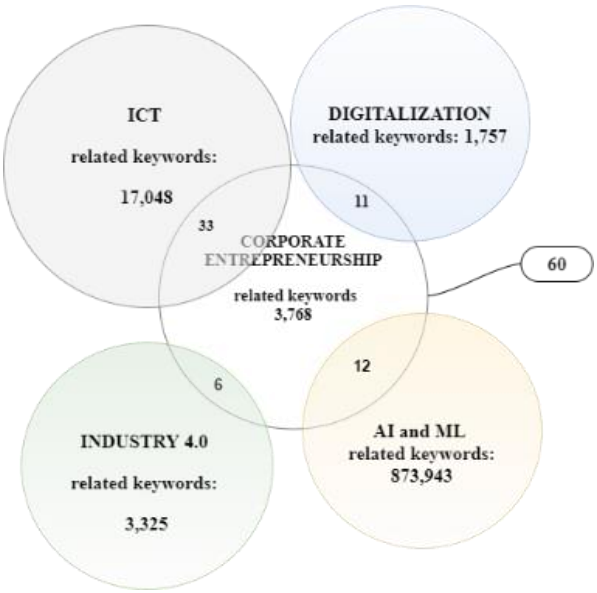

Figure 1. Data collection process

2.2 The Bibliometric Analysis

The technique used for the bibliometric analysis was the authors' keywords occurrence. Based on the co-occurrence of most frequent keywords contained in the searched articles, clusters were grouped containing relevant terminology (Dabić et al., 2021).

The bibliometric analysis reveals the relationships between keywords, whereby more frequent combinations among keywords implies a stronger relationship. For an easier conceptualization of the research field, relationships between relevant keywords and clusters are supported by a visualization of these links (see Fig. 2).

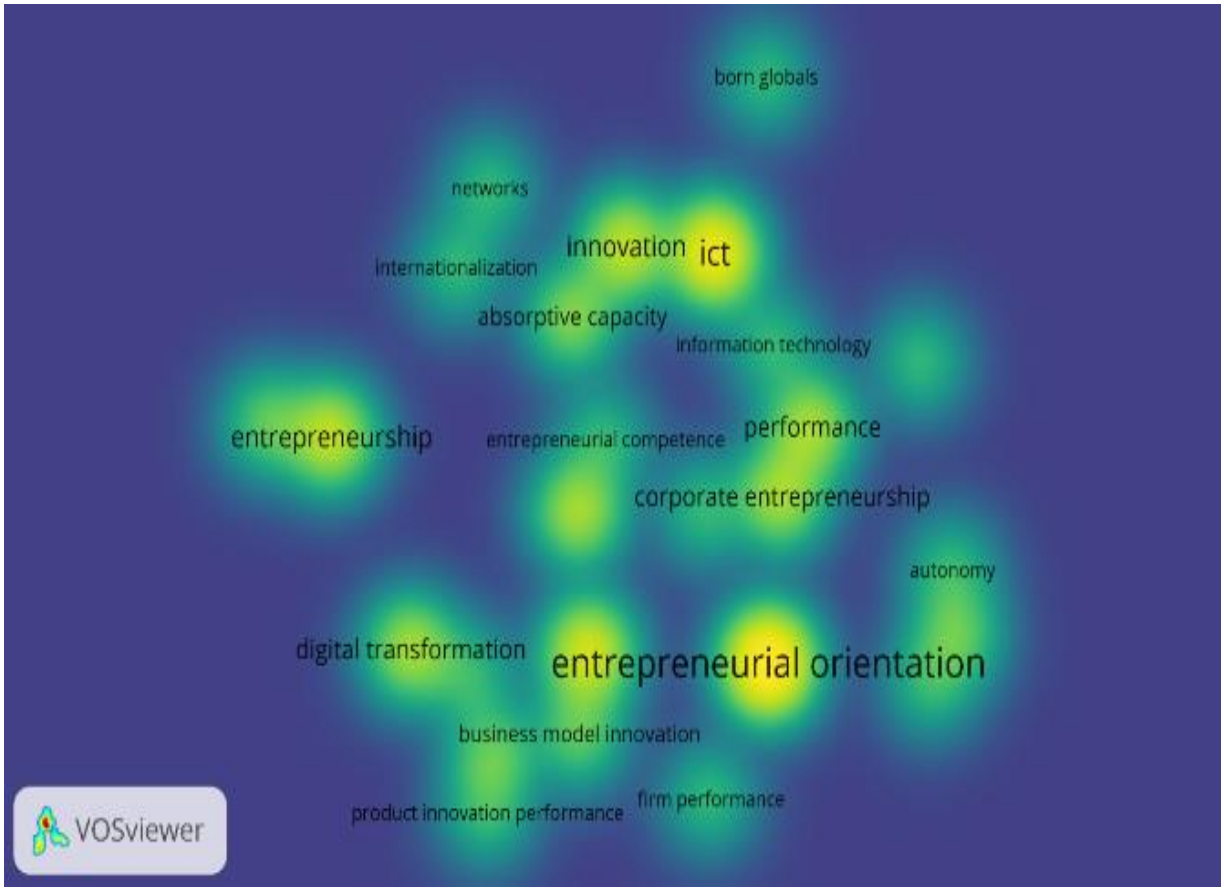

Figure 2. Authors' keywords density visualization

In the density visualization (see Fig. 2), colours are used to specify the density of the items represented by their labels. "Each point in the item visualization has a colour that indicate[s] the density of items at that point" (van Eck & Waltman, 2018, p. 10). The colour implies the number of items in the vicinity of a point and the weights of the neighbouring items. When there are a number of items "in the neighbourhood of the point" and the "weight" of these neighbouring items is larger, the colour is closer to yellow (van Eck & Waltman, 2018, p. 10). When there are a number of items "in the neighbourhood of the point" and the "weight" of these neighbouring items is lower, the colour is closer to blue (van Eck & Waltman, 2018, p. 10). With regards to Figure 2, the largest number of related points and the largest weight to these neighbouring points is for the keywords 'entrepreneurial orientation', 'innovation', and 'ICT'.

3 Outcomes

Although the query included the entire time span available, starting in 1955 and ending at the date of the search, publications on the queried articles started as late as the beginning of the 2000s. Only a single article on the examined topic was published in 2001, and the next was not until 6 years later, in 2007. As of 2010, publishing started regularly occurring each year. However, 78.33% of all the articles examined were published from 2016 onwards. In the period between 2007 and 2016, 20.00% of the articles examined were published, whereas prior to 2006, this was only 1.67% (see Fig. 3).

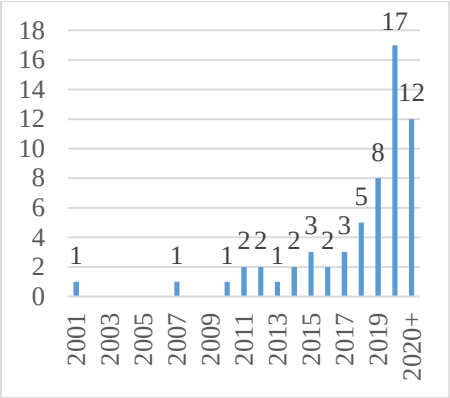

Figure 3. Publishing intensity per year

The publishing distribution implies an increasing interest in the topic of ICT and TD in the CE domain, supporting the need for our research as well.

3.2 Journal Productivity Distribution

The distribution of articles per journal was between 44 journals, where only four journals published three or four articles on the researched topic of ICT and DT in the CE domain. Those four journals - the *Journal of Business Research*, the *Journal of Intelligent & Fuzzy Systems*, the *International Journal of Production Economics*, and the *Journal of World Business* - account for 20% of all of the published articles on the researched topic (see Table 1).

Table 1. Journals' frequencies

Journals	Freq.
ACADEMIA-REVISTA LATINOAMERICANA DE ADMINISTRACION	1
AFRICAN JOURNAL OF BUSINESS MANAGEMENT	1
ANAIS DA ACADEMIA BRASILEIRA DE CIENCIAS	1
BRITISH JOURNAL OF MANAGEMENT	1
CALIFORNIA MANAGEMENT REVIEW	1
COMMUNICATION RESEARCH	1
COMPUTERS IN HUMAN BEHAVIOR	1
FRONTIERS IN PSYCHOLOGY	1
CONVERGENCE-THE INTERNATIONAL JOURNAL OF RESEARCH INTO NEW MEDIA TECHNOLOGIES	1
EDUCATION AND TRAINING	1
EUROPEAN JOURNAL OF INNOVATION MANAGEMENT	2
INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	1
INTERNATIONAL BUSINESS REVIEW	1
INTERNATIONAL ENTREPRENEURSHIP AND MANAGEMENT JOURNAL	2
INTERNATIONAL BUSINESS REVIEW	1
INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT	1
IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT	1
INFORMATION AND SOFTWARE TECHNOLOGY	1
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS	**3**
INFORMATION TECHNOLOGY FOR DEVELOPMENT	1
INFORMATION SYSTEMS JOURNAL	1
JOURNAL OF BUSINESS RESEARCH	**4**
JOURNAL OF BUSINESS & INDUSTRIAL MARKETING	1
JOURNAL OF ENTERPRISE INFORMATION MANAGEMENT	1
JOURNAL OF GLOBAL INFORMATION MANAGEMENT	1
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS	**4**
JOURNAL OF KNOWLEDGE MANAGEMENT	2
JOURNAL OF MANAGEMENT & ORGANIZATION	1
JOURNAL OF MANAGEMENT STUDIES	1
JOURNAL OF MANAGERIAL PSYCHOLOGY	1
JOURNAL OF ORGANIZATIONAL CHANGE MANAGEMENT	1
JOURNAL OF PRODUCT INNOVATION MANAGEMENT	1
JOURNAL OF SMALL BUSINESS MANAGEMENT	2
JOURNAL OF TECHNOLOGY TRANSFER	1
JOURNAL OF WORLD BUSINESS	**3**
LONG RANGE PLANNING	1
MANAGEMENT INTERNATIONAL REVIEW	1
SMALL BUSINESS ECONOMICS	1
SOUTH AFRICAN JOURNAL OF ECONOMIC AND MANAGEMENT SCIENCES	1
SUSTAINABILITY	**3**
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	1
TECHNOLOGY ANALYSIS & STRATEGIC MANAGEMENT	1
TECHNOVATION	1
TELECOMMUNICATIONS POLICY	1
Total	60

3.3 Authors' Keywords Evolution

The bibliometric analysis of the 60 articles resulted in 254 keywords selected by the authors. Predominantly, the articles explored the role of ICT and/or DT as fundamental factors for development, strategic renewal, economic growth, and improved performance. The studies analysed leading drivers of organizations' innovativeness and possibilities of information technology were viewed as a driver of internal venturing and entrepreneurial competitiveness.

The article from 2001 was the first article published on the searched area, analysing "technology based entrepreneurs" (Colombo & Delmastro, 2001). The study explored personal characteristics among entrepreneurs in high-tech start-ups, suggesting internet entrepreneurs to be less experienced and educated in comparison to the other founders explored. The research highlighted the role of the technical revolution and the stage of the industry life cycle in newly established organizations and their creators.

Following the analysis of entrepreneurial intensity among ICT companies and companies listed on the Johannesburg Stock Exchange (Scheepers et al., 2007), the results indicated a higher entrepreneurial intensity in ICT companies, suggesting that entrepreneurial intensity is 'industry specific'. In addition to this, the results revealed that a higher entrepreneurial intensity was affected by organisational factors and age (age was shown to be negatively correlated with entrepreneurial intensity). The study also suggested the development of internal organizational climates, supportive of corporate entrepreneurship, as tools to facilitate increased entrepreneurial intensity.

Furthermore, the researchers explored (Kollmann & Stoeckmann, 2010) the effect of entrepreneurial orientation dimensions on "strategic ambidexterity" - the capability to explore and exploit innovations at the same time. Exploration of innovations was shown to be fostered by risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy, while innovation exploitation was stimulated by proactiveness and competitive aggressiveness. The two dimensions of entrepreneurial orientation are not mutually disruptive; therefore, ambidexterity could be achieved through greater entrepreneurial orientation.

The field of interest in the searched area evolved from having entrepreneurship at the nucleus of the research, to innovation and DT as cornerstones of growth and development.

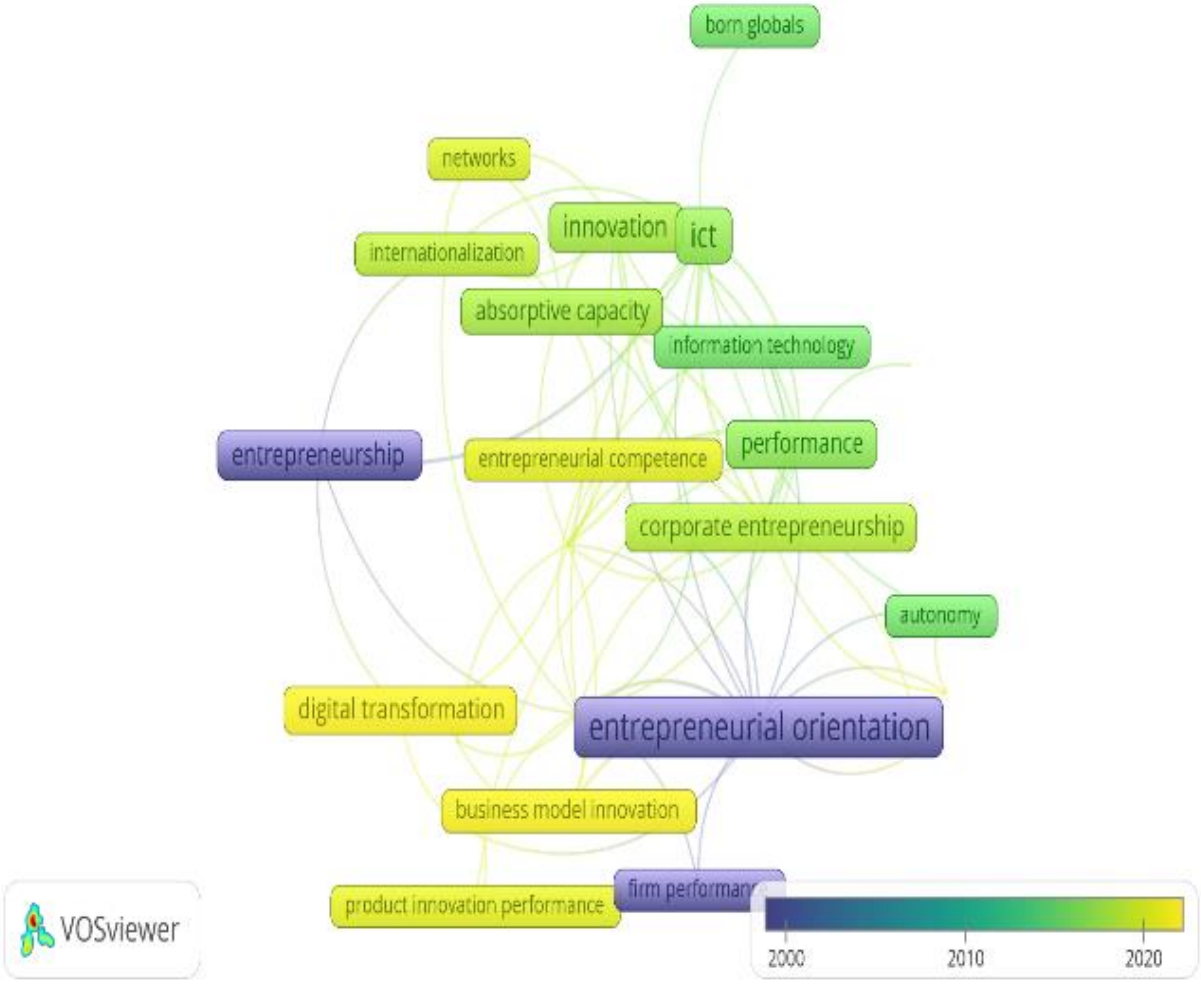

Figure 4. Authors' keywords overlay visualization

The overlay visualization is used to show "how scores of the items [determined by colour criteria on the bottom right hand side of the Figure 4] … are mapped to colours" (van Eck & Waltman, 2018, p. 9). Years have been selected as a colour criteria for overlay visualisation, which suggests 'entrepreneurial orientation', 'entrepreneurship' and 'firm performance' are keywords from the early stages of the research, i.e. the 2000s. Items closer to yellow signify keywords that were defined in 2020s.

3.4 Intellectual Structure of CE in ICT

The bibliometric analysis of the researched field depicted six different clusters representing a structural overview of the researched topic (see Fig. 5).

1) Green Cluster - Entrepreneurial Orientation

Keywords such as 'entrepreneurial orientation', 'artificial intelligence', 'autonomy', 'business performance', 'corporate entrepreneurship', and 'firm performance' were included in Green Cluster - Entrepreneurial Orientation. Researchers explored the relationship between entrepreneurial orientation and performance, depending on different elements, knowledge acquisitions (Bojica et al., 2011), social capital, organizational learning capabilities (Khan et al., 2021), organizational environment dynamism (Ruiz-Ortega et al., 2013), innovation (Ndubisi & Agarwal, 2014), operational ambidexterity (Sahi et al., 2020), and the implementation of AI in big data analytics (Dubey et al., 2020). Chatterjee et al. (2020) proposed ICT to be an empowering tool for female micro entrepreneurs, whilst Khalid (2020), based on study among universities, proposed AI to be a learning stimulator for entrepreneurial activities.

2) Red Cluster - Digital Transformation

The Red Cluster - Digital Transformation - consists of keywords such as 'digital transformation', 'digitalization', 'entrepreneurial competence', 'business model innovation', 'strategic entrepreneurship', 'product innovation performance', and 'dynamic capabilities'.

DT has been analysed in terms of how companies in traditional industries establish "dynamic capabilities

for digital transformation" (Warner & Wäger, 2019, p. 1), and is involved in debates on whether SMEs implementing DT demonstrate better performance when allocating resources to the innovation of their business models (Bouwman et al., 2019). A recent study (Cennamo et al., 2020) views DT not only as a background activity, but as a comprehensive process effecting the whole organization and its entrepreneurial and innovation actions.

The effects of the COVID-19 outbreak highlighted the need for digital innovation. The case study analysis disclosed the importance of not only technological, but also cultural characteristics as a driver of digital innovation process (Agasisti et al., 2020).

Empirical research on DT was conducted mainly on SMEs (Bouwman et al., 2019; Ceipek et al., 2020; Prügl & Spitzley, 2021). The analysis on family management companies and the impact of exploration risk of the Internet of Things revealed a hesitation towards risks related to innovations. As a remedy for family management risk aversity, the study suggested adopting a more diverse management structure (Ceipek et al., 2020).

3) Blue Cluster - Innovation

Keywords such as 'networks', 'internationalization', and 'absorptive capacity' were contained in the Blue Cluster - Innovation. Absorptive capacity has been researched as antecedent of innovative output. However, a study by (Agramunt & Berbel-Pineda, 2018) demonstrated the moderating role of absorptive capacity on the innovative intensions of a company, regardless of its participation in international networks.

Associations between corporate entrepreneurship as a mediator and lists of factors, such as ICT, absorptive capacity, innovation, and competitive advantage, was explored in a study on 460 organizations. The study confirmed a positive relationship between all relations, excluding the direct effect of absorptive capacity on competitive advantage. However, absorptive capacity harvests competitive advantage through corporate entrepreneurship (Mahmood & Arslan, 2020).

4) Purple Cluster - Performance

The Purple Cluster – Performance - contains searched for keywords such as 'performance', 'international entrepreneurship', and 'knowledge acquisition'. The analysis of Born Globals vs conventional start-up performance revealed a significantly higher performance for Born Globals in some performance outputs (turnover and growth rates). However, the difference in productivity performance was negligible (Choquette et al., 2016).

5) Light Blue Cluster - Entrepreneurship

The Light Blue Cluster - Entrepreneurship - consists of the keywords 'entrepreneurship' and 'emerging economies'. Resource limitation is a significant and frequent challenge that enterprises in emerging economies confront; especially large state-owned enterprises. Due to their size, large companies demonstrated lower degrees of innovativeness and adaptability towards technology changes, consequently failing in 'technology entrepreneurship' (Ge et al., 2020).

Research on factors influencing the ecosystem of industries - those dealing with creative cultures and related services established in Internet technology - have indicated that external and internal factors significantly influence the performance of entrepreneurial ecosystem. However, the authors highlighted a surprising impact of political environment on the Internet Cultural Industries, suggesting the prioritization of "good government governance" (Xie et al., 2019, p. 503).

6) Yellow Cluster – Technological Change

Technological Change (the Yellow Cluster) contains keywords such as 'ICT', 'information technology', and 'Born Globals'. Studies questioning Born Global start-ups seek to confirm whether there are really any differences in comparison to conventional start-ups. Results of a large-scale register data study revealed better performance outputs for Born Globals in many aspects; however, not in all. Still, the authors managed to answer the research question: "is there a fire behind the smoke?" (Choquette et al., 2016).

An empirical study on the promotors of internationalization intension in start-ups in ICT suggested sector strategy and entrepreneurs' network relationships were key drivers for early internationalization and international expansion affinities. The experimental knowledge and team diversity demonstrated the significant influence of "born globals' degree of born-globalness" (Cannone & Ughetto, 2014). Still, they were not considered essential for early internationalization.

Additionally, a study on ICT start-ups and Born Globals found a positive correlation between venture capital financing and the number of founders on Born Globals' growth (Ughetto, 2015).

Our network visualization displays the map of keywords represented by circles (by default) or by rectangles (as in Fig. 5). The size of the rectangle denotes the weight of the item and its colour determines which cluster it represents. Links between items, i.e. keywords, suggest the relationship between keywords in terms of their occurrence. To avoid keywords overlapping, not all of the keywords are revealed in the network visualization. VosViewer adjusts the visualisation (van Eck & Waltman, 2018, p. 8). However, for clarification and comprehensiveness, the frequency of the keywords are presented in Table 2.

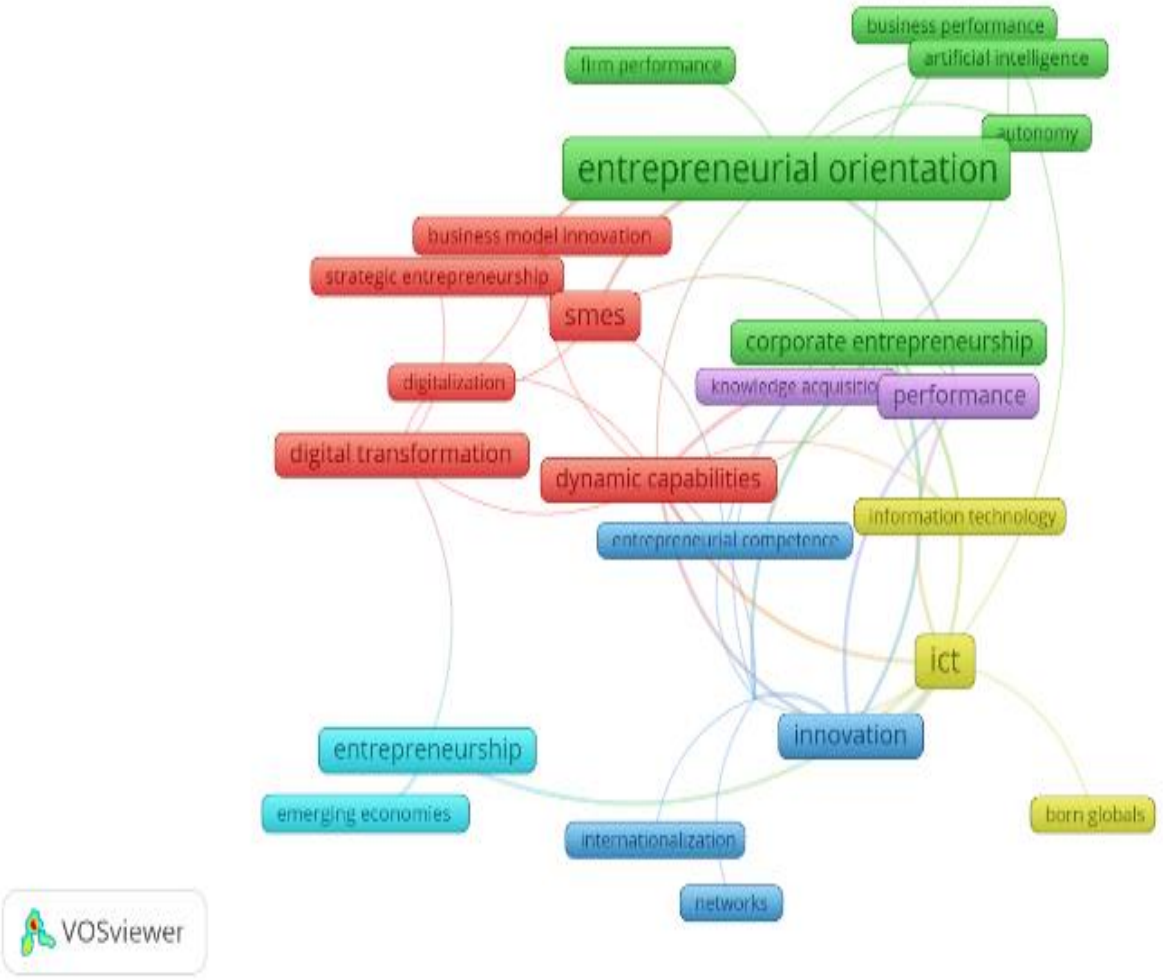

Figure 5. Authors' keywords network

Table 2. Keywords frequency by link strength and occurrences

Keyword(s)	Cluster number	Link strength	Occurrences
ICT	4	19	9
entrepreneurial orientation	2	16	12
innovation	3	16	6
dynamic capabilities	1	14	5
SMEs	1	14	7
corporate entrepreneurship	2	14	5
performance	5	14	5
absorptive capacity	3	10	4
entrepreneurship	6	7	6
business model innovation	1	6	3
internationalization	3	6	2
information technology	4	6	2
knowledge acquisition	5	5	2
digital transformation	1	4	5
digitalization	1	4	2
strategic entrepreneurship	1	4	3
artificial intelligence	2	4	3
entrepreneurial competence	3	4	2
autonomy	2	3	2
business performance	2	3	2
networks	3	3	2
product innovation performance	1	2	2
firm performance	2	2	2

4 Discussion and Future Research Avenues

Following the bibliometric analysis of the literature and the review, the topic is revealed to be understudied, and thus further research should be viewed as needed and welcome.

In spite of the vast number of papers for each separate topic researched as a part of the bibliographic analysis, intersectional research is insufficient.

Innovation, DT, and technological excellence are usually associated with start-ups and born global companies. However, large enterprises (Ge et al., 2020) are often neglected; particularly those working in non-ICT. The reasoning behind neglected technology and innovativeness in some companies, especially the state-owned ones, lies in their diminished adaptability and their underdeveloped technology entrepreneurship strategies, followed by their absence of entrepreneurial activity implementation (Chege et al., 2020).

Empirical studies on family companies revealed surprising findings on risk aversion towards innovations that could be mitigated by miscellaneous management structures (Ceipek et al., 2020).

Additionally, a study analysing factors influencing the ecosystem of Internet Cultural Industries revealed that external and internal factors considerably influence the performance of an entrepreneurial ecosystem. However, the impact of the political environment was significant as well, suggesting prioritization of "good government governance" as a remedy for that impact (Xie et al., 2019, p. 503). This could be considered a future avenue of research.

The challenges organizations face in trying to be more competitive by developing internal entrepreneurship through technology and innovativeness could be another field for future research, especially through empirical studies (including case studies) on positive examples.

Additionally, research could be supplemented by more refined explorations of these challenges, depending on existing government policies supporting technology investments through financing and grants, or depending on collaboration with other economy participants.

Vis-à-vis other topics for potential future research, studies exploring correlations between technology entrepreneurship (as an intersection of CE and levels of technological development) and corporate governance gender structures could contribute to the body of knowledge. ICT proved to be an empowering factor for female micro-entrepreneurs (Chatterjee et al., 2020). However, taking into account the gender gap and the lower percentage of women in STEM disciplines (Dabić et al., 2021), it would be interesting to see the level of entrepreneurship within technology/ STEM companies (prejudicially "male" businesses) managed and/or established by women. We could then see whether they are more or less entrepreneurial.

Based on the work of existing scholars, the authors suggest that potential future research in these areas could broaden and enrich the existing literature opus.

5 Conclusion

This study seeks to research the latitude of existing scholarly literature in the fields of CE and ICT. Throughout this process, a bibliometric analysis was conducted, resulting in metrics and illustrative maps confirming the need for further research of this topic, which has only recently begun to be studied intersectionally.

In light of its development, this research has certain limitations as it was conducted using only the Web of Science data base. However, the bibliometric approach undertaken integrated two existing and established domains of CE and ICT, providing an intersectional overview and offering a framework for future research. The opportunities for management and other social research could be multi-faceted, contributing from theoretical, empirical, and methodological perspectives.

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Appendix

Table 3. Data collection process

Search Query conducted on 25 May 2021		*from Web of Science Core Collection limited to Articles and Reviews in English*		
Query type	**Step**	**Domain**	**Keywords**	**Result of query**
Individual query	#1	CE	TS= ("corporate entrepreneur*" OR "strategic renewal" OR "strateg* entrepren*" OR "intrapreneur*" OR "entrepreneur* orientation" OR "corpo* vent*" OR "intern* entrepreneu*" OR "firm-level entrepreneur*")	3.768
Individual query	#2	Digitalisation or DT	TS= ("digitalisation" OR "digit* transfor*")	1.757
Individual query	#3	AI or ML	TS=("AI" OR "artif* intel*" OR "machin* learn*" OR "ML")	873.943
Individual query	#4	Industry 4.0	TS= ("industry* 4*")	3.325
Individual query	#5	ICT	TS= ("ICT" OR "infom* comm* tech*")	17.048
#1 AND #2	#6	CE AND (Digitalisation or DT)	TS= ((("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*")) AND (TITLE-ABS-KEY (("digitalisation" OR "digit* transfor*")))	11
#1 AND #3	#7	CE AND (AL OR ML)	TS= (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*")) AND (TITLE-ABS-KEY ("AI" OR "artif* intel*" OR "machin* learn*" OR "ML"))	12
#1 AND #4	#8	CE AND Industry 4.0	TS= (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*"))) AND (TITLE-ABS-KEY (("industry* 4*"))	6
#1 AND #5	#9	CE AND ICT	TS= (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*"))) AND (TITLE-ABS-KEY (("ICT" OR "infom* comm* tech*")))	33
#6 OR #7 OR #8 OR #9	#10	(CE AND (Digitalisation or DT)) OR (CE AND (AI OR ML)) OR (CE AND industry 4.0) OR (CE AND ICT)	((TITLE-ABS-KEY (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*"))) AND (TITLE-ABS-KEY (("industry* 4*")))) OR ((TITLE-ABS-KEY (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*"))) AND (TITLE-ABS-KEY (("ICT" OR "infom* comm* tech*")))) OR ((TITLE-ABS-KEY (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*"))) AND (TITLE-ABS-KEY (("digitalisation" OR "digit* transfor*")))) OR ((TITLE-ABS-KEY (("corpor* entrep*" OR "strateg* renewal" OR "strateg* entrepren*" OR "intrapren*" OR "entrep* orient*" OR "corp* vent*" OR "inter* entrep*" OR "firm*level entrep*"))) AND (TITLE-ABS-KEY (("AI" OR "artif* intel*" OR "machin* learn*" OR "ML"))))	60