Steering the sustainability of entrepreneurial start-ups

Charles Karani^{1,2} • Patience Mshenga¹

Received: 1 November 2019 / Accepted: 28 February 2021 / Published online: 14 May 2021
© The Author(s), under exclusive licence to Faculty of Entrepreneurship, University of Tehran 2021

Abstract

Entrepreneurship is a promising business avenue that individuals, groups and governments can explore and adopt for economic progress. However, there have been high rates of failure of entrepreneurial start-ups within their first 5 years across the globe. In this regard, the aim of the study was to explore ways of improving the sustainability of entrepreneurial start-ups. The study employed a thematic synthesis exploratory analysis on 105 articles. The paper sheds light on survival tools which may be applicable particularly during the setting-up of entrepreneurial ventures as well as in the course of difficult economic periods. The research findings were that, firstly, the entrepreneurial start-ups are prone to risks that if left uncontrolled would impact on their survival. Secondly, there exists a strong theoretical basis for birth (start-up) and death (failure/exit) of start-ups although failure is a learning opportunity. Thirdly, club theory provides a platform for a sharing economy which resource constrained start-ups would find cost friendly. Fourthly, building of relationships through collaboration and social networking has been in existence but favourably emerging approach that could offer start-ups a lifeline through accruing social capital. Fifthly, incubation and responsible innovation have continually been embraced wherein science and research are key ingredients for start-ups' sustainability. Finally, sustainability of entrepreneurial start-ups is a cumulative effect from existing and new product(s) and process(es) aspects. The insights emanating from this exploratory study may serve as signals to governments and private stakeholders of the urgency to initiate frameworks that would incorporate and facilitate entrepreneurial start-ups in implementing sustainability programmes. The findings derived from the study are expected to influence the sustainability management theory especially for entrepreneurial start-ups. Based on the limitations of manual exploratory analysis, the study recommends consideration of machine learning methods in conducting future exploratory studies.

Keywords Sustainability · Start-ups · Club theory · Sharing economy · Responsible innovation · Incubation · Building relationships

Introduction

Entrepreneurship has been widely accepted and promoted as a way of life especially in wealth and employment creation (Aribaba et al., 2019; Audretsch, 2004; Greco & Jong, 2017; Moyi, 2019; Urbano & Aparicio, 2016). Additionally,

entrepreneurship has fundamentally been associated with positive economic development (Acs et al., 2018; Toma et al., 2014) in particular the entrepreneurial capital (Audretsch, 2004; Urbano & Aparicio, 2016). Entrepreneurs' initiatives are drivers in value creation through resource reallocation from lesser to more productive utilization which enables economic enrichment via structural composition (Szirmai et al., 2011). According to Zoltan and Storey (2010), entrepreneurship promotes cost discovery, gap-filling and input-completing. However, Baumol (1990) indicated that although entrepreneurship is critical in recognition, creation and utilization of opportunities as seen through their ingenuity, not everything in regard to opportunities exploitation is destined in the societal best interest.

In recognition of the positive relationship between entrepreneurship and economic progress, individuals are keen to become entrepreneurs notwithstanding as opportunity or replicative entrepreneurs (Acs et al., 2018). Entrepreneurs and

✉ Charles Karani
karani.char@gmail.com

Patience Mshenga
pmshenga@egerton.ac.ke

¹ Department of Agricultural Economics and Agribusiness Management, Egerton University, Njoro, Kenya

² School of Agricultural Sciences and Agribusiness, Pwani University, Kilifi, Kenya

entrepreneurship are viewed from the process, behaviour or outcome (Stokes et al., 2010) aspects, but their commonality is that they alter the status quo by introducing change. However, there has always been a mismatch between entrepreneurial intentions and actions (intentions-action gap) mostly associated with emergence of unforeseen constraints and change in individual preferences over time (Van Gelderen et al., 2015, 2018). The transition of an individual's idea from aspirations and intentions to activities is a vital but only a preliminary step in entrepreneurship. The actionable step on intention is done with the realization of possibility of failure. Whereas success may be attained, it can only be termed as relative since host of issues have to be continually resolved in the post-action period. Furthermore, there can be failure in the midst of success; failure in a few entrepreneurial aspects while succeeding in most of the aspects. Therefore, success does not have to be absolute. Gollwitzer (2012) points out that people fail not because they cannot succeed but merely for failing to factor-in negative feedback in formulation of objectives and generally planning.

The blending of entrepreneurial actions and feedback generated thereof may offer a more formidable guarantee in attaining and surpassing entrepreneurial objectives compared to taking action alone. The positive and negative impacts of entrepreneurship as well as the likely success and failure aspects bring about the question of sustainability of entrepreneurial start-ups. Although sustainability is considered from a long-term perspective, it can also encompass short-term perspective depending on the entrepreneur's goal(s). Burton and Obel (2018) highlighted that there may be organizations that are setup and disbanded quickly upon realization of their goals. Again, goals of an entrepreneur may change overtime depending on the changes in the environment. But do entrepreneurs pursue an in-depth analysis of what the goals they formulate entail? Do they assess the short-term and long-term nature of their intentions and actions? Do they consider sustainability? These questions are critical in understanding where they are and where they want to be. In this regard, it is critical to pursue the benefits of entrepreneurship while having societal interest at heart so as to control for negative impacts of entrepreneurship which gives rise to sustainable entrepreneurship. Dvoulety et al. (2018) associated negative impacts of entrepreneurship to improperly working institutions especially in developing countries.

Van Gelderen et al. (2018) argued that longevity is overshadowed by impact on sustainable entrepreneurship compared to the mainstream sustainability and entrepreneurship due dynamism in the external environment. Rather than develop long-lasting products and/or services, sustainable entrepreneurs seek to attain a positive impact while being adaptive to changes in the environment which makes longevity unrealistic and potentially damaging. However, from the above argument, sustainability of entrepreneurial start-ups should be seen as cumulative relevance/appeal attained from

the products or services and processes offered to the market over time through continuous response to environmental changes. Recently, sustainable entrepreneurship concept has been defined as:

Discovery, creation, and exploitation of entrepreneurial opportunities that contribute to sustainability by generating social and environmental gains for others in society. (Greco & Jong, 2017, pp.14)

Even though an entrepreneur resides in a society, the definition gives more weight to gains of others in society (social and environmental). The definition fails to articulate the benefits that an entrepreneur or entrepreneurial setup would draw from implementing sustainable entrepreneurship which would be considered a motivational reward (Hanohov & Baldacchino, 2018). However, it captures sustainable development which is the most important aspect. Moreover, Hoogendoorn et al. (2019) noted that sustainable entrepreneurs aim to serve both self- and collective-interests by addressing the pending needs in the social and environmental spheres. According to Hooi et al. (2016), sustainable entrepreneurship is economically necessary and sound. Whereas sustainable entrepreneurship would be inclined towards non-economic gains for the society, for an entrepreneurial start-up to be sustainable, it would need to be immersed in pursuing economic sustainability while attempting to maintain a healthy balance with social and environmental spheres.

Based on SBA (2014), Burton and Obel (2018) and Otari (2018) with particulars on start-ups, failure and building formidable organizations through efficient scientific organization design that would impact on organizational performance, a need arises in attempting to improve the sustainability of organizations. Burton et al. (2017) and Burton and Obel (2018) noted that entrepreneurial start-ups are not well understood and there was need for agile and stable organizations that would quickly respond to adjustments in the environment in which they operate, an indicator for their sustainability. In this regard, 'how can entrepreneurs improve the sustainability of their start-ups?'

Methods

Although there are numerous articles on sustainable entrepreneurship in literature, to the best of our knowledge, there is no article that had been dedicated towards specifically exploring how entrepreneurial start-ups sustainability could be enhanced. Sustainability approaches have largely been scattered in literature. Based on the above perspectives, the exploratory analysis methodology was chosen to comb, scan and synthesize the sustainability and organizational theory literature in order to identify insights into the sustainability of entrepreneurial start-

ups. Therefore, the resultant thematic synthesis exploratory essay is a retrospect and thinking process in regard to the problem and projection of solutions in regard to improving the sustainability of entrepreneurial start-ups. Other studies that have used exploratory approach include Meira et al. (2017), Dunne (2018), Hanohov and Baldacchino (2018) and Asmussen and Møller (2019). Swedberg (2020) provided a pitch on the basis for exploratory research in social studies in piloting and generation of new ideas. Additionally, Thomas and Harden (2008), Barnett-Page and Thomas (2009) and Cruzes and Dybå (2011) applied the thematic synthesis approach to qualitative research. Informed by these studies, the study recognizes literature review as a cumulative attempt in knowledge enhancement (Pare et al., 2015; vom Brocke et al., 2009). The choice of the methodology was based on the limited specificities in regard to sustainability of entrepreneurial start-ups. Similar to the findings by Hanohov and Baldacchino (2018), knowledge and experience with organizational theory played a critical role in shaping the output of this study.

The study modified Thomas and Harden (2008) steps of extracting data from literature to accomplish thematic synthesis. The steps included (i) selection and pooling text, (ii) reconsideration of pooled text and developing descriptive

themes and (iii) generating analytical themes. However, these steps were not static. As such overlaps were experienced during the exploratory analysis. The overlaps were critical in boosting the validity, reliability, and relevance of the literature text that was used and the findings arrived at. Guided by the research question, at first the exploratory review involved selection and pooling journal articles, books, reports, working papers and web pages under ‘sustainability and organizational theory’, ‘start-up sustainability’, ‘sustainability and entrepreneurship’ and ‘sustainable entrepreneurship’ search words and phrases. The suitability values of these articles were assessed individually for their sustainability inclinations: economic, social and environmental. The articles that portrayed a start-up related sustainability aspect were considered. Articles were selected from a wide range of publishers so as to minimize likely bias. Additionally, as long as the articles identified contained any of the relevant themes as described above, they were considered for review. This diversity was a basis for improving the validity of the findings of the paper. The study involved exploratory analysis of 105 articles where majority (85) were peer-reviewed journal articles. The population of articles and books by various publishers that were reviewed include:

Journal/source	Publisher	Number of articles/books
Books	K&S Ranch Inc., Springer, Palgrave Macmillan, Sage, Cengage Learning and Oxford University Press	10
Webpages, conference papers, working papers and reports	Various	10
Entrepreneurship Theory and Practice	Sage	4
Journal of Global Entrepreneurship Research	Springer	4
Sustainability	Multidisciplinary Digital Publishing Institute	4
Small Business Economics (Abbreviated as Small Bus Econ)	Springer	3
Regional Studies	Taylor & Francis	3
Business Strategy Series	Emerald	2
BMC Medical Research Methodology	BioMed Central	2
Industry and Innovation	Taylor & Francis	2
International Journal of Entrepreneurial Behavior & Research	Emerald	2
Journal of Organization Design	Springer	3
Management Decision	Emerald	2
Management Research Review	Emerald	2
Procedia Economics and Finance	Science Direct	2
Technological Forecasting & Social Change	Elsevier	2
Psychology (Abbreviated as Psychol)	Sage	1
Economica	John Wiley & Sons Inc.	1
Human Relations	Sage	1
Academy of Management Executive	Academy of management	1
Administrative Sciences Journal (Abbreviated as Adm. Sci)	Multidisciplinary Digital Publishing Institute	1
Administrative Science Quarterly	Sage	1
African Journal of Business Management	Academic journals	1
American Journal of Sociology	The University of Chicago Press	1

Journal/source	Publisher	Number of articles/books
Australian Journal of Management	Sage	1
Building Research & Information	Taylor & Francis	1
Business Horizons	Elsevier	1
Cogent Business & Management	Cogent OA	1
Drustvena Istrazivanja	Institute of Social Sciences Ivo Pilar	1
Environmental Innovation and Societal Transitions	Elsevier	1
European Business Review	Emerald	1
European Journal of Cultural Studies	Sage	1
Foundations and Trends in Entrepreneurship	Now publisher Inc.	1
IEEE Software	Institute of Electrical and Electronic Engineers	1
Industrial Marketing Management	Elsevier	1
Information Systems Frontiers (Abbreviated as Inf Syst Front)	Springer	1
Information & Management	Elsevier	1
International Journal of Scientific and Research Publications	J. Prakash	1
Journal of Big Data	Springer	1
Journal of Business and Technical Communication	Sage	1
Journal of Business Ethics	Springer	1
Journal of Business Research	Elsevier	1
Journal of Business Venturing	Elsevier	1
Journal of Cell Science	The Company of Biologists	1
Journal of Cleaner Production	Elsevier	1
Journal of Competitiveness	Tomas Bata University	1
Journal of Constructivist Psychology	Routledge- Taylor & Francis	1
Journal of Innovation and Entrepreneurship	Springer	1
Journal of Innovative Management	Associação Journal of Innovation Management	1
Journal of Management & Governance	Springer	1
Journal of Political Economy	University of Chicago Press	1
Journal of Public Economics	Elsevier	1
Marketing Review St. Gallen	Springer	1
Problems of Sustainable Development	Politechnika Lubelska	1
Procedia - Social and Behavioral Sciences	Elsevier	1
Product Innovation Management	Wiley-Blackwell	1
Public Choice	Springer	1
Strategic Management Journal	John Wiley & Sons Inc.	1
Sustainability Accounting, Management and Policy Journal	Emerald	1
Technology Analysis & Strategic Management	Routledge-Taylor & Francis	1
Teorija in Praksa	University of Ljubljana	1
The ITB Journal	Institut Teknologi Bandung	1
The Journal of Technology Transfer	Springer	1
The Quarterly Journal of Economics	Oxford University Press	1

Secondly, reassessment of the pooled text which involved further exploration of sustainability for entrepreneur start-up aspects was conducted. Through author analysis and paper peer-review, the initial sustainability aspects were as well enriched. As a result, potential risks, survival, sharing resources, incubation, responsible innovation, innovative marketing, networking and science themes were developed. The descriptive themes of sustainability brought to the fore critical insights into the approaches that

start-ups could adopt in course of steering through the murky business environment.

Thirdly, the descriptive themes were further assessed and summarized to form the analytical themes for the study. The developed analytical themes included potential risks, birth and death, and sustainability approaches and their respective sub-themes and crosscutting issues were considered. Synthesized information per theme were summarized and arranged in a manner meant to make the flow of ideas. Additional author

insights are included to enrich the “**Findings and discussion**” section.

Compared to machine learning methods (MLM), this study could be limited in terms of paper volumes since a manual exploratory analysis approach was used. However, process clarity difficulties and expertise requirement associated with MLM were not experienced. Further, optimality challenges on topics and number of papers that is related to MLM were also not experienced (Asmussen & Møller, 2019).

Findings and discussion

Potential risks associated with start-up enterprises

The pre-start-up phase of a business is essential in moulding the future of an enterprise. Natasha (2003) recognized that setting up an enterprise is a process that is non-instantaneous and is generally complex. Deviations from projections are common due to changes associated with evolving of the market environment: competition, technology, laws and access to raw materials. The setting up of an entrepreneurial start-up is regarded as uncertain in regard to success, failure, sustainability (life cycle indicator), knowledge and understanding. The potential risks that may determine the survival of an enterprise may be related to individual (human capital and psychology), environment (network, financial and ecological), process (aggressiveness, work timelines and business planning) and organizational setup (innovativeness, intended firm size and leadership type) characteristics (Kerr et al., 2017; Natasha, 2003; van Gelderen et al., 2005). These aspects may be organized as personality traits, market, bureaucracies and institutional arrangements. For instance, some start-ups may have access to financing through personal savings, grants and or loans, whereas others may not. This implies likely differentials in the typology of financial risks they may face.

Garnsey et al. (2006) recognized that start-ups growth is non-linear. They are characterized by interruptions and setbacks: back-and-forth changes. This is an indicator that start-ups operations are prone to risk which may contribute to their failure. Changes and risks associated to the business environment are likely to have an impact on entrepreneurial start-ups as well as the environment itself. Whereas entrepreneurial start-ups are associated with positive impact (Acs et al., 2018), negative influence of entrepreneurship on regional development has been empirically established in recent times (Dvoulety et al., 2018). The risks associated with public sector institutional arrangements, processes and operational practices may also determine the survival of an entrepreneurial start-up. Early stage enterprises have been recognized to have significant creation and destruction aspects on revenue and jobs in the course of their growth. The risk of destruction in economies is associated with the rise and fall of business start-ups

that are unable to sustain their operations. In this regard, as start-ups are destroyed (non-growth and reverse growth), economic performance may be affected as well as employee’s livelihoods (Davila et al., 2015).

As pointed out earlier, failure is one of the risks that every enterprise yearns to get rid-off, but it is also a cumulative effect of other start-up related risks such as market, technical and product/service risks. However, it is a reality that every business setup has to live with by devising the necessary shock absorbers in case it does happen. However, Walsh and Cunningham (2016) considered failure as an indicator of economic vibrancy as well as a critical source of entrepreneurs’ trauma. Identifying and addressing, causes, lessons, psychological effects and how to recover from failure especially for entrepreneurial start-ups offers insights on how to continue attracting individuals and organizations into implementing their entrepreneurial intentions for the sake of economic vibrancy (Byrne & Shepherd, 2015; Knott & Posen, 2005; Walsh & Cunningham, 2016). Some of the research contributions that have been made in regard to potential start-up risks include:

Research contributions on potential risks associated with start-up enterprises which may impact on their survival if left uncontrolled. These risks are mostly related to market, technical and product/service user risks.

- a) Setting up an enterprise is not an event nor is it an automatic process; its non-linear and non-instantaneous (Garnsey et al., 2006; Natasha, 2003).
- b) Personality/individual traits such as self-efficacy (capacity, opportunity recognition and action), innovativeness, locus of control (leadership style and directing the business) and the inner drive for achievement (motivation) are critical in determining success and how to control risks arising (Kerr et al., 2017).
- c) A deductive-inductive matrix meant for the management of start-up risks and uncertainties in regard to new product and process (Teberga et al., 2018).
- d) Enhanced estimation of net present value risk adjusted measures for start-ups (Teberga et al., 2018).
- e) Entrepreneurial orientation in regard to innovativeness, risk-taking and proactiveness aspects could be distinctively delineated into process and outcome attributes thereby enabling a better understanding of entrepreneurial orientation in start-ups (Linton, 2019).
- f) Explored factors affecting business sustainability in the context of government support for start-ups as a way of improving the effectiveness of such government programmes. Entrepreneurship, market orientation and networking were found to be vital attributes in influencing business sustainability (Lee & Kim, 2019).
- g) The operational business environment of start-ups is vibrant, volatile, indeterminate and sometimes chaotic. These scenarios requires entrepreneurs to learn fast and respond quickly; otherwise they may fail fast to attain a sustainable income (Giardino et al., 2014).
- h) Gender differentials towards perceived innovation and risk orientation; unlike men, women felt that these aspects had significant influence in enterprise performance. Women participation in entrepreneurship was conditioned on their families being prioritized (Hazudin et al., 2015).
- i) Risk of destruction in the business environment (the start-up, employees and other stakeholders) may bear the blunt of a start-up collapse (Davila et al., 2015).

- j) Start-ups risk of failure may contribute to spill over effects (psycho-social and financial). These may impact on the ability of an entrepreneur in setting up an enterprise in future (Byrne & Shepherd, 2015; Natasha, 2003).

In identification of opportunities and controlling the risk involved in sustainable entrepreneurship, Hanohov and Baldacchino (2018) findings showed that knowledge of ecological and societal environments, the drive to benefit themselves and others as well as the entrepreneurial knowledge influence entrepreneurial involvement. Exposure to foreign culture, socialization, self-employment desire, personal background and personality acted as motivators, whereas work experience formed a basis for entrepreneurial knowledge. Similarly, Koe et al. (2014) findings revealed that sustainable attitude, social norms, perceived desirability and perceived feasibility had a positive influence on the propensity for sustainable entrepreneurship. According to Hoogendoorn et al. (2019), at the start-up of a venture, sustainable entrepreneurs perceive institutional obstacles (financial, administration and information facilitation) at a higher scale compared to regular entrepreneurs. Even though sustainable entrepreneurs are more prone to fear of personal failure, there is no substantial difference between their risk attitudes compared to regular entrepreneurs. Bergset and Fichter (2015) assessed how green start-ups could encounter additional challenges in accessing and using finance. Whereas green start-ups are considered high risk investments, they have potentially more appealing returns but largely realize low returns in practice. The study established that there may be more differences between green start-ups themselves than when compared to conventional start-ups. Most often, sustainable entrepreneurship involve perseverance and patience thus it runs on ‘patience capital’.

In recognizing opportunities and implementing them as entrepreneurial aspirations and intentions, entrepreneurs usually have expectations. Failure should be one of the aspirations which is an important aspect in business and more often serves as an informative consideration in business design and may contribute to sustainability. Hörisch (2015) and Burton and Obel (2018) indicated that entrepreneurial start-ups are not well understood yet they have a role in sustainability transitions and there is need for agile organizations that are swift in responding to changes in the environment. The entrepreneurial start-up standing in research is further complicated by indications that approximately 50% business start-ups fail within their first 5 years (SBA, 2014) whereas one in three businesses live to see their tenth birthday (Otar, 2018; SBA, 2014). Giardino et al. (2014) reiterated that start-ups are associated with high risk and failure rates. Nevertheless, resilient entrepreneurs are known to emerge from failure and invest in the same or other businesses either before or after internalizing the failure they suffered in the

past. While most researchers are inclined towards studying success, Yamakawa et al. (2013) indicated that researching failure is a preventative attempt of a likely re-emergence. Perhaps assumed to be known, literature is limited on how entrepreneurial start-ups could survive the strong tides in the today’s business environment, thereby avoiding failure. The risk associated with failure can be viewed from the lens of education. Whereas there as many students who give up due to unsatisfactory performance, there are as many who resit their exams in order to pursue their aspirations. For this to happen, students who are not buried by failure are like entrepreneurial start-ups who emerge out of failure to try again by revising their strategies. Resilience plays a significant role in overcoming the risks and hurdles involved in business.

Organizational theory of organism and population ecology: birth and death reality

In theory, the survival of business start-ups can be seen through the organism and population ecology lens. From these theories, the start-up and decline phase of such an enterprise is highly risky and may result to its death which implies that its lifecycle comes to an end, at least for the time being. As much as entrepreneur perspectives dominate entrepreneurship studies, entrepreneurial ventures are basically organizations. With time, entrepreneurial start-ups become legal persons whereas as many remain informal. The stride towards becoming artificial persons makes them more formal in establishing relationships with stakeholders which may be one way of starting the sustainability journey. Start-ups are basically ventures that are new and young in a given market (Song et al., 2008) with little resources for their operational demands (Katila et al., 2008). Salkowitz (2013) described a start-up as a venture that come to existence in effort to offer a solution to a specific problem or commercialize a distinct idea while Blank and Dorf (2012) defined a start-up as a transitory firm in the process of exploring a repeatable, scalable and profitable business model. Realistically, entrepreneurial start-ups may be new subsidiaries of well-established and capital intensive organizations but still their kick-start budgets are little as they undergo feasibility and market trials. Therefore, for this study, a start-up is considered to be a small (resource wise) enterprise in the initial stages of operation; basically within a 5-year period from inception.

The organism metaphor considers organizations as living things that are born, grow and die. These organisms (organizations) continuously strive to survive by evolving to gain a competitive edge. Since organisms are responsive to their immediate environment, organizations behave in the same way by interacting with the environment thereby gaining knowledge. The knowledge gained enables organisms to adjust by conforming to the environment and eventually use it to adapt. The organization is seen to operate in an ecosystem that

necessitates development of survival features in the natural selection process. Organizations co-exist with others in the environment and depict a non-exclusive characteristic: non-closed systems. Their survival cannot be guaranteed without the environment. The organism metaphor can be observed through human relations and contingency theories (Öcal, 2011; Örtenblad et al., 2016; Tohidian & Rahimian, 2019). Contrastingly, Barter and Russell (2014) held that the metaphor impede sustainable development since it dehumanizes humans by characterizing organizations like humans. Whereas the metaphor humanizes organizations in a way, this would be held to be a mere form of personification and or anthropomorphism which may not hinder sustainable development per say. More so, humans are not equivalent to organisms but are a type of organism. In actual sense, the organism metaphor gives life to an essentially non-living thing.

Similar to the organism metaphor, population ecology theory attempts to illustrate the influence of environment on the emergence and closure of organizations: birth, change and death. At their onset, new ventures seek for legitimacy (legal, cultural and managerial aspects) in the business environment in order to be competitive. The birth stage (newness) is seen as a liability to an entrepreneurial start-up where mortality threats are rife. When legitimacy sets in, business confidence to manoeuvre the competitive environment propels it to be innovative thereby becoming an enabler to retain relevance in the market (Di Paola et al., 2017). Further, the population ecology theory considers how organizational outcomes are determined by organizational characteristics (size, scope), environment and contextual random effects. Existing organizations are viewed as competitors of resources in the environment they operate in. Therefore, they have to devise strategies for attaining a competitive edge; otherwise the natural selection process may take toll on them. As a result, access to resources may determine entry, survival and exit of organizations in an industry (Hannan & Freeman, 2019; Manjula & Raymond, 2011).

The organism metaphor and population ecology theory paints a picture of the critical nature of environment in the survival/sustainability of entrepreneurial start-ups. The approaches bring forth the reality of birth and death of organizations. These aspects can be illustrated by Schumpeter's theory on creative destruction which is commonly associated to Schumpeterian entrepreneurship, characterized by constant births and deaths of organizations in vivacious economies (Block et al., 2017; Fritsch, 2017). Amidst changes in the environment, organizations have to devise sustainable ways of exploiting resources. Otherwise the natural selection process sets in, where extinction is a possibility. Darwinism presents an interface between organism metaphor and population ecology (Abatecola et al., 2016). The basis of sustainability in relation to organism and population ecology theories in literature is as illustrated below:

Research	Sustainability inclinations	Author(s) and date
A shift in perceiving organizational metaphors among business administration students in an EU country: a window into the current thinking of future employees	Business students perceived organizations as machines, organisms and interlinkage of social entities. The study was inclined towards the younger generation and particularly the futuristic (sustainability) aspect of how the current generation will perceive and steer the organizational notions during the largely accessible information age.	Grah et al. (2015)
Beyond Morgan's eight metaphors: adding to and developing organization theory	The research embraces the theory of change in that views and ideas do not have to remain static. New ideas are incorporated into the growth of organizational theory. Realistically, the environment keeps changing just like in the case of organization as an organism and population ecology theories. In order to survive, business ventures have to undergo critical change and growth processes and have to be embedded in the environment.	Örtenblad et al. (2016)
Entrepreneurial ecosystems: economic, technological, and societal impacts	The researchers argued that the missing clarity of 'ecosystem' in organizational metaphors had contributed to study of ecosystems without well-defined boundaries thereby inhibiting performance evaluation and outcome measure. The researchers adopted economic, technological and societal features to be what constitute entrepreneurial ecosystem. With improved clarity, performance and outcome assessments are enriched thereby enabling sustainability projections of such ecosystems.	Audretsch et al. (2019)
Population ecology theory: implications for sustainability	The study cites a convergence between sustainability and population ecology. The research appreciated that although unsustainable	Manjula and Raymond (2011)

Ecological entrepreneurship and sustainable development	<p>organizational practices may be driven by ecosystem pressures, their existence will be threatened by a decline in population density or a possibility of death. By embracing sustainable practices, firms improve their sustainability.</p> <p>The study explored the coexistences and interaction of economic, social and ecological subsystems in promoting sustainable development. Cumulative benefits of implementing ecological solutions by stakeholders (individuals, organizations and government) are identified as a basis for futuristic societal wellness. ‘The time has come to understand that nature will exist without man, but not man without nature’</p>	Mieszajkina (2016)
---	---	--------------------

Sustainability approaches

Business-related risks imply that unless they are addressed, they may impact on the survival of entrepreneurial start-ups, causing failure and/or death. This need necessitates the adoption of sustainability approaches that may prolong their life cycle. Some of the organizational theory approaches that entrepreneurial start-ups may consider in improving their sustainability may include:

Club theory: shared resource approach

Club theory is considered a theory of co-operative membership in which ownership-consumption rights are determined for a finite number of persons who belong to an exclusive group. According to Buchanan (1965), a preferred membership for practically every activity exists for people in a given economic context. Level of income is argued to be a key determinant for such groups. He referred the good being shared as a club good which is contrasted to a public good. Whereas a club good or service has a particularly restrictive access, that is, optimal membership is an individual or a family unit, a public good is non-restrictive in nature as such accessible by an infinite membership. Therefore, a club good may mostly not be purely private and has a characteristic of publicness though finite. In this case, club theory offers insights in determining the acceptable cost in consumption allocation arrangement.

A survey conducted on club theory highlighted the voluntary nature of membership in clubs (Sandler & Tschirhart, 2019). Glazer et al. (1997) noted that the voluntary members’ willingness to pay was pegged on facility capacity, the number and characteristics of other users which potentially determined the utility derivable. Members opt to join clubs informed by the expected net benefits derived from the economics of sharing. In principle, an expanding membership ought to reduce the cost per unit per member. However, there is reality of possibility of overcrowding thus likely to reduce the benefits derivable. Informed by this, need arises for restriction basically through pricing and or membership size. A club good or service is rivalrous although exclusion is costless unlike a public good which is non-rivalrous and non-restrictive (Sandler & Tschirhart, 2019).

From entrepreneurial start-ups perspective, club theory can be applicable since in most cases they are resource constrained, that is, inadequate human and financial resources (Katila et al., 2008). This reality makes sharing arrangement appealing as a strategy for operation cost management. At the onset, an entrepreneurial start-up may not require much space, and the space may not be used fulltime. In recent times, shared resources have emerged as a cost management strategy. Small businesses as well as entrepreneurial start-ups may embrace the various shared resource approaches such as business parks, home office space and co-working space.¹ Club theory essentially promotes the sharing economy. Whereas sharing of resources aspect has existed traditionally especially in regard to farm implements, it is gaining a new meaning in the modern society. It has recently taken the route of sharing personal items and spaces such as cars, houses, clothing, books, computers and internet resources among others in order to share the expenses arising (Frenken & Schor, 2017).

Business parks (innovative or industrial business parks) provide a diverse or specialized business platform where facilities are shared and offer a ready market from potential customer inflows seeking for service(s) within the facility. Gábor et al. (2010) highlighted that some of the rationale for innovative business parks development is hinged on the high failure rate of start-ups and thereby such facility improves access to support for innovation and entrepreneurship. Co-working is another shared resource approach in which users can rent office space desk or rooms on a daily, weekly or monthly basis or as may fit their requirements. This form of shared resources was established with the intention of promoting social change in labour circles by enhancing accessibility, user-friendliness, openness, sustainability, communalism and cooperation (Gerdenitsch et al., 2016; Ivaldi et al., 2018; Rus & Orel, 2015; Spinuzzi et al., 2018). It involves sharing amenities (computers, office furniture, internet, game rooms,

¹ The rise of virtual workplaces may also be associated with home office and co-working spaces (Cascio, 2000).

kitchen facilities, water and washrooms) and users rent as need arises. Additionally, meeting/conference areas are included in such co-working spaces. Just like in club theory, the shared space subscribers may be able to reduce per unit cost. It is not limited to entrepreneurs; other target users for co-working space include self-employed individuals, freelancers, outsourced workers, students, small- and medium-sized enterprises as well as employees of large corporations (de Peuter et al., 2017; Weijs-perrée et al., 2018) whose formal place of work may be far from their residences. Finally, home office space is a shared resource approach that entrepreneur start-ups can utilize before they outgrow the space. This involves putting aside a space within a home as a working office. In this case, only the setup and maintenance costs are incurred, as such there is no extra rental cost involved. These aspects are particularly convenient for users in a gig economy context. They offer cheaper avenues for entrepreneurial start-ups and could be key in promoting their sustainability. This would probably suit organizations that start-up and disband quickly as envisioned by Burton and Obel (2018).

The narrative of economics of shared resources can be illustrated through a commercial size fuel or gas station establishment. As much as an individual may own an automobile, they may not necessarily need to establish such a facility. Even in cases where an individual owns several automobiles, it would not be economical to establish such a facility considering its investment and management demands. Whereas it may make economic sense to establish such a facility for organizational use, this would depend entirely on their size in terms of fuel requirement, cost and convenience associated. Individually or family-owned farm set-ups could as well invest in such a facility for the convenience of fuelling its farm implements. In consideration of the initial investment requirement, the shared aspect of a fuelling facility makes per unit cost of fuel much lower. Similarly, this notion may apply to entrepreneurial start-ups where such enterprises may not need to incur heavy costs initially, whereas the same goods and or services could be accessed through sharing at a lower cost.

Collaborative and social networks: building relationships

Sustainable start-ups need to build formidable business models as well as processes that would enable them to design, establish and manage relationships towards attaining their triple bottom line (people, profit and planet) objective in value creation (Weissbrod & Bocken, 2016). Collaborative networks emanate from partnership between and among firms/partners such as government, community, non-governmental bodies and possibly other ventures with a common purpose. Collaboration is an interactive process that encompasses common rules and structure, formal and information negotiations, contributed competencies, shared risks and responsibilities whose subjects are associated to a problem and involve

compromises in order to attain joint benefits through value creation for all parties (Gray & Stites, 2013). In this case, networking involves building mutually beneficial relationships with other ventures and or stakeholders with the aim of establishing relations with new clients, improving visibility and relevance, gaining confidence and experience and sharing knowledge and information (Ward, 2019). Lee and Kim (2019) found that network influences business sustainability. Therefore, networking results to network embeddedness and synergies of association. As such, established relationships offer a stepping stone for entrepreneurial start-ups to manoeuvre in the competitive business environment thereby magnifying their visibility. Well-networked ventures are able to secure business opportunities even during low and slow business seasons. As a result, their economic sustainability is nurtured socially. This way, required skills, tasks, resources as well as sharing of likely risks, attached costs and benefits are unified.

van Gelderen et al. (2005) and Zheng et al. (2019) assessed how previous experience of new venture leaders (NVL) influence networking behaviour in entrepreneurial start-ups. They were of the view that past experience is vital in establishing formidable business networks by reducing the general, technical and start-up unknowns. NVLs prior technical experience determined the time orientation of the network approach showing preference for short-term networks among individuals who lack such experience. Broadening networking actions and symbolic desired benefits were key focus in limited technical and start-up past experience. Similarly, Camarinhamatos et al. (2010) established that sustainability effort would be more effective through collaborative networks which offers facilitative engagement and synergy emanating from multiple stakeholders.

Based on the various motivators of engaging in collaborative networks, that is legitimacy, competencies, resources and societal motivations, entrepreneurial start-ups are likely to benefit from sustainability. However, not all collaborations would result to mutual benefits for start-ups. Therefore, entrepreneur start-ups are supposed to explore vital characteristics of the potential collaborators which may include resource base, type, cultural fit, past experience, time horizon and reputation (Gray & Stites, 2013). These aspects would offer insights into a likely exploitative and non-beneficial partnership.

Related to collaborative networks, social networks are relations that arise among social actors and how the structure in those relations contributes to outcomes. The social network could be understood from a human relations theory perspective. These relations are explained by social network theory which is based on a central idea, social actors' positions in the structure that determine opportunities arising and their availability as well as a bond of constraints among the actors. As such, location within the social structure governs the level of derivable benefits: social and economic. Opportunities arising

and their availability for social actors influence the entrepreneurial processes. Therefore, the social networks provide an environment for recognition of opportunities, filtering entrepreneurial opportunities among them and deployment of required resources to exploit them. The interrelationships in a social network indicate information flows and exchanges that entrepreneurs can use for venture creation thereby benefiting an entrepreneurial start-up. The linkages among positions in the structure and actors also offer diffusion of information pathways which an entrepreneur can use to promote their innovations, products or services thereby accumulating sustainability. Opportunities of social networks for entrepreneurship are likely to be more and richer if an entrepreneur belongs to numerous social networks. However these relationships are dynamic and can be altered to suit the need (Greve & Salaff, 2003; Stuart & Sorenson, 2010).

Social networks can be further seen through social media which offer visibility and low-cost linkages with the clientele. Keeping in mind that start-ups are resource constrained, the social networks offers access to potentially large borderless market. Established ventures are known to use social media networks more vigorously to bring their products to the market (Kapoor et al., 2018). Equally, start-up ventures exploitation of this platform would likely result to sustainable performance.

Similar to networking, systems theory is an organizational theory that generally attempts to comprehend objects through relationships between and among those individual objects, relationship between array of objects and how those objects relate with the environment. Systems theory is an illustration that depicts organizations as a conglomeration of parts, their interaction and interrelationships and the synergy emanating from their relationship (Coleman & Palmer, 1973). This theory gives rise to business systems theory which aims to explore the interactions between people, organizations and institutional features and how they influence human skills, organizational strategies and proficiencies (Rana & Allen, 2018). Systems theory is critical in entrepreneurship as it registers the importance of working together and non-exclusivity of start-ups from their environment. A start-up is transformative in nature, draws inputs from the environment (internal and external), transforms them through laid down processes and produces output for the environment. The theory explains how institutional contexts facilitate entrepreneurs in exploiting opportunities emerging and to create start-ups. The established relationship impacts on entrepreneurial start-ups survival (Clawson, 2014).

Social networks and systems theory offer an illustration of the benefits associated with togetherness. Often idioms such as ‘if you want to walk fast, walk alone’ and ‘if you want to go far, walk with others’ have been used to demonstrate the importance of networks in sustainability. Therefore, entrepreneurial start-ups would benefit much more from working with

other ventures or individuals who would potentially enable them to move up the ladder of expansion, resource and market accessibility, stability and sustainability.

Incubation and responsible innovation: support for new

Business incubation concept has developed and diffused over time. The entrepreneurial ecosystem has largely benefited from business incubation through organizational provision of centralized support: infrastructure, services and networking. Incubation is often implemented as a network of academia, government and private sector. As put across by Byrne and Shepherd (2015), setting up start-up ventures involve unforeseen events. Notably, failure may not be the most traumatizing consequence in exit of new ventures but spill over effects that arises as a result are worse: psycho-social and financial crises. Business incubation is mostly embraced in effort to steer a new venture to success but also devising preventive measures and if worse gets to worse manage failure and any likely spill over effects. However, as much as failure is unwanted, when it eventually happens, the only option for an entrepreneur is to learn from it. It is noteworthy that failure is not an event but a process that provides signals, but in some occasions, it may be too abrupt. The process offers a training ground for entrepreneurs on aspects they need to amend if they were to re-start the venture or initiate a new one altogether (Eklund et al., 2018). In effort to survive, other ventures gain knowledge from such failures and may contribute to their sustainability: a pointer that failure is worthwhile for the economy (Knott & Posen, 2005).

Business incubation is seen as a success and survival strategy among firms (Eshun, 2009). It prepares incubatees for a dynamic operating environment by supporting them fine tune their ideas and possibly in identification and exploitation of opportunities as they emerge. Essentially, incubators are supposed to offer a platform for jumpstarting incubatees’ ideas. The knowledge amassed from incubation ought to empower trainees in development of new products, processes and appropriate business models. Therefore, business incubation is a major driving force for innovation among entrepreneurial start-ups.

Whereas business incubation has been flaunted as a current and futuristic approach to addressing the high rate of failure of entrepreneurial start-ups, Lose and Tenenge (2015) highlight its challenges. In effort to support the incubates, business incubators may not possess requisite skills, unstable funding, productivity and sometimes absence of true entrepreneurship. These bring to question the value proposition of joining such incubators. Furthermore, in some instances, business incubators may be profit oriented and may focus on maximizing the number of incubates rather than the quality of their ideas and the end results. This will be more often the case where business incubator managers fail to follow a rigorous process in

vetting incubates' ideas, if the business model for the incubator involve charging for incubation services and or where (donor) funding is provided without proper controls. The challenges above limit the capacity of business incubators and the likely results.

Rather than considering regular innovation, in sustainable entrepreneurship, responsible innovation which arises from responsible research is considered. This involves thinking beyond self-impact in terms of returns but also considering societal (social and ecological) impact arising from the innovation (Ofstedal et al., 2019; Stahl et al., 2017). Are the purpose(s), process(es) and outcome(s) of the innovation acceptable, desirable and sustainable? (Stahl et al., 2017). Like the seventeen United Nations sustainable development goals, responsible innovation involves tapping on opportunities and resources with the people, planet and prosperity in mind (Ofstedal et al., 2019). Since, start-ups are established on the notion of searching and designing a scalable business model, entrepreneurial start-ups are considered to be innovation powerhouses. Product and process innovations have been linked to employment growth although the process innovation link is inconclusive (Okumu et al., 2019). Similar to Schwartz (2008) notion on the importance of stupidity in research, the process of incubation may foster innovations through a different view that incubates may develop gradually. Through a well thought process and assessment, the stupidity in regard to an idea is generally minimized over time.

Most often, entrepreneurial start-ups are characterized by innovation: new technologies and disruptive business models (Salkowitz, 2013). These innovations disrupt the marketing models of existing ventures. Salkowitz (2013) cited that there are increasing innovations that are fuelled by the increasing university programmes that are encouraging students to pursue entrepreneurship as a way of minimizing the uncertainty associated with the today's job market. In addition, incubation by institutions, investors and corporations are also contributing to innovation thereby impacting on the market. Beyond innovations among entrepreneurial start-ups, innovation management is critical in stretching their economic usefulness (Horn & Brem, 2013). In order to exploit benefits from entrepreneurial innovations, innovative marketing is required so as to bring as much to the target consumers. Innovative marketing goes beyond compliance of existing market rules and is based on imaginative thinking whose principles are playfulness, unboundedness and provocativeness. Some of the innovative marketing approaches include ecological, guerrilla, personal, ambush, buzz, ambient, viral and mobile marketing. Product placement, peer marketing and behavioural marketing are also considered innovative (Ungerma et al., 2018).

Adoption of innovative marketing approaches is increasingly becoming requisite for sustainability. More so, sustainability marketing is a form of innovative marketing such that sustainable relationships with the customers, social

environment and natural environment are established (Greenland, 2019; Peattie & Belz, 2010). Innovative marketing has been associated with horizontal integration, vertical integration and product life cycle. Ungerma et al. (2018) indicated that higher demands on workers, improving communication with clients, increasing business competitiveness, changes in costs, entering new markets, increment in labour productivity, changes in corporate culture, distribution channels, product quality and strategic planning contribute to innovative marketing of a venture. As a result, innovative marketing would inject the much needed thrust for entrepreneurial start-ups giving them a competitive edge (Gupta et al., 2016; Kamp & Parry, 2017), thus becoming sustainable in the meantime (Greenland, 2019). According to O'Dwyer et al. (2009), small and medium enterprises of which entrepreneurial start-ups are part of dominate the international industry volume wise, but their size bars them from tangible influence of the market. However, it is their size that gives them competitive advantage which emanate from their distinct marketing style which is often not gagged by formal structures and business models (Hill, 2001). Although their marketing activities are mostly characterized by simplicity, haphazardness and responsive to competitors' activities, their limited scope enables them to give adequate and requisite focus to the market unlike large ventures (O'Dwyer et al., 2009). For entrepreneurial start-ups, relationship establishment and unfettered attention to the market in itself is innovative marketing since it affords them the opportunity to address customer needs to precision, thus capitalizing on the arising opportunities.

At the heart of innovation is science and research. Burton and Obel (2018) dwelt on organizational design innovativeness as a basis for building efficient and resilient organizations. The research hoisted science as a necessary building block in organizational design. They called upon scholars to embrace innovative research methods driven by science which shows a link to classical theories especially Scientific Management theory by Taylor which was based on exact science (Thompson, 1914). The science of experimentation and observation enables managers to generate knowledge and have a more meaningful understanding of organizations and environments in which they exist. The 'as is' or 'what is' of observation and the 'what might be' of experimentation would guide innovation of process and product designs in the 'what should be' through action. Science offers entrepreneurial start-ups a leeway to manipulate variables which enable them to observe and assess the outcomes before launching such outputs to the market. Science brings concepts and imaginations to being through innovation. As a result, prototypes are created which enables testing of a product or process chemistry and eventually their biology through target market response. Essentially, science builds a platform for which start-up entrepreneurs can repetitively alter variables of products and processes in order to emerge with more formidable outputs

through lifecycle extension. This way sustainability of entrepreneurial start-ups may be achieved.

In the today's world, incubation offers business entrants an avenue to be nurtured. Entrepreneurial start-ups could benefit from the incubations processes in carrying their business ideas from their raw form to maturity through market launching as start-ups. The youth could potentially benefit especially due to their inexperience in idea conversion to product launching through essential mentoring. The training phase propels innovation during the incubation period whereby revision of ideas and prototyping is conducted. Furthermore, during the incubation period, the incubates get an opportunity to think through their marketing strategies in delivering their products to their target customers. This is an indication that entrepreneurs could benefit from incubation platforms as avenues for innovation that could potentially improve the sustainability of their start-ups once they are set-up.

Whereas incubation is thought to be a process that individual and organization entrepreneurs have to undergo at their onset, in our view, it is timeless. At the point where entrepreneurs realize their incapacity in refining their ideas into products and or processes, then this becomes the right time for incubation. From experience, signing up for incubation does not give an express guarantee that the synthesized ideas will eventually result to an innovation. Some incubation establishments may lack the capacity to offer requisite support for given set of ideas based on their human resource skills and inexperience constraint. Moreover, an incubator and entrepreneur may have inadequate resources to bring an idea to the market. This often happens when an incubator was unable to anticipate and estimate the required set of resources from the planning stage. Based on the ethical standing of an incubator, there may be instances where such setups may utilize incubates ideas for their own benefit. Therefore, in deciding to be incubated, an entrepreneur is responsible for assessing the ability and reputation of such an incubator. Based on these circumstances, the incubation process may sometime be non-worthwhile.

Based on the review conducted, the findings and contributions of the paper to entrepreneurship may be summarized as follows:

Themes/sub-themes	Results and contributions
Potential risks vis-à-vis birth and death	
Birth, change and death (failure) of organizations amidst risk	<ul style="list-style-type: none"> • In birth, change and death processes in an organization, the study is of the view that 'change' is the most critical in determining sustainability of a venture. Rarely can a business remain static in terms of size, operations, products and/or services and then be sustainable. Whether it adopts expansion, diversification, acquisition, merger, partnership

Sustainability approaches

Shared resources economy

- and/or networking, then these are crucial change aspects in promoting performance and sustainability.
- Failure is a cumulative effect of start-up related risks such as market, technical and product/service risks.
- Success does not have to be absolute. At many times failure and success goes hand in hand.
- Sustainability is the cumulative effect of processes and products/services in an enterprise.

Networking

- Business parks, co-working spaces and home office represent the sharing economy among the start-ups. Unlike the way business parks and co-working spaces seem sophisticated currently, the aspects can be simplified by people coming together and establishing them in their neighbourhoods where other businesses are located. The importance of the shared economy is in the sharing of the resources with the aim of networking, improved resource access and above all for cost minimization notwithstanding the location. The sharing economy is applicable beyond business start-ups, a possible exploration by researchers.
- The study reinforces the existing literature by bringing more focus on start-ups aspects of sharing. It highlights the possibility of initiating ventures in minimized cost aspect as a way of securing their thrust at the onset when inflows may be limited. The paper sets a basis for furtherance of sharing economy research in other areas of the world economies.
- Whereas collaboration is an avenue for improving business sustainability, perhaps social networking may be the cheapest but the most delicate approach to a venture sustainability. With the rise of information age and social platforms, they present a formidable asset as well as a high risk that can ruin a start-up due to issues associated with freedom to information and of speech. In rivalrous competitive business environment, a genuine or a fabricated publicized claim against a venture may ruin it. However, collaboration can also be done at micro-level.
- As the business grows, the usefulness of some social networking aspects especially those related to family and friends may be outrun by the wider nets that are required to be cast for survival.

Incubation and innovation

- Generally, the ‘tried and tested’ approach contributes to resilience and sustainability of ventures. Trial and error is a significant approach that may contribute to development of process(es) and product(s) in ventures. It contributes to innovation precision. This translates to the importance of incorporation of scientific research approaches in the sustainability quest.
- Continuous learning (whether through incubation, other entrepreneurial/entrepreneur experiences or other modes) is the most vital asset in grounding a new business towards sustainability.
- Done even in a small way, experiments for products/services and processes are promissory in the success and sustainability in start-ups as seen through product lifecycles.

Conclusion

Sustainable entrepreneurship is an area of entrepreneurship that is increasingly gaining popularity. It offers insights into ventures’ futuristic orientation by majorly considering their social and environmental practices. Many times failure of a venture is seen as its inability to sustain. Although failure is important in business circles as a learning opportunity, no entrepreneur would initiate a business with the intention of failing. However, failure should be anticipated, and in the likely event that it happens, it should be embraced as an informative consideration in business strategies. More so, it should be used as a tool for the furtherance of sustainability. In this regard, the study explored ways in which entrepreneurial start-ups can improve their sustainability in an increasingly dynamic business environment. A manual exploratory analysis methodology was employed in conducting the requisite literature review. Potential business risks were noted to have an impact on the survival of entrepreneurial start-ups if left uncontrolled. Organizational theoretical approaches were identified as content-rich and applicable in the pursuit for start-ups sustainability; organism metaphor and population ecology theory. The study stressed that entrepreneurial start-ups undergo through a process of change which requires entrepreneurs to be aware of and undertake necessary actions in order to enhance their sustainability. Through club theory, shared resource approach enables resource constrained entrepreneurs to jump start their ideas in a cost effective manner. As such, business parks, home office set-ups and co-working spaces hold a promise in enhancing the survival and stability of entrepreneurial start-ups. The study notes that networking

avails social capital that may improve the visibility of entrepreneurial innovations. Incubation offers start-up entrepreneurs innovation support platform through provision of requisite capacity in launching their ideas and possibly controls for failure.

The insights derived from the study are expected to influence the sustainability management theory especially for entrepreneurial start-ups. The implications of the study include influencing running of business start-ups using cost-effective business models. Rather than being inward looking, businesses could benefit from adopting an outward looking approach in order to tap into resources that exist in the external environment. As a new venture, working with others or under an environment of sharing raises the bar of performance and survival. In the course of birth, change and death of organizations, change whether in few or all the aspects that a venture starts with is good for business. This implies that changes in businesses are survival strategies that businesses that are experiencing success or facing possible failures must embrace. New business entrants and managers are spoilt for choice with the existing social networking platforms for their product/service exposure. However, partnerships with successful and or established businesses or organizations still present promising benefits. Lastly, the study implies that entrepreneurs should understand that processes and products/services precision are critical in their overall survival. This requires mentorship whether through incubation or other guided arrangements. Informed by this study and others, there is likely to be enhanced government and private sector support through tailor-made programmes meant to support business start-ups especially in the midst of rising unemployment emanating from the effects of COVID-19 pandemic. Researchers are likely to be influenced by this paper to conduct further studies on steering the sustainability of entrepreneurial start-ups.

Limitations and suggestions for future research

The survival approaches suggested may not be fool-proof in attaining sustainability but could be adopted along with appropriate planning and management aspects of an entrepreneurial start-up. The suggested sustainability approaches were also not weighted to determine their actual contribution. As such no conclusive ranking was established, future studies could delve into levels of usability of such approaches. Furthermore, the study conducted a manual exploratory analysis which could be limited in regard to paper volumes compared to machine learning methods. Human-related oversights are minimized under MLM. This calls for future exploratory literature studies to consider such technology based methods.

Abbreviations CESAAM, Centre of Excellence for Sustainable Agriculture and Agribusiness Management; SBA, Small Business Administration; NVL, new venture leaders; MLM, machine learning methods

Acknowledgements This manuscript being a PhD coursework output, we would like to acknowledge the Centre of Excellence for Sustainable Agriculture and Agribusiness Management (CESAAM) of Egerton University for sponsoring the first author for his PhD studies.

Author contribution CK conceptualized the study, selected the review materials, drafted the article and submitted the article for publication consideration. PM provided the necessary training on the subject matter that is Advances in Organization Theory, shaped CK's write-up, read and edited the article.

Availability of data and materials All materials that were used for the study are provided.

Code availability The study did not use a software application or custom code.

Declarations

Competing interests The authors declare no competing interests.

References

- Abatecola, G., Belussi, F., Breslin, D., & Filatotchev, I. (2016). Darwinism, organizational evolution and survival: Key challenges for future research. *Journal of Management & Governance*, 20(1), 1–17. <https://doi.org/10.1007/s10997-015-9310-8>.
- Acs, Z. J., Szerb, L., Lafuente, E., & Lloyd, A. (2018). *The global entrepreneurship index 2018*. Washington, D.C., USA: The Global Entrepreneurship and Development Institute. <https://doi.org/10.1007/978-3-030-03279-1>.
- Aribaba, F. O., Oladele, R., Ahmodu, A. O., & Yusuff, S. A. (2019). Tax policies and entrepreneurship sustainability in Ondo State, Nigeria. *Journal of Global Entrepreneurship Research*, 9(53), 1–13. <https://doi.org/10.1186/s40497-019-0168-0>.
- Asmussen, C. B., & Møller, C. (2019). Smart literature review: A practical topic modelling approach to exploratory literature review. *Journal of Big Data*, 6(93), 1–18. <https://doi.org/10.1186/s40537-019-0255-7>.
- Audretsch, D. B. (2004). Entrepreneurship capital and economic performance. *Regional Studies*, 38(8), 949–959.
- Audretsch, D. B., Cunningham, J. A., Kuratko, D. F., Lehmann, E. E., & Menter, M. (2019). Entrepreneurial ecosystems: Economic, technological, and societal impacts. *The Journal of Technology Transfer*, 44(2), 313–325. <https://doi.org/10.1007/s10961-018-9690-4>.
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: A critical review. *BMC Medical Research Methodology*, 9(59), 1–11. <https://doi.org/10.1186/1471-2288-9-59>.
- Barter, N., & Russell, S. (2014). Organisational metaphors and sustainable development: Enabling or inhibiting? *Sustainability Accounting, Management and Policy Journal*, 4(2), 145–162. <https://doi.org/10.1108/SAMPJ-Jan-2012-0002>.
- Baumol, W. J. (1990). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Political Economy*, 98(5), 893–921 Retrieved from <http://www.jstor.org/stable/2937617>.
- Bergset, L., & Fichter, K. (2015). Green start-ups – A new typology for sustainable entrepreneurship and innovation research. *Journal of Innovative Management*, 3(3), 118–144. <https://doi.org/10.24840/2183-0606>.
- Blank, S., & Dorf, B. (2012). *The step-by-step guide for building a great company*. Pescadero, CA: K&S Ranch, Inc..
- Block, J. H., Fisch, C. O., & van Praag, M. (2017). The Schumpeterian entrepreneur: A review of the empirical evidence on the antecedents, behaviour and consequences of innovative entrepreneurship. *Industry and Innovation*, 24(1), 61–95. <https://doi.org/10.1080/13662716.2016.1216397>.
- Buchanan, J. M. (1965). An economic theory of clubs. *Economica*, 32(125), 1–14 Retrieved from <http://www.jstor.org/stable/2552442>.
- Burton, R. M., & Obel, B. (2018). The science of organizational design: Fit between structure and coordination. *Journal of Organization Design*, 7(5), 1–13. <https://doi.org/10.1186/s41469-018-0029-2>.
- Burton, R. M., Håkansson, D. D., Nickerson, J., Puranam, P., Workiewicz, M., & Zenger, T. (2017). GitHub: Exploring the space between boss-less and hierarchical forms of organizing. *Journal of Organization Design*, 6(10), 1–19. <https://doi.org/10.1186/s41469-017-0020-3>.
- Byrne, O., & Shepherd, D. A. (2015). Different strokes for different folks: Entrepreneurial narratives of emotion, cognition, and making sense of business failure. *Entrepreneurship Theory and Practice*, 44(0), 375–405. <https://doi.org/10.1111/etap.12046>.
- Camarinha-matos, L. M., Afsarmanesh, H., & Boucher, X. (2010). The role of collaborative networks in sustainability (IFIP AICT 336). Retrieved from https://link.springer.com/content/pdf/10.1007/978-3-642-15961-9_1.pdf. Accessed 25 June 2019.
- Cascio, W. (2000). Managing virtual workplace. *Academy of Management Executive*, 14(3), 81–90.
- Clawson, J. G. (2014). *Systems theory and organizational analysis* (UVA-OB-0214).
- Coleman, C. J., & Palmer, D. D. (1973). Organizational application of system theory. *Business Horizons*, 16(6), 77–84. [https://doi.org/10.1016/0007-6813\(73\)90082-7](https://doi.org/10.1016/0007-6813(73)90082-7).
- Cruzes, D. S., & Dybå, T. (2011). Recommended steps for thematic synthesis in software engineering. In *International Symposium on Empirical Software Engineering and Measurement on 22-23 Sept. 2011 in Banff, AB, Canada* (pp. 275–284). Institute of Electrical and Electronic Engineers. <https://doi.org/10.1109/esem.2011.36>.
- Davila, A., Foster, G., He, X., & Shimizu, C. (2015). The rise and fall of startups: Creation and destruction of revenue and jobs by young companies. *Australian Journal of Management*, 40(1), 6–35. <https://doi.org/10.1177/0312896214525793>.
- Di Paola, N., Spanò, R., Caldarelli, A., & Vona, R. (2017). Hi-tech startups: Legitimacy challenges and funding dynamics. *Technology Analysis & Strategic Management*, 30(3), 363–375. <https://doi.org/10.1080/09537325.2017.1313402>.
- Dunne, D. (2018). Implementing design thinking in organizations: An exploratory study. *Journal of Organizational Design*, 7(16), 1–16. <https://doi.org/10.1186/s41469-018-0040-7>.
- Dvoulety, O., Gordievskaya, A., & Procházka, D. A. (2018). Investigating the relationship between entrepreneurship and regional development: Case of developing countries. *Journal of Global Entrepreneurship Research*, 8(16), 1–9. <https://doi.org/10.1186/s40497-018-0103-9>.
- Eklund, J., Levratto, N., & Ramello, G. B. (2018). Entrepreneurship and failure: Two sides of the same coin? *Small Business Economics*, 54, 1–10. <https://doi.org/10.1007/s11187-018-0039-z>.
- Eshun, J. P. (2009). Business strategy series. *Business Strategy Series*, 10(3), 156–166. <https://doi.org/10.1108/17515630910956570>.
- Frenken, K., & Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, 23, 3–10. <https://doi.org/10.1016/j.eist.2017.01.003>.
- Fritsch, M. (2017). The theory of economic development – An inquiry into profits, capital, credit, interest, and the business cycle. *Regional*

- Studies*, 51, 654–655. <https://doi.org/10.1080/00343404.2017.1278975>.
- Gábor, V., Gutí, A., & Tímea, M. (2010). *Development of innovative business parks to foster innovation and entrepreneurship in the SEE area*. Mid-Pannon Regional Development Company.
- Garnsey, E., Stam, E., & Heffernan, P. (2006). New firm growth: Exploring processes and paths. *Industry and Innovation*, 13(1), 1–20. <https://doi.org/10.1080/13662710500513367>.
- van Gelderen, M., Thurik, R., & Bosma, N. (2005). Success and risk factors in the pre-startup phase. *Small Business Economics*, 24, 365–380. <https://doi.org/10.1007/s11187-004-6994-6>.
- Gerdenitsch, C., Scheel, T. E., Andorfer, J., & Korunka, C. (2016). Coworking spaces : A source of social support for independent professionals. *Frontiers in Psychology*, 7(581), 1–12. <https://doi.org/10.3389/fpsyg.2016.00581>.
- Giardino, C., Paternoster, N., Unterkalmsteiner, M., Gorschek, T., & Abrahamsson, P. (2014). What do we know about software development in startups ? *IEEE Software*, 31(5), 28–32. <https://doi.org/10.1109/MS.2014.129>.
- Glazer, A., Niskanen, E., & Scotchmer, S. (1997). On the uses of club theory: Preface to the club theory symposium. *Journal of Public Economics*, 65, 3–7. [https://doi.org/10.1016/s0047-2727\(97\)00002-9](https://doi.org/10.1016/s0047-2727(97)00002-9).
- Gollwitzer, P. M. (2012). Mindset theory of action phases. In P. A. van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 526–545). Sage Publications Ltd. <https://pdfs.semanticscholar.org/d7d1/8d5869ac4ba686978636945b3f1363a00c61.pdf>. Accessed 20 June 2019.
- Grah, B., Dimovski, V., & Peterlin, J. (2015). A shift in perceiving organisational metaphors among business administration students in an EU country: A window into the current thinking of future employees. *Drustvena Istrazivanja*, 27(1), 133–154.
- Gray, B., & Stites, J. P. (2013). Sustainability through partnerships: Capitalizing on collaboration. Network for Business Sustainability. Retrieved from nbs.net/knowledge. Accessed 20 June 2019.
- Greco, A., & Jong, G. De. (2017). Sustainable entrepreneurship: Definitions, themes and research gaps (1706-CSE). Retrieved from https://www.rug.nl/cf/pdfs/cse/wps6_angela.pdf. Accessed 10 July 2019.
- Greenland, S. J. (2019). Future sustainability, innovation and marketing: A framework for understanding impediments to sustainable innovation adoption and corporate social responsibility. In D. Crowther & S. Seifi (Eds.), *The components of sustainable development* (pp. 63–80). Singapore: Springer. <https://doi.org/10.1007/978-981-13-9209-2>.
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1–22. <https://doi.org/10.1111/1540-8520.00029>.
- Gupta, S., Malhotra, N. K., Czinkota, M., & Foroudi, P. (2016). Marketing innovation: A consequence of competitiveness. *Journal of Business Research*, 69, 5671–5681. <https://doi.org/10.1016/j.jbusres.2016.02.042>.
- Hannan, M. T., & Freeman, J. (2019). The population ecology of organizations. *American Journal of Sociology*, 82(5), 929–964 Retrieved from https://www.jstor.org/stable/pdf/2777807.pdf?casa_token=k1BXJS02W8IAA AAAA:IkPJNSUnVU4y70p1UI2UQO8FTjV9Ake5O00pWN7-1In1jmgo-4VDWE8r4D11u2Kk-e-nzEIG92FXKk5zug3o sX5BNqwkQU2RXeLX21AW8eX1AuXX-DC6. Accessed 18 June 2019.
- Hanohov, R., & Baldacchino, L. (2018). Opportunity recognition in sustainable entrepreneurship: An exploratory study. *International Journal of Entrepreneurial Behavior & Research*, 24(2), 333–358. <https://doi.org/10.1108/IJEBR-12-2015-0275>.
- Hazudin, S. F., Kader, M. A. R. A., Tarmuji, N. H., Ishak, M., & Ali, R. (2015). Discovering small business start up motives, success factors and barriers: A gender analysis. *Procedia Economics and Finance*, 31, 436–443. [https://doi.org/10.1016/S2212-5671\(15\)01218-6](https://doi.org/10.1016/S2212-5671(15)01218-6).
- Hill, J. (2001). A multidimensional study of the key determinants of effective SME marketing activity: Part 1. *International Journal of Entrepreneurial Behaviour & Research*, 7(5), 171–204. <https://doi.org/10.1108/EUM000000000006006>.
- Hoogendoorn, B., Van Der Zwan, P., & Thurik, R. (2019). Sustainable entrepreneurship: The role of perceived barriers and risk. *Journal of Business Ethics*, 157, 1133–1154. <https://doi.org/10.1007/s10551-017-3646-8>.
- Hooi, H. C., Ahmad, N. H., Amran, A., & Rahman, S. A. (2016). The functional role of entrepreneurial orientation and entrepreneurial bricolage in ensuring sustainable entrepreneurship. *Management Research Review*, 39(12), 1616–1638. <https://doi.org/10.1108/MRR-06-2015-0144>.
- Hörsch, J. (2015). The role of sustainable entrepreneurship in sustainability: The multi-level perspective. *Adm. Sci.*, 5, 286–300. <https://doi.org/10.3390/admsci5040286>.
- Horn, C., & Brem, A. (2013). Strategic directions on innovation management – A conceptual framework. *Management Research Review*, 36(10), 939–954. <https://doi.org/10.1108/MRR-06-2012-0142>.
- Ivaldi, S., Pais, I., & Scaratti, G. (2018). Coworking (s) in the plural: Coworking spaces and new ways of managing. In S. Taylor & S. Luckman (Eds.), *The new normal of working lives: Critical studies in contemporary work and employment* (pp. 219–241). Cham, Switzerland: Springer Nature. <https://doi.org/10.1007/978-3-319-66038-7>.
- Kamp, B., & Parry, G. (2017). Servitization and advanced business services as levers for competitiveness. *Industrial Marketing Management*, 60, 11–16. <https://doi.org/10.1016/j.indmarman.2016.12.008>.
- Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in social media research: Past, present and future. *Information Systems Frontiers*, 20, 531–558. <https://doi.org/10.1007/s10796-017-9810-y>.
- Katila, R., Rosenberger, J. D., & Kathleen, M. (2008). Swimming with sharks: Technology ventures, defense mechanisms and corporate relationships. *Administrative Science Quarterly*, 53, 295–332 Retrieved from <https://pdfs.semanticscholar.org/9c2c/f961c8e4148c47216bc04a6c45cd3ac7a850.pdf>. Accessed 1 July 2019.
- Kerr, S. P., Kerr, W. R., & Xu, T. (2017). *Personality traits of entrepreneurs: A review of recent literature*. Working paper No. 18–047. Retrieved from https://www.hbs.edu/ris/Publication%20Files/18-047_b0074a64-5428-479b-8c83-16f2a0e97eb6.pdf. Accessed 28 June 2019.
- Knott, A. M., & Posen, H. E. (2005). Is failure good? *Strategic Management Journal*, 641, 617–641. <https://doi.org/10.1002/smj.470>.
- Koe, W., Omar, R., & Sa'ari, J. (2014). Factors influencing propensity to sustainable entrepreneurship of SMEs in Malaysia. *Procedia - Social and Behavioral Sciences*, 172, 570–577. <https://doi.org/10.1016/j.sbspro.2015.01.404>.
- Lee, W., & Kim, B. (2019). Business sustainability of start-ups based on government support: An empirical study of Korean start-ups. *Sustainability*, 11(4851), 1–20.
- Linton, G. (2019). Innovativeness, risk-taking and proactiveness in startups: A case study and conceptual development. *Journal of Global Entrepreneurship Research*, 9(20), 1–21.
- Lose, T., & Tenge, R. K. (2015). The sustainability and challenges of business incubators in the Western Cape Province, South Africa. *Sustainability*, 7, 14344–14357. <https://doi.org/10.3390/su71014344>.
- Manjula, S., & Raymond, J. (2011). Population ecology theory: Implications for sustainability. *Management Decision*, 49(6), 874–910. <https://doi.org/10.1108/00251741111143595>.

- Meira, L., Salgado, J., Sousa, I., Ribeiro, A. P., & Miguel, M. (2017). Psychological change in everyday life: An exploratory study. *Journal of Constructivist Psychology*, 31, 1–16. <https://doi.org/10.1080/10720537.2017.1304300>.
- Mieszajkina, E. (2016). Ecological entrepreneurship and sustainable development. *Problems of Sustainable Development*, 12(1), 163–171.
- Moyi, E. D. (2019). The effect of mobile technology on self-employment in Kenya. *Journal of Global Entrepreneurship Research*, 9(56), 1–13. <https://doi.org/10.1186/s40497-019-0180-4>.
- Natasha, E. (2003). The process and problems of business start-ups. *The ITB Journal*, 4(1), 1–26. <https://doi.org/10.21427/D7WT8K>.
- O'Dwyer, M., Gilmore, A., & Carson, D. (2009). Innovative marketing in SMEs: A theoretical framework. *European Business Review*, 21(6), 504–515. <https://doi.org/10.1108/09555340910998805>.
- Öcal, K. (2011). Evaluating organizational culture with metaphors. *African Journal of Business Management*, 5(33), 12882–12889. <https://doi.org/10.5897/AJBM11.2327>.
- Ofedal, E. M., Foss, L., & Iakovleva, T. (2019). Responsible for responsibility? A study of digital E-health startups. *Sustainability*, 11(5433), 1–21. <https://doi.org/10.3390/su11195433>.
- Okumu, I. M., Bbaale, E., & Guloba, M. M. (2019). Innovation and employment growth: Evidence from manufacturing firms in Africa. *Journal of Innovation and Entrepreneurship*, 8(7), 1–27.
- Örtenblad, A., Putnam, L. L., & Trehan, K. (2016). Beyond Morgan's eight metaphors: Adding to and developing organization theory. *Human Relations*, 69(4), 875–889. <https://doi.org/10.1177/0018726715623999>.
- Otar, C. (2018). What percentage of small businesses fail and how can you avoid being one of them? Retrieved January 26, 2020, from <https://www.forbes.com/sites/forbesfinancecouncil/2018/10/25/what-percentage-of-small-businesses-fail-and-how-can-you-avoid-being-one-of-them/#44b7e8fb43b5>. Accessed 7 July 2019.
- Pare, G., Trudel, M., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management*, 52(2), 183–199. <https://doi.org/10.1016/j.im.2014.08.008>.
- Peattie, K., & Belz, F.-M. (2010). Sustainability marketing: An innovative conception of marketing. *Marketing Review St. Gallen*, 27(5), 8–15. <https://doi.org/10.1007/s11621-010-0085-7>.
- de Peuter, G., Cohen, N. S., & Saraco, F. (2017). The ambivalence of coworking: On the politics of an emerging work practice. *European Journal of Cultural Studies*, 20(6), 687–706. <https://doi.org/10.1177/1367549417732997>.
- Rana, M. B., & Allen, M. M. C. (2018). Business systems perspective on entrepreneurship. In R. Turcan & N. Fraser (Eds.), *The Palgrave handbook of multidisciplinary perspectives on entrepreneurship* (pp. 271–291). Cham Business: Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-91611-8>.
- Rus, A., & Orel, M. (2015). Coworking: A community of work. *Teorija in Praksa*, 52(6), 1017–1038.
- Salkowitz, R. (2013). *How start-ups are reinventing marketing from the bottom up*. Retrieved from <https://www.thegeniusworks.com/wp-content/uploads/2017/06/How-Startups-Are-Reinventing-Marketing.pdf>. Accessed 11 June 2019.
- Sandler, T., & Tschirhart, J. (2019). Club theory: Thirty years later. *Public Choice*, 93(3/4), 335–355 Retrieved from <http://www.jstor.org/stable/2552442>. Accessed 18 July 2019.
- SBA. (2014). *Frequently asked questions*. Retrieved from https://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf. Accessed 15 May 2019.
- Schwartz, M. A. (2008). The importance of stupidity in scientific research. *Journal of Cell Science*, 121, 1771. <https://doi.org/10.1242/jcs.033340>.
- Song, M., Podoynitsyna, K., Van Der Bij, H., & Halman, J. I. M. (2008). Success factors in new ventures: A meta-analysis. *Product Innovation Management*, 25(7), 7–27 Retrieved from https://ris.utwente.nl/ws/portalfiles/portal/6458114/success_factors.pdf. Accessed 20 June 2019.
- Spinuzzi, C., Bodroz, Z., Scaratti, G., & Ivaldi, S. (2018). “Coworking is about community”: But what is “community” in coworking? *Journal of Business and Technical Communication*, 33, 1–29. <https://doi.org/10.1177/1050651918816357>.
- Stahl, B. C., Obach, M., Yaghmaei, E., Ikonen, V., Chatfield, K., & Brem, A. (2017). The responsible research and innovation (RRI) maturity model: Linking theory and practice. *Sustainability*, 9(1036), 1–19. <https://doi.org/10.3390/su9061036>.
- Stokes, D., Wilson, N., & Mador, M. (2010). *Entrepreneurship*. Hampshire: Cengage Learning.
- Stuart, T. E., & Sorenson, O. (2010). Social networks and entrepreneurship. In S. A. Alvarez, R. Agarwal, & O. Sorenson (Eds.), *Handbook of entrepreneurship research* (pp. 233–252). New York: Springer Science+Business Media, Inc. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.317.8589&rep=rep1&type=pdf>. Accessed 2 June 2019.
- Swedberg, R. (2020). Exploratory research. In C. Elman, J. Gerring, & J. Mahoney (Eds.), *The production of knowledge: Enhancing progress in social science* (Strategies for Social Inquiry, pp. 17–41). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108762519.002>.
- Szirmai, A., Naudé, W., & Goedhuys, M. (Eds.) (2011). *Entrepreneurship, innovation, and economic development*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199596515.001.0001>.
- Teberga, P. M. F., Oliva, F. L., & Kotabe, M. (2018). Risk analysis in introduction of new technologies by start-ups in the Brazilian market. *Management Decision*, 56(1), 64–86. <https://doi.org/10.1108/MD-04-2017-0337>.
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(45), 1–10. <https://doi.org/10.1186/1471-2288-8-45>.
- Thompson, B. (1914). The literature of scientific management. *The Quarterly Journal of Economics*, 28(3), 506–557 Retrieved from <https://www.jstor.org/stable/1884986>. Accessed 26 June 2019.
- Tohidian, I., & Rahimian, H. (2019). Bringing Morgan's metaphors in organization contexts: An essay review. *Cogent Business & Management*, 6(1), 4–11. <https://doi.org/10.1080/23311975.2019.1587808>.
- Toma, S., Grigore, A., & Marinescu, P. (2014). Economic development and entrepreneurship. *Procedia Economics and Finance*, 8(14), 436–443. [https://doi.org/10.1016/S2212-5671\(14\)00111-7](https://doi.org/10.1016/S2212-5671(14)00111-7).
- Ungerman, O., Dedkova, J., & Gurinova, K. (2018). The impact of marketing innovation on the competitiveness of enterprises in the context of industry 4.0. *Journal of Competitiveness*, 10(2), 132–148. <https://doi.org/10.7441/joc.2018.02.09>.
- Urbano, D., & Aparicio, S. (2016). Technological forecasting & social change entrepreneurship capital types and economic growth: International evidence. *Technological Forecasting and Social Change*, 102, 34–44. <https://doi.org/10.1016/j.techfore.2015.02.018>.
- Van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30(5), 655–673. <https://doi.org/10.1016/j.jbusvent.2015.01.003>.
- Van Gelderen, M., Kautonen, T., Wincent, J., & Biniari, M. (2018). Implementation intentions in the entrepreneurial process: Concept, empirical findings, and research agenda. *Small Business Economics*, 51, 923–941 Retrieved from <https://link.springer.com/content/pdf/10.1007%2Fs11187-017-9971-6.pdf>.
- vom Brocke, J., Simons, A., Niehaves, B., Niehaves, B., Reimer, K., Plattfaut, R., & Cleven, A. (2009). Reconstructing the giant on the importance of rigour in documenting the literature search process. In *Paper presented at the 17th European Conference on Information*

- Systems (ECIS 2009)*, Verona, Italy (pp. 2206–2217) Verona, Italy. Retrieved from <http://aisel.aisnet.org/ecis2009/161>. Accessed 6 June 2019.
- Walsh, G. S., & Cunningham, J. A. (2016). Business failure and entrepreneurship: Emergence, evolution and future research. *Foundations and Trends in Entrepreneurship*, 12(3), 163–285.
- Ward, S. (2019). What is business networking & what are the benefits? Retrieved July 5, 2019, from <https://www.thebalancesmb.com/what-is-business-networking-and-what-are-the-benefits-2947183>
- Weijss-perrée, M., van de Koeving, J., Appel-Meulenbroek, R., & Arentze, T. (2018). Analysing user preferences for co-working space characteristics Analysing user preferences for co-working space characteristics. *Building Research & Information*, 47(5), 534–548. <https://doi.org/10.1080/09613218.2018.1463750>.
- Weissbrod, I., & Bocken, N. M. P. (2016). Developing sustainable business experimentation capability – A case study. *Journal of Cleaner Production*, 142, 2663–2676. <https://doi.org/10.1016/j.jclepro.2016.11.009>.
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. (2013). Rising from the ashes: Cognitive determinants of venture growth after entrepreneurial failure. *Entrepreneurship Theory and Practice*, 39(2), 1–28. <https://doi.org/10.1111/etap.12047>.
- Zheng, C., Ahsan, M., & DeNoble, A. F. (2019). Entrepreneurial networking during early stages of opportunity exploitation: Agency of novice and experienced new venture leaders. *Entrepreneurship Theory and Practice*, 44, 1–29. <https://doi.org/10.1177/1042258719844715>.
- Zoltan, A., & Storey, D. (2010). Introduction: Entrepreneurship and economic development. *Regional Studies*, 38(8), 871–877. <https://doi.org/10.1080/0034340042000280901>.

Charles Karani is a PhD student at Egerton University, Kenya, and an Assistant Lecturer of Agribusiness at Pwani University, Kenya.

Patience Mshenga is an Associate Professor of Agribusiness at Egerton University, Kenya.