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An integrative Framework of Stakeholder Engagement for Innovation Management and Entrepreneurship Development

Erasmia Leonidou, Michael Christofi, Demetrius Vrontis, ALkis Thrassou

Abstract

This article is the first to consolidate the state of scholarly research on stakeholder engagement in innovation management and entrepreneurship development. We hereby systematically review the relevant literature published over the past 27years, and we integrate the various prominent research perspectives into a preliminary, multi-dimensional and integrative framework of stakeholder engagement; thus, interlinking the antecedent role of stakeholder engagement for innovation management and subsequent entrepreneurship development. Through this methodologically systematic review and framework development, we provide a more comprehensive and deeper understanding of the interaction between entrepreneurs and the various stakeholders, for enhancing innovation management and entrepreneurship development. In so doing, we consequently identify various research gaps and prescribe effective avenues for future works in this research stream. Conclusively, we discuss the implications of the stakeholder management perspective for the theory and the practice of entrepreneurship.

Introduction

The strength and nature of the link between stakeholder engagement, innovation management and entrepreneurship development is indisputably a critical question in the effort to understand these business foci, collectively and individually. Stakeholder theory states that an important component of value creation in businesses, which enhances their chances of being successful, is their engagement and development of strong relationships with a wide variety of stakeholders (Campanella, Del Giudice, Thrassou, & Vrontis, 2016; Harrison, Bosse, & Phillips, 2010; Pollack, Barr, & Hanson, 2017; Sefiani, Davies, Bown, & Kite, 2018); and extant research on stakeholder theory within the entrepreneurship knowledge field clearly illustrates the significant role of engaging with the various stakeholders and crafting strong relationships with them for entrepreneurship development (Bresciani, Thrassou, & Vrontis, 2013; Maxwell & Lévesque, 2014; Pollack et al., 2017; Vandekerckhove & Dentchev, 2005). Moreover, innovation management and its value-delivery process do not rest on the efforts of a single entrepreneur or a

business. In this context, there is growing recognition of the fact that stakeholders can be important sources of innovation for businesses, and research focusing on open innovation is investigating the ways firms can take advantage of this (Bresciani et al., 2013; Santoro, Vrontis, Thrassou, & Dezi, 2018; Vrontis, Thrassou, Santoro, & Papa, 2017; Watson, Wilson, Smart, & Macdonald, 2018; West, Salter, Vanhaverbeke, & Chesbrough, 2014). Thus, stakeholder engagement for innovation management is a task of growing significance and the cornerstone of a win–win outcome (Christofi, Leonidou, & Vrontis, 2014; George, McGahan, & Prabhu, 2012; Kaufmann & Shams, 2015; Vos & Achterkamp, 2006). Hence, entrepreneurs comprehend that they cannot rely only on their in-house capabilities in planning and implementing the innovation processes necessary to achieve sustainable competitive advantages (del Vecchio, Secundo, & Passiante, 2018; Bughin, Chui, & Johnson, 2008). The interaction of entrepreneurs with their various stakeholders can therefore offer a valuable source of social, knowledge and human capital that may enhance entrepreneurs' success (Smith & Lohrke, 2008) in innovation management.

The present study and its constituent systematic review and synthesis of extant research on the topic have, thus, been motivated by the following rationale(s). First, even though past research findings illustrate a diverse range of stakeholders' potentially important effects on innovation management and subsequent entrepreneurship development, existing research on the topic does not offer any integrative or systematic analysis of the link between stakeholder engagement, innovation management and entrepreneurship development. Thus, we still lack knowledge on how entrepreneurial companies utilize their stakeholder network for innovation management and entrepreneurship success (Yu, Hao, Ahlstrom, Si, & Liang, 2014). Second, with contributions coming from a wide variety of research fields, research on this topic has become complex and disjoined. Adding to this, the pace of rapidly expanding research, also creates a situation in which the knowledge on the topic does not accumulate. Thus, the field of entrepreneurship would benefit from a comprehensive framework that integrates the various insights from existing research, while addressing the various stakeholder perspectives on innovation management and entrepreneurship development. Third, with stakeholder engagement and innovation management now acknowledged as important elements of growing interest in the entrepreneurship field (Smith & Lohrke, 2008), we identified that the need for a critical and systematic review of scholarly research from peer-reviewed academic articles from the premier business journals is timely.

Thus, the aim of this paper is to aggregate the current knowledge on how stakeholder engagement affects innovation management and subsequent entrepreneurship development. In this context, the primary objective of this study is to deliver a methodologically systematic review of the literature on this topic towards the following contributions: (a) the development of the first comprehensive literature review on stakeholder engagement in innovation management and entrepreneurship development. Thus, our study is a systematical charting, through a multi-stakeholder perspective, of the theoretical insights and knowledge gaps present in extant research. (b) Through the identification of the aforementioned knowledge gaps we prescriptively suggest promising paths for future research on the intersection between stakeholder, innovation and entrepreneurship fields. (c) We contribute an integrative multidimensional framework of stakeholder engagement for innovation management within the entrepreneurship field. And, (d) by mapping and consolidating the literature on the topic, our study stimulates valuable insights for managers and executives for practical implementation.

Structurally, we begin by discussing the applied review methodology and next provide a descriptive and thematic analysis of the findings. We subsequently synthesize the findings through a multi-stakeholder perspective to, finally, provide a preliminary integrative conceptual framework on stakeholder engagement for innovation management and entrepreneurship development.

1. Methodology

1.1. Choosing a review methodology

A comprehensive review methodology is important for analyzing the state of a specific body of literature in a systematic way (Crossan & Apaydin, 2010). Aligning with this principle, we chose to appropriately utilize a systematic literature review methodology. A systematic review methodology applies a specific protocol, to search and critically analyze existing literature. Hence, systematic reviews have advantages over traditional literature reviews because they enhance: a) the quality of the review methodology and findings by applying a transparent, scientific and replicable procedure (Christofi, Leonidou, & Vrontis, 2017; Crossan & Apaydin, 2010; De Menezes & Kelliher, 2011; Tranfield, Denyer, & Smart, 2003), and; b) the generalisability of the findings by allowing the accumulated knowledge in the given domain to be

synthesised and analyzed in a systematic way (Wang & Chugh, 2014). Moreover, we decided not to apply a meta-analysis because it requires a high level of agreement of the methodology applied across the various studies in terms of the measurement of independent and dependent variables, study design, samples, and context, as well as the applied statistical methodology for analyzing the data (Sousa, MartínezLópez, & Coelho, 2008). Adding to this, a meta-analysis was also excluded because we wanted to include in our review empirical studies that apply both qualitative and quantitative methodologies, as well as conceptual contributions and literature reviews.

We applied a systematic literature review methodology following the suggestions outlined by Tranfield et al. (2003), Macpherson and Holt (2007) and Crossan and Apaydin (2010), but certain methods were refined. In essence, the systematic review involves four steps: 1) question formulation; 2) defining the review protocols; 3) analysis of the results (in terms of descriptive and thematic analysis), and; 4) data synthesis.

2. Question formulation

A systematic review is driven by a review question, from which search strings for the scientific database searches are defined (De Menezes & Kelliher, 2011). Following a preliminary theoretical study the research question was specified to be: “What is the relationship between stakeholder engagement and innovation management for entrepreneurship development?”. Stakeholder engagement was defined as the engagement in terms of procedures, solution development and/or usage, co-creation, interactions and/or relevant, marketing-based forms of service exchange, of all stakeholders within the micro- and macroenvironment of an organization in the spirit of entrepreneurship development.

3. Definition of the review protocols

To identify the relevant and highest quality research in relation to the research topic, we applied several inclusion and exclusion criteria. Following other state-of-the-art systematic reviews in the management field (e.g., Thorpe, Holt, Macpherson, & Pittaway, 2005; Wilson, Arshed, Shaw, & Pret, 2017), we limited our search to academic peer-reviewed publications from all business disciplines within the following scientific search engines: Business Source Ultimate, Emerald and Science Direct. The selection of these databases was based on the fact that they represent the most complete scientific databases on business studies (Zott, Amit, & Massa, 2011), and because of their selection by other systematic reviews published in top journals from the business field (e.g., Christofi et al., 2017; Mostaghel, 2016; Pittaway, Robertson,

Munir, Denyer, & Neely, 2004). Then, we applied a general keyword search requirement for the initial pool of papers in order to eliminate the possibility of not including relevant articles. More specifically, we used a combination of keywords for searching titles, keywords and/or abstracts: for entrepreneurship we followed Delgado García, Quevedo Puente, and Blanco Mazagatos (2015) and Cacciotti and Hayton (2015) and we used the word 'entrepreneur*' (to include entrepreneur[s], entrepreneurism, entrepreneurial, entrepreneurship) AND for engagement, we used the word 'engag*' (to include engage, engagement, engaging). Adding to this, we did not limit the search to a specific timeframe. On the contrary, we included all relevant articles irrespective of the date of publication. However, as with other systematic reviews, we excluded academic peerreviewed articles written in a non-English language (Sousa et al., 2008).

At this point, because the aim of this review is to examine both conceptual and empirical research with methodological and theoretical rigor, we searched for publications from top business journals (John & Lawton, 2018).

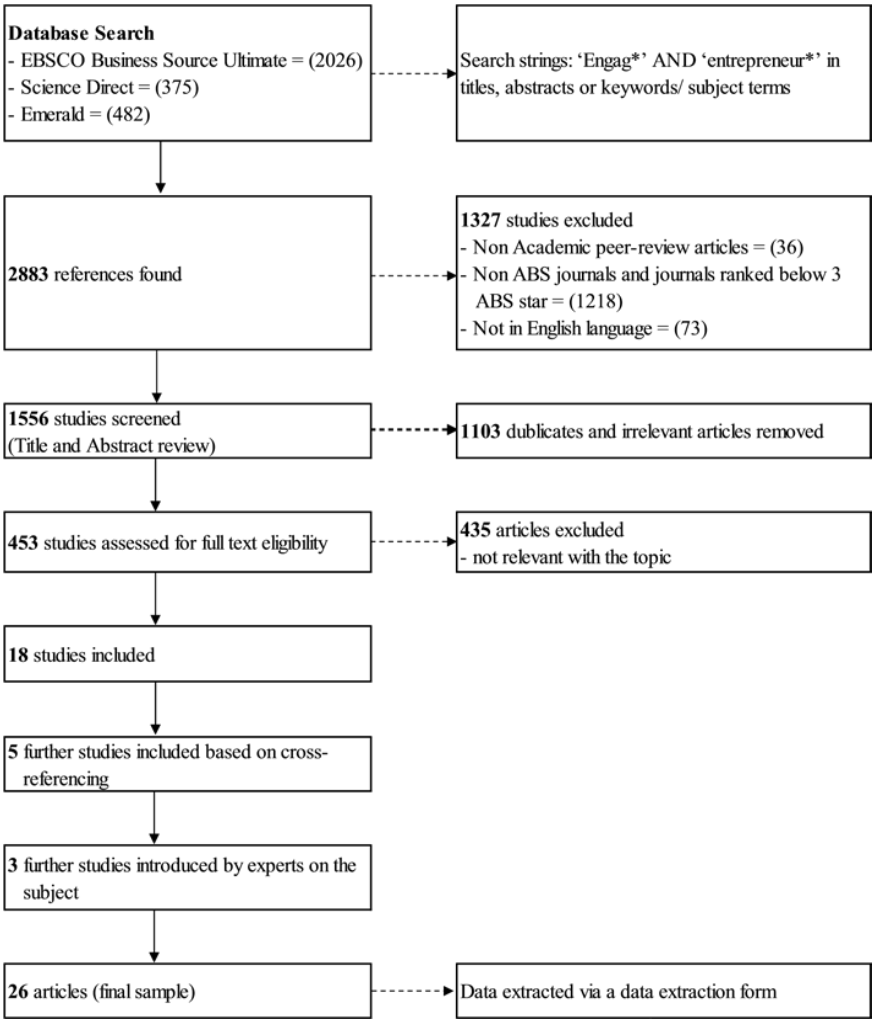


Fig. 1. Search strategy

Based on this, only those journals that ranked 4*, 4 and 3 in the 2015 Association of Business Schools Academic Journal Quality Guide (ABS 2015) were included (Mabey, 2013). The rationale for our journal ranking restriction was based on the following two reasons: first, as Baldacchino, Ucbasaran, Cabantous, and Lockett (2015) state, publication in these journals raises the quality level to the highest standard, which ensures the identification of articles of rigorous design and appropriate standard, and; b) the selection of articles from top-tier journals is a frequently used method for capturing scholarly debates and research trends in a domain while conducting literature reviews (Atewologun, Kutzer, Doldor, Anderson, & Sealy, 2017; Radaelli & Sitton-Kent, 2016).

The initial sample of potentially relevant academic articles retrieved in the chosen search engines was 2883. Next, we excluded articles not written in English language (73), nonacademic peer-review articles such as editorials, commentaries and book chapters (36), and non ABS ranked journals as well as journals ranked below 3 ABS rank (1218). Consistent with prior approaches to identifying relevant studies (e.g., Meier, 2011; Ravasi & Stigliani, 2012), we removed not related and duplicate articles based on Title and Abstract screening, which resulted a total of 1103 studies to be excluded. For studies whereas the research focus was not clear within the title or abstract, we were leaving it for further screening in the next stage, to eliminate the possibility of excluding relevant articles from the review. This procedure yielded 453 articles that were screened for full-text eligibility based on their relevance on the research topic. For instance, articles dealing with work engagement, in terms of enthusiasm of an individual or group towards work lead to engagement in entrepreneurial activity, were excluded. Also, studies drawing on a sample of entrepreneurs but not focusing on stakeholder engagement were also excluded. Similarly, studies focusing on the various engagement levels but not on stakeholder engagement in entrepreneurship were also excluded. Finally, studies focusing in access to funding for entrepreneurship development via stakeholder engagement were also excluded as they do not focus on innovation management.

In total, we excluded 435 studies that were irrelevant with the topic of this review. This additional round reduced the number of studies to 18. Next, we shifted through the references of the studies selected so far to identify additional articles that had been overlooked by the search engines. This further crossreferencing round yielded an addition of another 5 papers. These peer-reviewed academic articles were also screened based on the inclusion criteria of this systematic review. Next, as with other systematic reviews published in the leading management publication outlets (e.g., Nofal, Nicolaou,

Symeonidou, & Shane, 2018) we provided our list of articles to three academics that are experts in the domain and asked them to identify any studies that our methodology process failed to identify. This step provided 3 additional studies. Altogether the search methodology yielded a total of 26 articles which are marked with an asterisk (*) at the reference list.

Next, a data extraction form was devised to extract and summarize important data from the selected studies. We decided to proceed in this step because data extraction forms can minimize human error and document this procedure for replicability purposes (Tranfieldet al. 2003; Nguyen, de Leeuw, & Dullaert, 2018). The data extraction form classified the main elements of the articles in eleven categories, based on the research question and objectives of the review, including: (1) name(s) of author(s), (2) year of publication, (3) journal title, (4) journal rank based on ABS ranking system) (5) type of article (empirical/theoretical/review), (6) type of stakeholder(s), (7) methods (quantitative/qualitative/mixed methods approach), (9) sample and data characteristics, (10) key findings, and (11) future research directions stated by the authors of each article. The overall strategy of the review methodology and findings are illustrated in Fig. 1.

4. Analysis of the results

4.1. *Descriptive analysis*

Table 1 presents an overview of the characteristics of the final 26 articles. Continuing, as Fig. 2 shows, management and entrepreneurship scholars started focusing on the role of stakeholder engagement for innovation management for entrepreneurship development since the year 2000, except from 1 article published in 1991 by Smeltzer et al. Fig. 2 also indicates that the interest of academic research on the subject virtually exploded in the 8-year period between 2010 and 2018 (February).

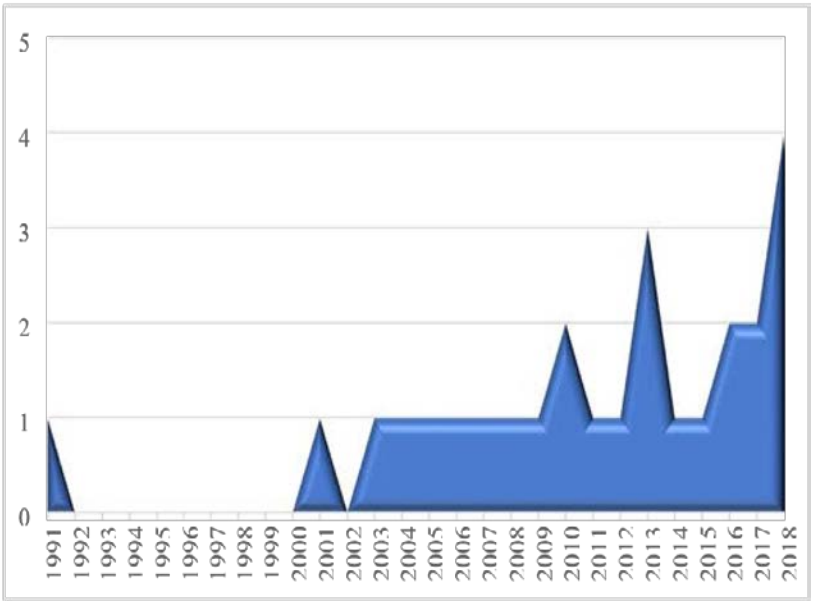


Fig. 2. Number of articles per year.

Notes: This figure illustrates the number of studies on the topic published every year since the first publication in 1991. The findings for 2018 are not representative because the systematic review included articles published before the writing of this article (February 2018).

Table1

Characteristicsofthearticles.

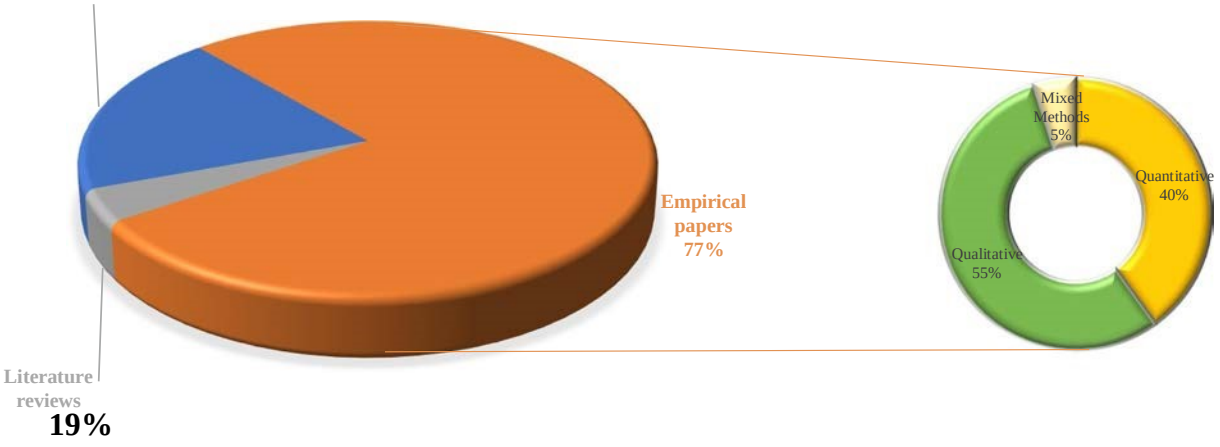
No	Year	Authors	Articletitle	TypeofarticleJournaltitle	Fieldofjournals
		deJong J.P.,Gillert,N.L.,&Stock,R.			
		Goerzen,A. M.	Firstadoptionofconsumerinnovations:Exploringmarketfailureandalleviating factors	EmpiricalResearchPolicy	Innovation
		Yoon,H.D.,Kim,N.,Buisson,B.,&	SmallFirmBoundary-spanningviaBridgingTies:AchievingInternational ConnectivityviaCross-borderInter-clusterAlliances	EmpiricalJournalofInternational Management	InternationalBusinessandAreaStudies
	22018	Sousa,M.J.,Carmo,M.,Gonçalves,A. Phillips,F.	Across-nationalstudyofknowledge,governmentintervention,andinnovative nascententrepreneurship	EmpiricalJournalofBusinessResearchGeneralManagement,	EthicsandSocial Responsibility
12018		Chatfield,A.T.,&Reddick,C.G.,Alongitudinalcross-sectoralanalysisofopendatatangotalserviceCreatingknowledgeandentrepreneurialcapacityforHEstudentswithdigital capability:Thecaseof education methodologies:Differencesintheperceptionsofstudentsand entrepreneurs	EmpiricalJournalofBusinessResearchGeneralManagement,	EthicsandSocial Responsibility
		Kassen,M.		EmpiricalGovernmentInformationQuarterlyInformationManagement	
32018		Balfour,B.,Fortunato,M.W.,&Alter,T.	Australianlocalgovernments		
		Ritchie,H.A.	OpendatainKazakhstan:incentives,implementationandchallenges	TheoreticalInformationTechnology&PeopleInformationManagement	
42018		R.	Thecreativefire:Aninteractionalframeworkforruralarts-baseddevelopmentConceptual	JournalofRuralStudies	Regionalstudies,planning,and environment
	62017	Qin,F.,&Estrin,S.	Unwrappinginstitutionalchangeinfragilesettings:womenentrepreneursdriving institutionalpathwaysinAfghanistan	EmpiricalWorldDevelopment	SocialSciences
	82016	Aarikka-Stenroos,L.,Sandberg,B.,&	Doessocialinfluencespantimeandspace?EvidencefromIndianreturnee entrepreneurs	EmpiricalStrategicentrepreneurshipjournal	EntrepreneurshipandSmallBusiness Management
72016		Kidwell,D.K. Lehtimäki,T.	Networksforthecommercializationofinnovations:Areviewofhowdivergent networkactorscontribute	ReviewIndustrialMarketingManagement	Marketing
	92015	Kalsaas,B.T.	Principalinvestigatorsasknowledgebrokers:Amultiplecasestudyofthecreative actionsofPIsinentrepreneurialscience	EmpiricalTechnologicalForecastingand SocialChange	SocialSciences
	112013	Carlisle,S.,Kunc,M.,Jones,E.,&Tiffin,	Collaborativeinnovation:thedecadethatradicallychangeddrillingperformance	EmpiricalProductionPlanning&Control	Operationsandtechnology management
102014	122013	Pache,A.C.,&Chowdhury,I. S.	Supportinginnovationfortourismdevelopmentthroughmulti-stakeholder approaches:ExperiencesfromAfrica	EmpiricalTourismManagement	Sectorstudies
		Fischer,E.,&Reuber,A.R.	Socialentrepreneursasinstitutionallyembeddedentrepreneurs:Towardsanew modelofsocialentrepreneurshipeducation	TheoreticalAcademyofManagementLearning &Education	Managementdevelopmentand education
		Haefliger,S.,Jäger,P.,&VonKrogh,G.Undertheradar:Industryentrybyuserentrepreneurs Zhang,Y.,&Li,H.	SocialinteractionviaNewSocialMedia:(How)caninteractionsonTwitteraffect effectualthinkingandbehavior?	EmpiricalJournalofBusinessVenturing	EntrepreneurshipandSmallBusiness Management
132013		Thursby,M.C.,Fuller,A.W.,&		EmpiricalResearchPolicy	Innovation
	142012		Innovationsearchofnewventuresinatechnologycluster:theroleoftieswithservice intermediaries	EmpiricalStrategicManagementJournal	Strategy
	152011	Klerkx,L.,&Leeuwis,C. Thursby,J.	Anintegratedapproachtoeducatingprofessionalsforcareersininnovation	EmpiricalAcademyofManagementLearning &Education	Managementdevelopmentand education
	172010	Shah,S.K.,&Tripsas,M.	Matchingdemandandsupplyintheagriculturalknowledgeinfrastructure: Experienceswithinnovationintermediaries	EmpiricalFoodPolicy	Sectorstudies
		Lüthje,C.,&Prügl,R.	Theaccidentalentrepreneur:Theemergentandcollectiveprocessofuser entrepreneurship	EmpiricalStrategicEntrepreneurshipJournal	EntrepreneurshipandSmallBusiness Management
182009		Park,J.S.	Preparingbusinessstudentsforco-operationinmulti-disciplinarynewventureteams: Empiricalinsightsfromabusiness-planningcourse	EmpiricalTechnovation	Innovation
		Murray,F.	Opportunityrecognitionandproductinnovationinentrepreneurialhi-techstart-ups:	TheoreticalTechnovation	Innovation
202007		Davidsson,P.,&Honig,B.	anewperspectiveandsupportingcasestudy		
212006	222005		Theroleofacademicinventorsinentrepreneurialfirms:sharingthelaboratorylife	EmpiricalResearchPolicy	Innovation
		Mezias,S.J.,&Kuperman,J.C.Thecommunitydynamicsofentrepreneurshipthebirthoftheamericanfilm	Theroleofsocialandhumancapitalamongnascententrepreneurs	EmpiricalJournalofBusinessVenturing	EntrepreneurshipandSmallBusiness Management
	232004	Smeltzer,L.R.,VanHook,B.L.,&Hutt,		TheoreticalJournalofBusinessVenturing	EntrepreneurshipandSmallBusiness Management
			industry,1895–1929		
242003		R.W.	Analysisoftheuseofadvisorsasinformationsourcesinventurestartups	EmpiricalJournalofSmallBusiness Management	EntrepreneurshipandSmallBusiness Management

Table 2

Journals included in the sample.

Journal	ABS ranking	No. of articles	Weight (%)
Journal of Business Venturing	4	3	6.00%
Research Policy	4	3	6.00%
Academy of Management Learning & Education	4	2	4.00%
Journal of Business Research	3	2	4.00%
Strategic entrepreneurship journal	4	2	4.00%
Technovation	3	2	4.00%
Food Policy	3	1	2.00%
Government Information Quarterly	3	1	2.00%
Industrial Marketing Management	3	1	2.00%
Information Technology & People	3	1	2.00%
Journal of International Management	3	1	2.00%
Journal of Rural Studies	3	1	2.00%
Journal of Small Business Management	3	1	2.00%
Production Planning & Control	3	1	2.00%
Strategic Management Journal	4*	1	2.00%
Technological Forecasting and Social Change	3	1	2.00%
Tourism Management	4	1	2.00%

World Development	3	1	2.00%



Continuing, as Table 2 shows, despite the burgeoning research on the topic and the relevancy of the entrepreneurship literature, the toprated entrepreneurship journals (those that are ranked as 4 star in the ABS list) have only published a few articles (5) on the subject. Of the three entrepreneurship journals — Journal of Business Venturing (JBV), Entrepreneurship: Theory and Practice (ETP) and Strategic Entrepreneurship Journal (SEJ) — only JBV and SEJ published a mere three (Davidsson & Honig, 2003; Fischer & Reuber, 2011; Mezias & Kuperman, 2001) and two (Qin & Estrin, 2015; Shah & Tripsas, 2007) papers on stakeholder engagement for innovation management and entrepreneurship development respectively. There is an additional paper that has been published in Journal of Small Business Management (Smeltzer, Van Hook, & Hutt, 1991), whereas there were no publications found in the rest of the 3 and 4 ABS star journals belonging to the Entrepreneurship and Small Business Management field. The total weight of entrepreneurship journals among our consideration set reached 23%. Also, although stakeholder engagement-oriented publications within mainstream entrepreneurship journals have been scarce, a substantial number of studies have been published in leading innovation journals (Research Policy with 3 papers and Technovation with 2 papers). Table 2 also indicates that the topic received attention from a wide variety of disciplines, ranging from Sector studies to Information Management and Marketing, among others.

Among our review sample, theoretical papers capture approximately one fifth of the total (5 studies, 19%). This finding shows that this research area lacks new theories and conceptual frameworks or models that are needed for shaping the future path of this research area, thus, future research should focus in advancing the theoretical basis of this research stream. Empirical studies capture the largest share (20 studies, 77%), with more emphasis on theory building (11 qualitative studies, 55%) rather than theory testing (8 quantitative studies, 40%), whereas only one paper (5%) applied a mixed methods approach.

This is a very interesting finding as it indicates the methodology path that scholarly research uses in an emerging research stream, that is, an indepth exploration of the topic under investigation; so as to better understand the various constructs and interrelationships involved and to develop the basis for further evolution of the domain and to expand its boundaries into new grounds. A single literature review study was identified (5%), of which no meta-analyses were found (Fig. 3).

Moreover, the results of our review indicate that scholarly research on the topic covers a wide range of sectors and industries, such as biotechnology, oil and gas, nanotechnology, medical and car equipment, agriculture and tourism, among others. Furthermore, Fig. 4 shows the countries from which the sample of the empirical studies included in this review were drawn. In total, the empirical studies

4%

Fig. 3. Breakdown of articles per type and methodology applied.

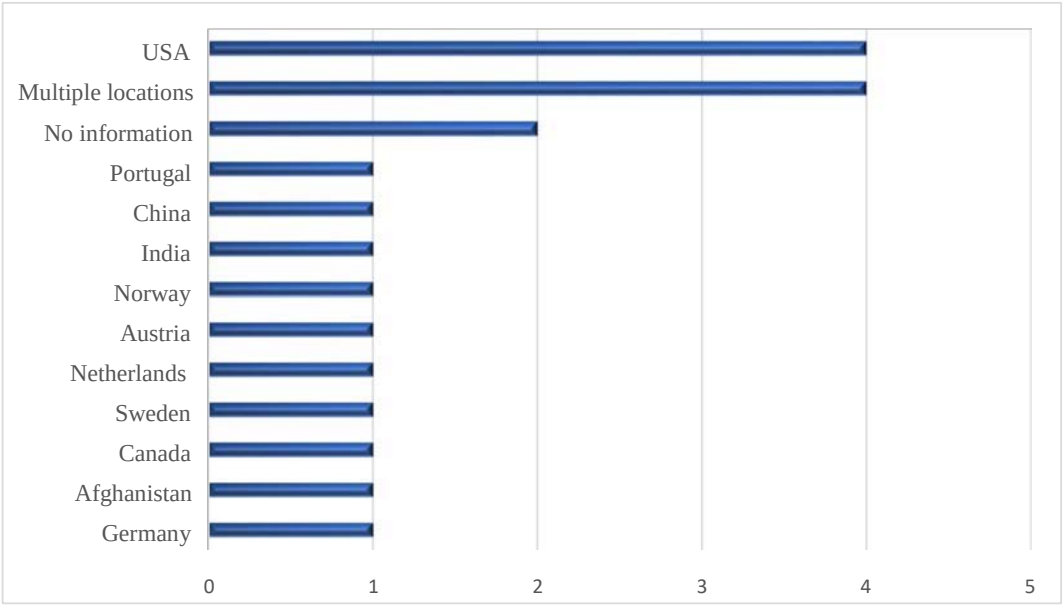


Fig. 4. Breakdown of articles per sample geographical location.

Note: The countries covered here are not consistent with the number of empirical studies as this figure provides four studies with a sample drawn from multiple locations. Two studies provide no information about the sample geographical location.

reviewed examined 51 countries, with the most studies, 6 (30%), drawing their samples from USA (2 of the studies include in their sample respondents from other locations as well). In terms of geographic region, Europe and North America received the most attention with 8 and 7 studies respectively, followed by Asia with 4 studies, Africa and Australia with 2 studies each, and lastly South America with only one study. These findings incorporate the sample geographical reach of four studies that drew from multiple economic contexts (e.g., Carlisle, Kunc, Jones, & Tiffin, 2013; Yoon, Kim, Buisson, & Phillips, 2018). Two studies gave no information of their geographic coverage. As the results hereby show, an important research shortcoming is the tendency of scholars to focus on a limited number of countries and regions. An overreliance on specific geographical regions such as the USA could possibly lead to false generalizations for other countries for which our knowledge base is still in its infancy. For instance, a study conducted by Ritchie (2016) within Afghanistan, showed that an important stakeholder for enhancing a spirit of innovation management within the society and subsequent entrepreneurship development were the NGOs. While the engagement of this stakeholder is important for that country, this finding would not have emerged from extant research if the study was not focusing on that country, as none of the other studies included in our sample identified the linkage of this stakeholder with innovation management and entrepreneurship development. Thus, in terms of geographic reach, it is important that future researchers expand to new geographic regions in order to capture potential new stakeholders that may play a significant role towards the development of innovation management and entrepreneurship development.

Mapping the field in CRM research by means of descriptive analysis is an important first step towards understanding the strengths and weaknesses of existing research, as well as the various research gaps that deserve more attention. To comprehend how literature findings are linked with each other to form a whole, a thematic analysis follows in the next section. *5.2. Thematic analysis*

The findings of the review indicate that entrepreneurship and management researchers draw on theories from various disciplines. The findings indicate that there wasn't any theory to be extensively applied by the existing literature. Instead, interorganizational network (Goerzen, 2018), institutional (Ritchie, 2016), effectuation (Fischer & Reuber, 2011), social capital (Davidsson & Honig, 2003), absorptive capacity, boundary spanning and brokering (Kidwell, 2013), social influence (Qin & Estrin, 2015), social network and brokering/boundary spanning (Murray, 2004) social information processing (Smeltzer et al., 1991), knowledge spillover and institutional (Yoon et al., 2018), and entrepreneurship education and organization (Pache & Chowdhury, 2012) theories were used in one paper each. However, 16 papers (64%, excluding the literature review study) were defined as ‘unspecified’ as in many cases no theory was applied by the authors. In some cases, the theories drawn upon were not made explicit in the paper, whereas in other cases the researcher(s) referred in general to the existing stakeholder literature that their study focused on. In the same vein, empirical studies tended not to draw upon a specific theory (55%, 11). Therefore, as

the findings show, currently, there are very limited studies on application of well-grounded and established theories from the various business fields. Based on this, researchers should apply a wider variety of theoretical notions to develop better-constructed empirical and theoretical studies, as well as to enhance cross-fertilization of theories, ideas and constructs from other disciplines as well.

Moreover, following Freeman (1984), Tang and Tang (2012) and Mohammed (2013), we define stakeholder as any individual or group who can affect or is affected by the accomplishment of the company's objectives – in this case: innovation management for entrepreneurship development. Based on this definition, we categorized the literature based on each study's stakeholder focus. Among our consideration set five studies entailed multiple stakeholders, whereas the remaining studies (except the review study) focused on a single stakeholder. Fig. 5 below indicates that existing literature on the topic focused on a wide variety of stakeholder groups (16), with academia being the most dominant stakeholder with 7 papers (23%), followed by government and community stakeholders with 3 studies each (10% respectively). This finding

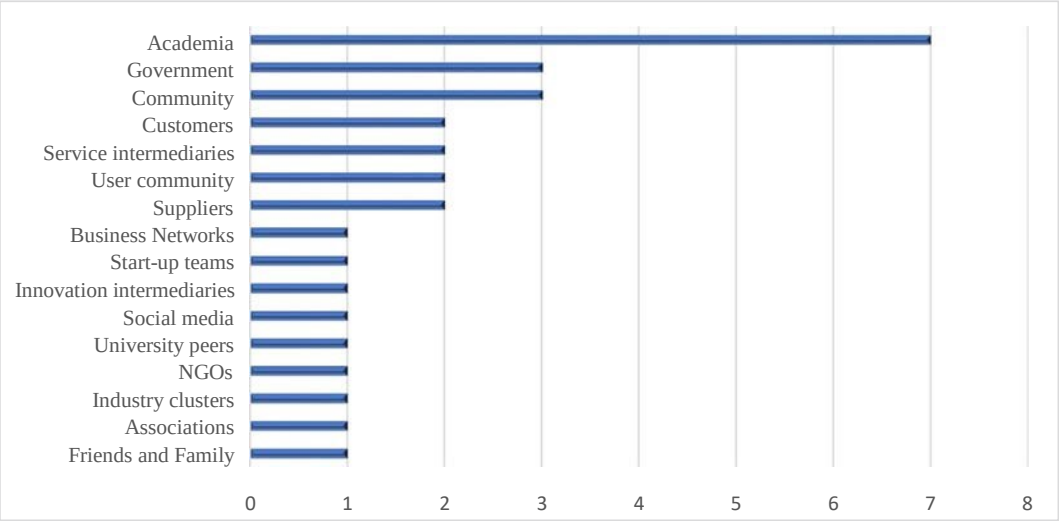


Fig. 5. Breakdown of articles per stakeholder category**.**

Note: This figure illustrates the focus of studies on stakeholder category. The consideration set includes twenty-five studies, as the review article was excluded. Also, this table illustrates the number of instances stakeholder categories appeared in the studies reviewed. Because multiple stakeholders often appear in a single study and are counted each time they appear, the totals are greater than the number of individual studies reviewed.

shows that extant research favored breadth over depth. This means that while existing research takes into consideration the various stakeholder perspectives, it fails to replicate existing literature findings within specific contexts; a finding that reveals generalizability issues. Also, the findings indicate an important gap in existing literature: the lack of research on the interrelationships between the various stakeholders and their collective impact on innovation management for entrepreneurship development. Moreover, when the year of publication is taken into consideration, it becomes clear that researchers shift from the traditional stakeholder groups to more broad stakeholder categories. For instance, from 1991 to 2013, five out of sixteen studies focused on the engagement of academia for enhancing innovation management and subsequent entrepreneurship development, whereas from 2014 to 2018 the scholar community reduced interest towards this stakeholder (only one study appears to focus on academia) and shifted towards new stakeholder groups, such as university peers and NGOs. This finding is encouraging as it shows that the boundaries of the research topic are expanding. Further details of each stakeholder group are provided in the next section.

5. Data synthesis

This section synthesizes the findings of this review into a preliminary multidimensional framework of stakeholder engagement for innovation management and stakeholder engagement. Our systematic review of extant research provides the basis for constructing this type of framework. This argument is based on the following rationale: first, the findings of the review show that the current state of the extant research is characterized by complexity and fragmentation, thus it provides an opportunity to have a more comprehensive understanding of the subject under research within a comprehensive framework, and; second, extant research has mainly focused on only one stakeholder category, thus, arguing on the basis of one, research on the topic misses the larger picture.

Based on this, we apply a methodology that provides a more comprehensive approach to incorporate the various stakeholder categories into a framework. Following Crossan and Apaydin (2010), we take as a starting point the main objective of theories, that is, to describe, predict and/or to provide explanations of the phenomena under research in a discipline by establishing relationships and, if possible, causality between the various elements (Bunge, 1997; Sutton & Staw, 1995). Thus, we adopt a sequential relationship approach, which is the basic causal building block (Crossan & Apaydin, 2010). Based on the sequential perspective for our conceptual framework, a set of determinants, which in this case is the engagement of different types of stakeholders, leads to our phenomenon of interest, that is, innovation management for entrepreneurship development.

Thus, during the process of our systematic review, we labelled each study based on the stakeholder categories described in the Thematic analysis section. A total of fourteen stakeholder categories surfaced

from the findings. The following sub-sections provide a detailed analysis of the studies classified in each stakeholder category. Adding to this, this section identifies various research gaps and inconsistencies that exist in each stakeholder category and provides various avenues for fruitful research.

5.1. *Academia*

The first and most researched (7 studies) stakeholder group refers to any individual, business unit or organization within the higher education industry that engages in innovation management and entrepreneurship development of external (outside the university) entrepreneurs. Within this research area, several studies found that higher education could facilitate innovation management and entrepreneurship development by providing specialized education and training programmes that prepare students to engage in innovation and entrepreneurship development successfully (Carlisle et al., 2013; Lüthje & Prügl, 2006; Thursby, Fuller, & Thursby, 2009). For instance, Lüthje and Prügl (2006) found that by providing interdisciplinary businessplanning courses to students better prepares the latter to engage in fruitful cross-disciplinary collaboration within entrepreneurial teams or in the context of innovation projects. In the same vein, Sousa, Carmo, Gonçalves, Cruz, and Martins (2018), found that the use of digital education tools and methodologies enhance the development of entrepreneurial capacity and knowledge of students in higher education. Through a different perspective, Kidwell (2013) found that Principal investigators in universities that engage in brokerage activities, act as technology intermediaries and enhance the interface between industry and academia. Therefore, principal investigators are also innovators because they create value by bridging structural holes and developing

trust between the academia and industry via specific brokering actions. Similarly, by drawing on biotechnology companies and their academic inventors, M urray (2004) investigated the extent to and mechanisms through which academic scientists contribute not only social capital but also human capital to entrepreneurial businesses. Their findings showed that: 1) the academic inventor brings his human capital, consisting of the wide variety of scientific knowledge, expertise and knowledge of laboratory techniques, in developing scientific strategy; 2) the social capital of academic scientists is important to innovation management and entrepreneurship development in new ventures, because it can be transformed into scientific networks that incorporate the venture into the scientific community, thus, providing the basis for the development of relationships between the entrepreneurial firm and members of his/her social network. Adding to this, the academic inventor's social capital has two distinctive components: the local laboratory network that the academic inventor belongs, and the cosmopolitan network of the inventor, which includes peers within his field. The local laboratory network can operate

as a source of continuous scientific expertise on the main idea for the entrepreneurial firm, whereas the inventor's cosmopolitan network can shape a firm's embeddedness and allow the company to tap into a wider scientific network for specific expertise that the company could apply in accomplishing technical milestones. Through these two network streams, important consultation and technical information enter the entrepreneurial firm, which, naturally enhances innovation and entrepreneurship development. On a theoretical note, Pache and Chowdhury (2012) argued that higher education can be engaged and facilitate innovation management and entrepreneurship (the authors focused on social entrepreneurship) development by teaching students "about" entrepreneurship to provide them with the knowledge and expertise necessary to engage in entrepreneurial activities successfully. While this research path provides several important findings on the review topic, further research is needed on providing additional ways through which academia can engage for enhancing innovation management and entrepreneurship development (Lombardi, Lardo, Cuozzo, & Trequattrini, 2017).

5.2. *Customers*

This area includes all types of external customers that an organization has. Two studies have been found to focus on the engagement of customers on the topic under investigation. Drawing on data from seven cases via interviews, desk research, field and participant observation, Haefliger, Jäger, and Von Krogh (2010) found that interaction of entrepreneurs with their customers assisted the former to improve their products and correct various flaws, thereby enhancing innovation and their entrepreneurial success. In the same vain, Kalsaas (2013) found that interaction and collaboration of entrepreneurs with customers, through the various demands and input of the latter, positively relate to enhanced innovation and consequently entrepreneurship development. Although the findings from these studies are encouraging in terms of the importance of customers in enhancing innovation management and entrepreneurship development, further research is needed in terms of other factors that could possibly affect this relationship. For instance, a fruitful avenue for future research could be the role of personal relationships with customers, which may work as a moderator, or the investigation into the contextual/motivational factors through which customers are encouraged to engage for improving innovation management in nascent businesses.

5.3. *Government*

This stakeholder group includes all actors of the institutional environment – Government – and their role for enhancing innovation and entrepreneurship. Towards this research stream, by drawing on data from a

longitudinal cross-sector analysis of 20 open data portals in Australia, Chatfield and Reddick (2017) found that government engagement for developing an open data policy in general, and open data policy intensity in particular, provides the basis for the successful creation of supply-side open data portal service capabilities that are crucial for attracting and engaging portal users/citizens for re-usage of open data towards citizen co-creation of open services innovation; which in turn enhances entrepreneurship. In the same vein, Yoon et al. (2018) found that the engagement of the government sector is necessary for transforming scientific knowhow into innovative nascent entrepreneurship. In particular, the results of their study show that by providing government policies as regards to labor, credit, and business operations that favour entrepreneurs, government engagement can further enhance innovation management and entrepreneurship development. On a theoretical note, Kassen (2017) focused on Kazakhstan and proposed that if government provides platforms with publicly available data sets in a machine readable format that needs some technological processing as a raw material, this is a crucial element in promoting the open data concept, which in turn enhances innovation and entrepreneurship development, as it works as a business accelerator due to the emergence of new businesses and the associated markets of mobile open data-driven projects and applications. In terms of future theory, researchers could focus on how government engagement affects the level of engagement of other stakeholder groups, such as NGOs, or industry-cluster alliances, and on what is their combined effect on innovation management and entrepreneurship development.

5.4. *Community*

This stakeholder category incorporates two sub-categories, namely, Physical community and User community. Physical community refers to a social group of any size (in terms of number), whose members share common values, behaviours, or habits (de Jong, Gillert, & Stock, 2018), in a physical environment. Based on the review findings we identified three studies that focus on this sub-category. First, de Jong et al. (2018) found that community engagement during the innovation process operates as a moderating variable on the relationship between general use value and first adoption of consumer innovations. In other words, the chances of first adoption of generally useful innovations with community engagement are higher. That is, because community engagement facilitates the chances of having an earlier communication about the innovation with members of the community. This enhances awareness of the general public, which is the first step of any adoption procedure (Rogers, 2003). Based on this, entrepreneurs can receive help, feedback or input from members of the community, which in turn enhances the innovation process and minimizes development costs, which lowers diffusion thresholds. On a theoretical note, Balfour, Fortunato, and Alter (2016) focused on the arts industry in rural areas and argued that arts businesses can be developed and sustainably maintained with the engagement of community by developing arts incubators that provide community workspace and train artists

(entrepreneurs) in business skills, which in turn generate or enhance an entrepreneurial context in rural communities. On a similar note, Mezias and Kuperman (2001), argue that entrepreneurship success is often not only the result of individuals acting in isolation. In particular, the authors argue that there is a population of businesses engaging in activities similar to those of the entrepreneurial firm, which constitute a social system (community) that can influence entrepreneurial success. Moreover, there is also a community of businesses characterized by interdependence of outcomes. Based on this, entrepreneurs could enhance their chances of succeeding in the venturing process if they recognize that their success

could depend on their engagement with this community. This research stream could be further enhanced by future studies that focus on factors and contexts that enhance community engagement in innovation management and entrepreneurship development, such as the structure or the size of the community, as well as the cultural context of the community in relation to the culture of the entrepreneur.

User community refers to a group of individuals that engage in various activities, from socializing with others who have shared interests, learning an activity to new members, to sharing information about how to better use a product, as well as for enhancing the development and diffusion of innovations (Shah & Tripsas, 2007). Towards this direction, Shah and Tripsas (2007) found that user entrepreneurs starting a new company often were part to such type of community and through their participation they benefited as follows: first, user innovators (entrepreneurs) receive first-hand information as regards to the preferences and needs of potential customers. User communities construct a forum for the open exchange of information about common problems, new and interesting applications that can be added to the product, desired characteristics of the potential product, and unpredicted experiences. Thus, in this way, members of the user community exchange information and build upon one another's contributions, which facilitate innovation for the product that the potential entrepreneur will be offering. Adding to this, users often share their prototype innovations with the other members in the user community, who serve as testers and provide fruitful feedback that guides product improvements. Second, through the engagement of user community with potential entrepreneurs, higher levels of novelty can arise because of the collective creativity. Similar to this, Haefliger et al. (2010) found that a user community is very important for the entrepreneur, because it serves as a knowledge pool for developing skills and experimenting with various commercialization paths. Whereas studies on this research path focused on the potential benefits towards innovation and entrepreneurship that arise from this engagement, future research could also explore the potential risks that could accrue for the potential entrepreneur and the product that (s)he wants to commercialize.

5.5. *Service intermediaries*

Service intermediaries refer to professional service firms that provide businesses with supporting services in areas such as finance, accounting, law, human resource management, and technology services (Zhang & Li, 2010). Focusing on this stakeholder group, Smeltzer et al. (1991) found that such organizations provide startups with technical knowledge for creating and further developing their businesses. Two decades after, Zhang and Li (2010) focused on the same research path and found that ties of new ventures with service intermediaries enable the former to enter into the networks of service intermediaries as they sit at the intersection of several businesses and industries, thus, establishing extensive networks of ties with various parts of the social business system. In turn, this entry enhances the ventures' product innovation by broadening the scope of their search for external innovation and at the same time reducing their search cost. In particular, a broadened external search scope enhances a startups' product innovation in three ways. First, innovation generation is an information-based activity. Second, a broadened external search scope can enhance the knowledge pool of a new business and increase the number of choices for the entrepreneurial firm to solve problems. Third, a broadened external search scope can assist entrepreneurial firms find external complementary capabilities and resources that are important for their product innovation. Adding to this, engagement of new ventures with service intermediaries helps the former balance their needs and costs of external innovation search. Further interesting and fruitful avenues of research could involve the various interactions between them and how this affects the level of engagement, as well as the outcomes on innovation management and entrepreneurship development. We leave it to the future scholar community to explore the ways service intermediaries can interact with each other.

5.6. *Suppliers*

Suppliers refer to all businesses or individuals that provide goods or services to an organization through a professional buying process (Amanipour, Jamshidvand, & Tabatabaei, 2015; Lin, 2009). Focusing on the engagement of this stakeholder category, Kalsaas (2013) found that success of entrepreneurial firms, can be attributed in part to the technology and knowhow provided by the suppliers and partners during the early phase of a new venture. On a theoretical basis, Park (2005) argued that by using external technology development sources as sub-contractors can provide the opportunity to an entrepreneurial firm to apply the latest technology developments of each business need, which in turn facilitates the new venture to focus internal resources on the need of their customers and in searching externally for appropriate technologies to satisfy them. Such an approach makes it easier to entice subcontractor involvement as potential profits are already visible before technology development begins. In order to show the potential benefits of supplier engagement for innovation management and entrepreneurship development, the

authors contrast this argument with corporate or university spinouts that start with a technology and the difficulties they have in their quest for establishing the potential market segment in which this technology can be offered and compete. This research area within the topic under investigation could benefit from further research on the types of suppliers that entrepreneurial firms could engage with, in order to facilitate innovation management and entrepreneurship development, as well as the impact of various contextual factors, such as industry characteristics (Christofi, Kaufmann, Vrontis, & Leonidou, 2013; Christofi, Vrontis, & Leonidou, 2014; Thrassou, Papasolomou, & Demetriou, 2018), on this relationship.

5.7. *Friends and family*

The next stakeholder group includes the friends and family of the (potential) entrepreneur. Whereas the majority of studies in the entrepreneurship literature focus on the role of this stakeholder group in relation to resource acquisition and emotional support for the entrepreneur, the findings of the review identified one study that focuses on innovation management and entrepreneurship development. By comparing 380 individuals engaged in entrepreneurship activities with a control group (n = 608), Davidsson and Honig (2003) find empirical evidence that encouragement from friends and family, as well as having this stakeholder group in business, was strongly associated with enhanced discovery process and probability of entry in entrepreneurship. As regards to further research directions, more studies are needed on the topic in order to empirically establish the engagement of this stakeholder group and its impact on innovation management and entrepreneurship development. Also, the barriers that arise from this group on innovation management and entrepreneurship development (for instance, the risk averse behavior of family and/or friends, which in turn may minimize the possibility of entry) that may arise, is a potential research area not frequently addressed in top management journals.

5.8. *Business networks*

The term ‘business networks’ refers to businesses that are connected to each other and tighten into network-like structures (Ciabuschi, Perna, & Snehota, 2012). Again, Davidsson and Honig (2003) found that, by bridging social capital in the context of weak ties (loose relationships between individuals), via the membership of the entrepreneur in a business network (i.e., Rotary, Lions, or Chamber of Commerce) positively relates with successful exploitation in terms of: 1) being able to make the process move forward, and 2) creating a viable business entity, as indicated by the frequency and pace by which nascent entrepreneurial activities are completed and by obtaining sales and achieving profitability, respectively. In turn, this enhances nascent entrepreneurship outcomes. The finding of the review here shows that research into business networks engagement and entrepreneurship development is an under-researched

area, in which valuable descriptions and empirical findings promise important conceptual development. Continuing, Carlisle et al. (2013) analyzed how associations facilitate indigenous innovation and entrepreneurship in two less economically developed country (LEDC) contexts: Tanzania and Gambia. The authors argued that for small indigenous firms operating in a LEDC context to grow, a supportive environment facilitating innovation and entrepreneurship is needed. Based on this, the authors explored how the involvement of a trade association, the 'Association of Small Scale Enterprises in Tourism (ASSET)' enhances innovation management and entrepreneurship in Gambia. Their findings showed that such an association indeed provides a supportive environment for innovation management through marketing innovation - a collaborative marketing approach. In particular, the authors found that the association provides marketing and promotional activities in order to help small businesses promote core messages about their services and products and access potential customers both within and outside the country. Adding to this, ASSET also provided the ground for knowledge transfer, networking and lessons for best practice, all of which enhance entrepreneurship development. Based on these findings, the scholar community should further investigate the role of such Associations in other industry contexts, as well as in developed economies and the BRIC context, in order to identify on whether or not these findings hold in other settings as well.

5.9. Start-up teams

Start-up teams refer to groups of entrepreneurs and/or new ventures that are connected to each other and tighten into network-like teams. Focusing on this stakeholder group, Davidsson and Honig (2003) investigated individual indicators of social capital that could result in both bridging and bonding relationships, which in turn enhance innovation management and entrepreneurship development. Their results found that when entrepreneurs are part of and engage with a start-up team, gestation activity is enhanced. In particular, the authors argued that such networks serve as conduits of information about innovation, the availability and character of product, resources and markets. Based on this, their results showed that by bridging social capital (by being a member of a start-up team), especially in the context of weak ties, the exploitation phase of the innovation and entrepreneurial process was enhanced. Further research on this stakeholder group could be very interesting as it can provide further insights of how entrepreneurs can further engage with such groups for enhancing their innovation outputs and entrepreneurship success.

5.10. *Innovation intermediaries*

Innovation intermediaries refer to '*an organization or body that acts as an agent or broker in any aspect of the innovation process between two or more parties*' (Klerkx and Leeuwis, 2008: p. 262). Such intermediary activities focus on: brokering a transaction among two or more parties; assisting in information acquisition about potential collaborators; acting as a mediator between organizations or bodies that they already have an established collaboration; and assisting in finding advice, support and funding for the innovation outcomes of such collaboration (Klerkx & Leeuwis, 2008). Based on this, Klerkx and Leeuwis (2008) focused on providing a summary of innovation intermediaries that were created to help entrepreneurs focusing on the agricultural sector with innovation solutions in the context of a market-based agricultural knowledge infrastructure, their contributions, as well as the tensions that were developed in relation to their functioning. Based on the authors, innovation intermediaries include: 1) Innovation consultants aimed at individual entrepreneurs or collectives of entrepreneurs; 2) brokerage organizations that create peer (inter-firm) networks; 3) systemic instruments in support of innovation at higher system level, and; 4) Internet-based databases and portals that provide information and knowledge associated with farmers (entrepreneurs) and related parties. Such intermediaries engage in the innovation management and entrepreneurship development, respectively, by: 1) having an innovation process management role and linking (agricultural) entrepreneurs with related service providers; 2) bringing entrepreneurs together in order to exchange experience outcomes and knowledge at both the interpersonal and group level; 3) having a catalytic role in innovation, by managing interfaces among (sub)systems, by creating and organizing innovation systems, by developing a platform for enhanced experimentation and learning and an infrastructure for enhancing strategic intelligence, as well as by facilitating demand articulation, vision and strategy development, and; 4) providing a wealthy source of information relevant to its entrepreneurial activity. Their findings (the fourth category of intermediaries - Internet-based databases and portals - was excluded from the empirical analysis of the authors) showed that, in the context of agriculture, such intermediaries positively affect innovation management and entrepreneurship development, as they: link demand and supply for services to assist innovation development; help manage managerial and information gaps (market failures), as well as system failures (system closure, inappropriate organizational systems, not compatible incentive schemes and reward systems) by conducting demand articulation, innovation process management and network brokerage; provide impartiality in network brokerage and demand articulation; raise capacity building and awareness at both demand and supply side for collaboration in innovation processes; provide access to agricultural

entrepreneurs in extensive networks of sources of knowledge and other resources; assist in the creation of radical and/or system innovations; facilitate accessibility to other agricultural entrepreneurs; act as liaisons within the agricultural knowledge infrastructure; provide cultural and cognitive proximity with both sources of knowledge and entrepreneurs (end-users) and; provide context sensitivity. Although this area of research is very promising in terms of the various benefits that this stakeholder group provides to innovation management and entrepreneurship development, further empirical research is needed to validate these outcomes within other contexts as well.

5.11. *Social media*

This stakeholder category focuses on social media, which refer to internet-based applications or platforms developed on the technological and ideological structures of Web 2.0 (Stohl, Etter, Banghart, & Woo, 2017). Within this category we identified one such study that focused on the role of social media engagement for innovation management and entrepreneurship development. Based on in-depth interviews with 12 entrepreneurs, Fischer and Reuber (2011) explored how the use of Twitter, one such social medium, could facilitate effectual (take a set of means as given and focus on choosing between various effects that can be triggered with that set of means) entrepreneurial action and thinking. The authors found that the moderate engagement of entrepreneurs in social interactions through Twitter, enhances an effectuation process by triggering a cognitive assessment of effects that can

be achieved with the means available. However, the authors also found that, if social interactions are seriously restricted, the impact on effectual cognitions is low, whereas if social interactions are extremely high, effectual churn could be experienced by the entrepreneurs. Based on the findings, research on social media within the subject under investigation focused on the relationship between social media engagement and innovation management for entrepreneurship development. Thus, based on Saxton and Guo (2014), who state that social media can be used as a tool for facilitating intense and meaningful interactions with various stakeholder groups, a fruitful avenue for future research is how social media engagement can enhance the engagement of other stakeholders for innovation management and subsequent entrepreneurship development, as well as how entrepreneurs and startups can use social media in order to facilitate the engagement of various stakeholders for enhancing innovation management and subsequent entrepreneurship success.

5.12. *University peers*

This category focuses on university peers, a stakeholder group identified in a study conducted by Qin and Estrin (2015). By drawing on the lens of social influence, the authors examine the transmission of entrepreneurship via the engagement of university dorm peers and ethnic association groups. Their findings show that the former facilitate returnee entrepreneurship by providing access to information and resources, thus enhancing innovation management and entrepreneurship development. This study focused on the engagement of university peers, however, living aside various factors that could moderate this engagement, as well as contextual factors that could influence the various outcomes of this stakeholder group. Thus, future research could focus on this research path, by examining, for example, the duration of being university peers and how this affects the ways of engagement and its outcomes on the potential entrepreneur.

5.13. *Non-governmental organizations*

NGOs refers to any voluntary, non-profit group of citizens and can be classified in terms of operational NGOS which provide social services such as health, education, or human relief, and in terms of advocacy NGOs which focus on lobbying local or international corporations, as well as governments (Guay, Doh, & Sinclair, 2004). In this study, we apply this definition for developing our NGO stakeholder category and we identify one such study that focuses on this stakeholder group. In particular, Ritchie (2016) conducted an empirical research in Afghanistan in order to explore how local actors engage to reshape the “rules of the game” in women's entrepreneurship development. Their findings showed, among others, that NGOs were the most important actor for the development of an innovative context within the society, and enterprise rules - chain rules routines, networking rules - through which women could develop their own enterprises. In other words, NGOs' engagement played a key role in facilitating institutional change which fostered innovation management and entrepreneurship development among women. This study was conducted in Afghanistan, an uncertain context that is characterized by a fragile and conservative setting, shaped by tradition and informality. Therefore, future research could take into consideration the particularities of this context and; 1) replicate the findings in similar settings so as to achieve generalizability, and; 2) conduct comparative studies in more liberal societies in order to explore the way NGOs engage for enhancing innovation management and entrepreneurship development, as well as the outcomes of this engagement in different societal contexts.

5.14. *Industry clusters*

Following Porter (2000) and Goerzen (2018), a cluster is a geographically concentrated group of interconnected businesses and related institutions in a specific field, linked by complementarities and commonalities, and characterized by formal structures of governance structures and business membership. Thus, an industry cluster alliance relates to a geographically concentrated group of firms and associated institutions belonging to the same industry, governed by specific structure and with membership status.

Also, called competitiveness clusters, in practice such clusters were first developed in 2005 by the French Government to improve French competitiveness in research and development and innovation and provide the opportunity to companies in expanding to new markets (Colovic & Lamotte, 2014). Within this stakeholder category, Goerzen (2018) argued that cluster managers enhance the flow of knowledge between the members, hence, minimizing the liability of un-connectedness. Based on this, the author found that entrepreneurial firms, given their lack of direct access to pipelines people and pipelines, can gain indirect access to these important resources by engaging with ICAs which bridge the ties with people and pipelines in the process of innovation and internationalization of their members. Adding to this, ICAs enhance flow of information, and provide access to social, technical and commercial capital, thus, enhancing innovation management and entrepreneurship development of new ventures. Towards this direction, future research could further explore the impact of industry type on such industry cluster alliances and the benefits they provide to their members-entrepreneurial firms, as industry-specific characteristics could, for example, affect the flow of information among members. Adding to this, future research could also explore the interaction of such clusters with other stakeholders, such as government and how these interactions could further enhance innovation management and entrepreneurship development.

As a concluding remark, several stakeholder categories analyzed above, entail findings from only one study, thus, future research is needed to better understand the engagement of each of these stakeholder categories and to further validate their impact on innovation management and entrepreneurship development. Adding to this, future research should also examine the findings of these studies in various contexts for further enhancing their generalizability.

5.15. *An integrative conceptual framework*

The framework in Fig. 6 uses information emerged from the findings of our systematic review and our stakeholder classification, to integrate and synthesize key findings regarding stakeholder engagement for innovation management and entrepreneurship development. We analyze the engagement of several actors in the innovation management and entrepreneurship development literature, which are classified

within fourteen categories: Academia, Customers, Government, Community, Service intermediaries, Suppliers, Friends and Family, Business Networks, Innovation intermediaries, Social media, University peers, NonGovernmental Organizations, Industry clusters, and Start-up teams. Fig. 6 is not an exhaustive framework, but rather meant as a multidimensional, integrative framework to which other stakeholders can be incorporated in the future. In addition, Fig. 6 provides an integrative framework for understanding the diverse body of existing literature because it subsumes all theoretical propositions, empirical findings and disciplinary idiosyncrasies of the stakeholder theory in relation to the innovation management area within the entrepreneurship field. Such an integration offered in Fig. 6 can serve as a building block to guide future research efforts in a more systematic and constructive way.

6. Contributions to theory and practice

This study makes the following five contributions. To our knowledge, this review is the first to provide scholars with a systematic and holistic overview of the scope and nature of studies focusing on stakeholder for innovation management and entrepreneurship development. Second, this review has highlighted a number of knowledge gaps that provide fruitful avenues for future research. In particular, our review reveals promising areas of research on the way various stakeholders engage in the innovation management and entrepreneurship development process, as well as various moderating and contextual factors that need to be considered, lying at the intersection of research on innovation, entrepreneurship, management and organization studies. Third, by applying an exhaustive and scientific review methodology, this study 'identifies' and 'summarizes' the various stakeholder groups that engage in the innovation management and entrepreneurship development process, thus integrating the fragmented literature into an integrative, multidisciplinary conceptual framework. An integrative perspective provides new insights and a greater understanding of extant research. Fourth, this study clarifies "how" stakeholder engagement can enhance the innovation process output, which in turn, enhances entrepreneurship development. Adding to this, the various stakeholder groups could all be fruitfully examined individually, as well as collectively, under the umbrella theme of the stakeholder engagement framework. Fifth, further to the theoretical

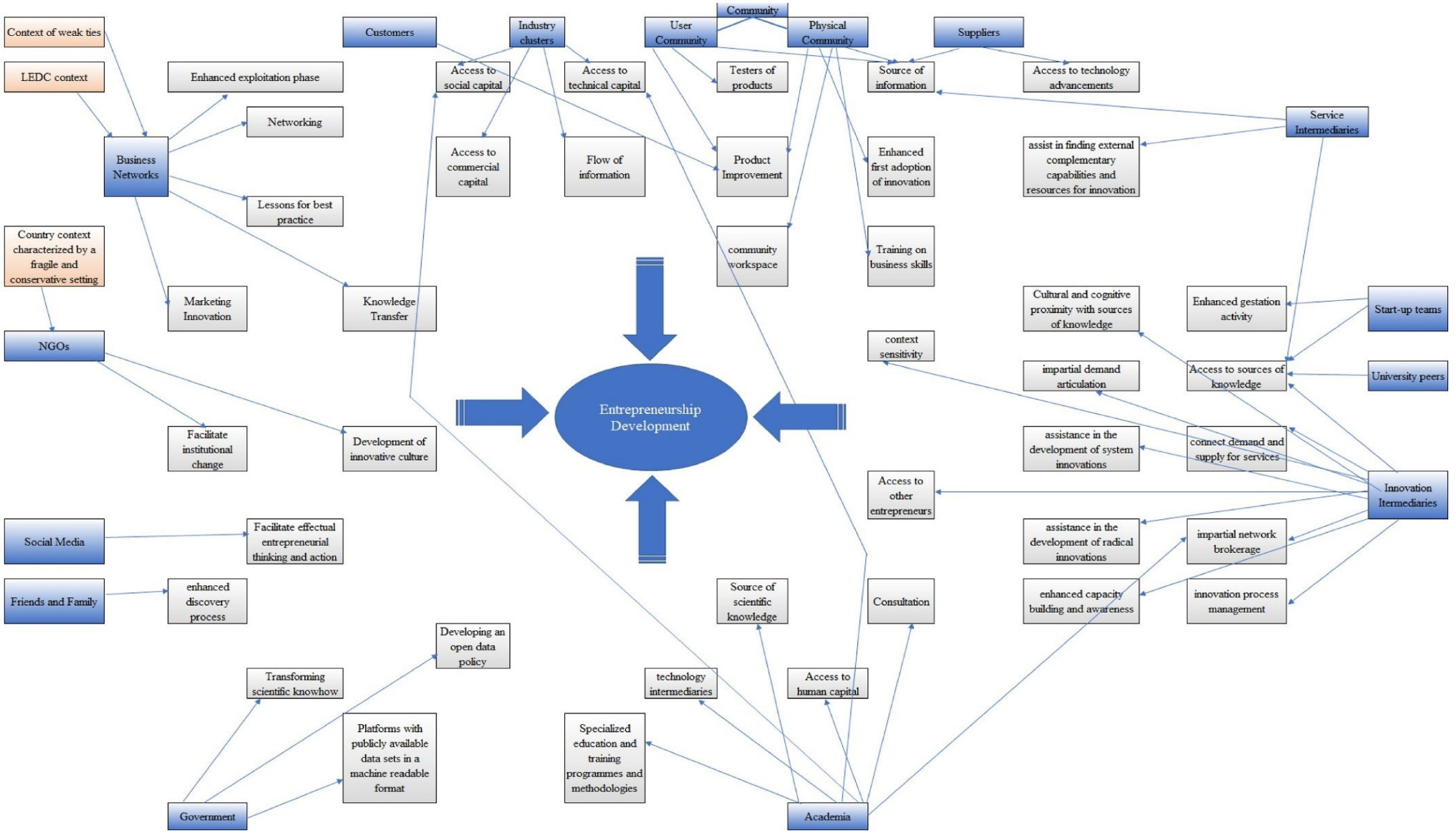


Fig. 6. A conceptual framework of stakeholder engagement for innovation management and entrepreneurship development.

contributions, this study also informs and guides executives towards practical applications. In the latter context, the findings of this work lay the foundations for entrepreneurs to understand the various direct and indirect linkages between the various stakeholders, and how these stakeholders affect their innovation management process and outputs, as well as their entrepreneurship success. Moreover, the integrative conceptual framework helps executives formulate appropriate strategies for engaging the various stakeholders in their entrepreneurial journey so as to enhance their chances of success. At a more general level, our framework is based on a sound theoretical basis and provides practitioners and entrepreneurs with a more holistic and comprehensive perspective on managing the various stakeholders for their benefit, in terms of innovation management and entrepreneurship development; the absence of which being a shortcoming that existed until now for both researchers and practitioners.

7. Concluding remarks and limitations

This study performs a systematic literature review of the relationship between stakeholder engagement and innovation management for entrepreneurship development. Even though we apply the systematic review methodology to identify relevant academic articles, other researchers may identify additional literature; a limitation that is true of any systematic literature review (Bartels & Reinders, 2011; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). In addition, as with other systematic literature reviews in entrepreneurship and management fields, this review includes studies published only in peerreviewed academic journals written in English and has excluded books and other 'grey' literature, as well as other studies written in other languages that might be relevant. Future research may focus on this. Moreover, future researchers could empirically test other opportunities unearthed in this study by testing the proposed framework across different cultures and industries, further exploring the mechanisms that connect the various elements of the framework, the interrelationships between the various stakeholders and the combined outcomes from

these interrelationships, and their underlying mechanisms. Adding to this, future research could also explore the effects of various moderators on the identified relationships, both positive and negative. Based on the findings from the literature review, this study developed a preliminary conceptual framework of stakeholder engagement for innovation management and entrepreneurship development. This framework sheds light about the current state of extant research on the topic and offers a number of directions to take the field forward rather than providing an ultimate solution. We hope that our study shall inspire scholarly and executive readers and that it has paved the way for more insightful research on the multidisciplinary interplay between stakeholder theory, innovation management, and entrepreneurship.

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