# ARTICLE IN PRESS

Journal of Business Research xxx (xxxx) xxx-xxx

FISEVIER

Contents lists available at ScienceDirect

# Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres



# Four questions of entrepreneurial marketing education: Perspectives of university educators

Audrey Gilmore<sup>a</sup>, Andrew McAuley<sup>b</sup>, Morgan P. Miles<sup>c</sup>, Hugh Pattinson<sup>d,\*</sup>

- <sup>a</sup> University of Ulster, United Kingdom of Great Britain and Northern Ireland
- <sup>b</sup> International Institute of Business and Information Technology, Australia
- <sup>c</sup> Charles Sturt University, Australia
- <sup>d</sup> Western Sydney University, Australia

#### ARTICLE INFO

#### Keywords: Entrepreneurship Marketing Education Entrepreneurial marketing University

#### ABSTRACT

This paper reviews and reflects on the design and delivery of entrepreneurial marketing (EM) education in universities. During recent decades, there has been a growing interest in EM from policymakers, educators, organizations, and individuals, in tandem with a desire to enhance growth potential within regional and national economies. EM activities and processes have been adopted by many entrepreneurial firms across industries as diverse as agriculture, tourism, and engineering. All of these developments have impacted upon EM education. A review of relevant literature indicated four key questions, these are: (1) what should be taught; (2) how it should be taught; (3) where it should be taught; and (4) who should teach EM. These four questions were posed to an international forum of EM university educators, and their responses are incorporated into a reflection of the nature of EM education today and the implications for educators.

#### 1. Introduction

Interest in entrepreneurial marketing (EM) education has evolved over the past thirty years leading to a large body of research. There is an increasing trend for government policy to advocate entrepreneurship; policymakers frequently consider the possibility of EM education and training as an efficient mechanism for increasing entrepreneurial activity (O'Connor, 2013). The current economic environment within which entrepreneurs operate is one where change is inevitable and where uncertainty undermines traditional attempts to plan (Bjerke & Hultman, 2002; O'Connor, 2013). In such an environment competition is intense, technology changes rapidly and proactive marketing is critical to success. In these turbulent times, EM education needs to address all forms of initiatives from survival ventures to those that aspire to become unicorns (Morris, Neumeyer & Kuratko, 2015). EM offers capabilities that help founders, owner-managers, and executives leverage networks, and to create marketing advantage (Bjerke & Hultman, 2002; Miles et al., 2017). This presents a challenging business environment for EM and for those involved in EM education.

Entrepreneurship is fundamentally about doing marketing, finding "new generic product-markets rather than refining the marketing process in well-developed and relatively well-known product-markets"

(Murray, 1981: 93). Morris, Schindehutte & LaForge (2002: 5) explicitly include in their definition of EM: "the proactive identification and exploitation of opportunities for acquiring and retaining profitable customers through innovative approaches to risk management, resources leveraging and value creation," indicating that EM is marketing based on profitably meeting customer needs. EM encapsulates the pursuit of a product market in the future (one that does not yet exist) and market creation (Venkataraman, 1997). The marketing role is visualized as a place for the entrepreneurial process in an organization (Murray, 1981). Competence in EM is manifested in the marketers' ability to implement a value-creating vision; their ability to master the valuecreation process and find resources that will underpin the creation of value. Prior studies have found that market creating firms often have larger market share and a greater marketing capability than non-market creating firms (Darroch & Miles, 2013) and may involve changing the rules of the market (Bjerke & Hultman, 2002; Hills, Hultman, & Miles, 2008). To achieve this, entrepreneurial marketers need to have sufficient resources and be ahead of changes in the marketplace and everchanging consumer expectations so that they can effectively identify, evaluate, exploit business opportunities and create value within dynamic environments (Hallbäck & Gabrielsson, 2013; Jaakkola, Möller, Parvinen, Evanschitzky, & Mühlbacher, 2010; Yang & Gabrielsson,

*E-mail addresses*: aj.gilmore@ulster.ac.uk (A. Gilmore), amcauley@iibit.edu.au (A. McAuley), mmiles@csu.edu.au (M.P. Miles), H.Pattinson@westernsydney.edu.au (H. Pattinson).

https://doi.org/10.1016/j.jbusres.2018.12.016

Received 29 October 2017; Received in revised form 1 December 2018; Accepted 5 December 2018 0148-2963/ Crown Copyright © 2018 Published by Elsevier Inc. All rights reserved.

<sup>\*</sup> Corresponding author.

#### 2017).

EM is vital for economies; Rauch and Hulsink (2015: 187) suggest that "education could be one way to increase the prevalence rate of entrepreneurs and, thereby, stimulate economic growth." The growth of interest in EM, together with the increase in supportive government policies has contributed to the creation of a wide range of courses in EM and entrepreneurship (Kuratko & Morris, 2018; O'Connor, 2013). In addition to for-profit business contexts, EM education has been applied to not-for-profit contexts, communities, regions, campuses and across borders. The growth in the number of courses available has led to some confusion regarding the multi-definitional perspectives of entrepreneurship and the perceived lack of a theoretically sound conceptual grounding (O'Connor, 2013). Across the university sector, there appears to be a diversity of opinion regarding the context in which EM is taught (Kuratko & Morris, 2018) and its perceived relevance. To this end, this paper evaluates the nature and scope of university EM education based on a review of current literature and the opinions of a sample of highly experienced EM educators. The overall aim of the manuscript is to reflect on the what, how, where and who issues of EM education in universities. These four questions are closely interrelated and dependant on each other, and therefore they need to be considered in context.

## 2. Four questions of entrepreneurial marketing education

The paper draws from prior studies (e.g., Frasier, Miles, Woods, & Lewis, 2017; Gilmore & Carson, 2007; Mehlhorn, Bonney, Frazer, & Miles, 2015; Morris, Webb, Fu, & Singhal, 2013). Outcomes of prior studies identify three core issues to be considered in relation to the design and delivery of EM programs. The three core issues are: what should be taught, how it should be taught and where it should be taught. This paper extends prior work and applies these three questions to EM education across university programs. Following a presentation and discussion with participants at the Global Research Symposium in Marketing and Entrepreneurship's (GRSME) 30th-anniversary conference, a fourth but increasingly significant question was added to the investigation - who should teach entrepreneurial marketing? Changes in recent years have led to the expansion of the what, how and where of EM education to include more competency-led teaching and learning and in places other than business schools. Therefore, consideration of who teaches EM has become very important (Frasier et al., 2017; Kuratko & Morris, 2018). Thus, the focus of this review and reflective piece is on what content should be included in the curricula, how this content can be disseminated, where (in the university or other locations) should entrepreneurial marketing education take place and who should design curricula and teach EM.

# 2.1. What should be taught?

The question of what should be taught includes both the knowledge (content) of courses and the skills and competencies to be developed. These are discussed in separate sections below, however knowledge of concepts and the competence required to practice are closely interlinked.

# 2.1.1. Knowledge/content

The foundational role of the study of SMEs to the development of EM theory is well recognized (Carson, 2010; Hansen & Eggers, 2010); it encapsulates the development and refinement of business practices as businesses grow from startup to growing firms that create value within industries. Although EM differs from traditional big business marketing, EM can also occur in big businesses if the organization's culture and the environment are conducive; where the focus is on being flexible and opportunistic, to reach new markets and develop innovative, competitive products and services (Miles, Gilmore, Harrington, Lewis, & Sethna, 2015).

Teaching EM is based on the concepts, approaches, focus, and attitudes which pervade entrepreneurs and business managers' perspectives, and identifies how they operate in a competitive marketing environment. Hills and Lumpkin (1997) emphasize the importance of teaching students the ability to recognize and exploit opportunities. They argue that the opportunity recognition process is central in EM education; it can be applied to any business or industry and it is most fruitful when it has problem-specific applications. The common building blocks of EM include the investigation and consideration of new ways of doing business, breaking the mold regarding developing products and marketing (Miles et al., 2015). Teaching EM is not only about imparting the core concepts and theories but also seeking to instill a proactive way of thinking regarding the identification of new markets, the innovative creation of new products, execution of marketing activities and creating superior value propositions for customers and markets.

A review of the entrepreneurship and EM literature over the past 30 years indicates a wide variety of content, which has evolved from the strategic planning, market disruption, and creation theories; from the adaptation of existing marketing and small business marketing theories to the increased use of more prescriptive, formal, tangible frameworks. These include prototyping, design thinking (Neck & Greene, 2011) lean startup (Blank, 2013), business model canvas (Osterwalder, Pigneur, Bernard, & Smith, 2014), effectuation (Sarasvathy, 2001) and customer development (Blank, 2013). Although these methods are content-based, they are all designed to encourage business competency development and have been applied to a wide range of contexts.

Prototyping is a hands-on, action orientated way of gaining the benefits of the rapid development of a product or business concept through iterative feedback and adjustments drawing on the knowledge of peers or a sample of the target market. It can be structured in various ways but does include the recently popularised 'hackathon' approach to innovation and design. Design thinking principles have shaped some universities approaches to EM education and practice over the past decade. For example, the Stanford B-School five stage Design Thinking Framework (Empathize  $\rightarrow$  Define  $\rightarrow$  Ideate  $\rightarrow$  Prototype  $\rightarrow$  Test (Plattner, 2010)) and User Experience (UX) can be viewed as expressions of EM principles and underpins many corporate and university incubators, accelerators and postgraduate EM courses. Lean startup focuses on entrepreneurs starting with existing resources and expertise, and through experimentation and learning iterate a portfolio to generate new products and strategies. Business model canvas is a tool developed by Osterwalder et al. (2014) which draws together the nine key elements of the classic business plan on one page. Within the context of EM, it can be useful to focus attention towards the value proposition that is being developed for the customer segments to be served. While being praised for broadly simplifying the process of creating a business plan, it has been criticized (Oyedele, 2016) for failing to recognize external market conditions sufficiently.

Effectuation theory is based on the examination of how and when marketing decisions are made under uncertainty; entrepreneurs may choose between 'many possible effects using a particular set of means' (Sarasvathy, 2001: 245). 'The process of effectuation allows the entrepreneur to create one or more several possible effects irrespective of the generalized end goal with which she started' (Sarasvathy, 2001: 247). Customer development is what Blank (2013) calls a "get out of the building" approach to business startup, by asking potential users, purchasers, and partners for feedback on all elements of the business model, including product features, pricing, distribution channels, and affordable customer acquisition strategies. The emphasis in most of these teaching frameworks is to be agile and nimble; instilling the recognition that new ideas/products may need to be adjusted based on customer feedback, and then re-tested to see what does and does not work with potential customers.

The adaption and use of marketing practices such as inbound versus outbound marketing (Fiskin & Hogenhaven, 2013) and guerrilla

marketing (Levinson, 2007) are also considered to be entrepreneurial and relevant to EM education, as they focus on creating competitive products, messages, and content that aim to attract customers and align their interests with a company and their products.

#### 2.1.2. Skills/competencies

EM education also needs to include developing competence and experiential learning (Carson & Gilmore, 2000; Fayolle, Verzat, & Wapshott, 2016; Lans, Verstegen, & Mulder, 2011; Morris et al., 2013). No one can teach a potential entrepreneur the specific skill of becoming innovative or creative, but it is possible to teach students the tools and skills required to transform a new idea into a practical business plan. They can be taught to embrace opportunity, risk and new ideas, which can become business plans and can create new enterprises (Klein & Bullock, 2006: 436). The focus is to help them develop confidence, emotional and business intelligence, how to cope with uncertainty and persistence in following ideas through to implementation.

Morris et al. (2013) and others (Bjerke & Karlsson, 2013; Carson & Gilmore, 2000) argue that EM education should aim to teach and develop competencies relevant for entrepreneurship. For example, to guide students 'as prospective entrepreneurs' to 'learn scripts to guide their present and future entrepreneurial pursuits' (Morris et al., 2013: 356). Their study sought to define entrepreneurial competencies using a Delphi process with input from 20 leading entrepreneurial academics and 20 successful entrepreneurs. They found that the competencies required for entrepreneurial initiatives such as venturing or strategic renewal are conceptually distinct from those competencies required for the effective and efficient management of an ongoing business. The entrepreneurial competencies they identified are related to the marketing actions of opportunity alertness, creation, assessment or exploitation and what Kirzner, 1973, 2009 terms entrepreneurial discovery. They identified thirteen entrepreneurial competencies that were considered to be essential for opportunity creation and recognition, assessment and exploitation. These included four attitudinal competencies: tenacity; goal-directed adaptation; resiliency; and entrepreneurial self-efficacy. They argue that if these attitudinal competencies do not exist, then entrepreneurial behavior may not ever be actualized, and opportunities not recognized, realistically evaluated, or exploited. This concurs with earlier work which views entrepreneurial marketing as an opportunity-seeking behavior that is fundamentally different from the administrative management of an on-going concern (Morrish, Miles, & Deacon, 2010; Stevenson & Gumpert, 1985); and studies indicating the importance of entrepreneurial persistence and tenacity, and taking a long-term business perspective (Carson & Gilmore, 2000; Shane & Venkataraman, 2000).

In recent years, EM education and practice have drawn on effectual logic and the "Lean Startup" framework (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009; Reis, 2011; Blank, 2013). These frameworks promote skills which focus on entrepreneurs starting with existing resources and expertise, experimentation and learning in order to generate new products and strategies. In addition to having the ability to create and renew products, processes, strategies, organizations, and markets, competency development also includes how to cope with uncertainty, and the ability to pitch new ideas to the market, investors, suppliers and other relevant prospects. These skills are fundamental to the exploitation of opportunities (Shane & Venkataraman, 2000; Stevenson & Gumpert, 1985). Indeed, Lans, Verstegen, & Mulder, (2011: 697) note that:

"Being entrepreneurially competent does not only refer to the know how to write a business plan, but it also implies recognizing and acting on opportunities, taking initiative and action, for example by convincing investors to invest money in a project, and relate to potential suppliers and buyers. It implies that the competent entrepreneur is actually able to identify and further exploit an opportunity within a specific context."

Given that EM is relevant to and can occur in many different contexts such as business startups, SMEs, family businesses, franchises,

larger corporations, social enterprises, it is understandable that the content and skills developed may vary in different institutions, geographical locations and in relation to local business contexts and lifecycles. Therefore, what should be taught needs to reflect these manifestations, and this has implications for the how, where and who of entrepreneurial education.

#### 2.2. How should it be taught?

Teaching EM marketing requires careful consideration of what can be taught in the classroom and what is better learned by experience. There are two broad approaches to teaching entrepreneurial marketing. First, the underpinning concepts and theories can be delivered in a traditional classroom context, for example, through conventional lectures, the use of online platforms, flipped classrooms, often with the aim of instilling knowledge of the core business theories (Crispin, McAuley, Dibben, Hoell, & Miles, 2013). The second approach involves a more hands-on experience based approach where students can engage in entrepreneurial marketing through the lived experience of developing a business idea, starting and running a business (Gilmore, McAuley, Gallagher, & Carson, 2013) or through an incubator or accelerator program where authentic learning is used as the foundation to create entrepreneurial competencies (Miles et al., 2017).

EM interactive teaching and learning approaches incorporate 'learning by doing,' whereby students are given the opportunity to work with mentors or interact with actual entrepreneurs. Experiential learning can take a variety of forms; the aim is to give students the opportunity to act 'as if' (Bjerke & Karlsson, 2013) they are entrepreneurs and engage in setting up and running a business. This allows students to gain an authentic understanding and knowledge of core business theories in the context of a specific entrepreneurial business environment. Accelerator programs are widely used to force students to experience the pressures of starting and funding a business in a controlled environment where the university setting ameliorates risk and outcomes. This experience when combined with reflection and the opportunity to be exposed to additional business theory helps develop a competency-based approach to learning that in turn takes the student to an appreciation of the practicalities of being an entrepreneur creating a virtual circle of entrepreneurial learning, action, reflection, and additional learning. This reflects the experiential learning theory of Kolb (1984, 2015), based upon the relationship between knowledge and education, co-operative leadership and dialogue, experience as an organizing focus for learning, development with purpose and learning from experience (Carson & Gilmore, 2000; Crispin et al., 2013).

Exposing students to the nature and value of working with others, such as business partners or technical experts is difficult to achieve within a conventional classroom. Real consulting projects with entrepreneurs, social enterprises, small or large organizations, and action learning approaches, have significant contributions to make to EM education (Gilmore et al., 2013). In recent years there has been increasing acceptance of the value of experiential learning, with more focus and time allowed for co-curricular activities such as the use of entrepreneurial mentors, entrepreneurial study abroad, campus-based business ventures and engagement with regional and national competitions for example. This has also had implications for how EM programs are assessed, and there has been considerable attention given to how to access students' experiential learning experience, using a variety of mechanisms for different contexts. The 'how' of teaching entrepreneurial marketing should facilitate and encourage students to experience a more realistic understanding and engagement with the 'real' business world.

#### 2.3. Where should it be taught?

In 2006, Klein and Bullock found that business schools offered entrepreneurial programs rather than other departments or faculties

within universities. However, this has been changing over the past decade; there is increasing evidence of cross-campus and university-wide entrepreneurship education programs (Katz, Roberts, Strom, & Freilich, 2014). In addition to business school programs, there are "courses in social entrepreneurship, family business management, technical entrepreneurship, performing arts entrepreneurship ... popping up in colleges of arts and sciences, engineering, education, social work, and even fine arts. Colleges of agriculture and life sciences are also expressing interest" (Klein & Bullock, 2006).

In comparing how and where entrepreneurship is taught, a study carried out by Katz, Hanke, Maidment, Weaver, and Alpi (2016) in the US and EU, identifies similar evolving themes that include a lifelong learning perspective, and a focus on encouraging the development of entrepreneurship skills. They advocate that entrepreneurship education should take place not only in business schools but in other disciplines because many students will enter careers where they will need to develop entrepreneurial characteristics. These include self-employed designers, engineers, scientists or artists. The goals of entrepreneurship education can vary at different stages of the educational process, from raising awareness of self-employment, starting a business to having the ability to think and act creatively, effectively problem solve, analyze a business idea and lead a business project (Katz et al., 2016).

Therefore it seems logical to conclude that EM education needs to offer different programs for different student (and business) needs and should not be limited to business schools but include other schools within universities such as schools of agriculture and life sciences (Mehlhorn et al., 2015), schools of engineering (Frasier et al., 2017) and in other locations outside universities. An additional consideration for students is whether an EM marketing curriculum should be offered after or in alignment with a specific product, service, application or process development module. When EM is taught to students who have not been exposed to the principles of marketing, then the fundamentals of business and marketing need to be incorporated into the early phase of the EM course.

#### 2.4. Who should teach EM?

The evolving nature of what, how and where of EM leads to the question of who should teach EM, and who should develop curricula. Traditionally EM curricula were designed and taught by business school faculty, however as discussed in the previous sections of this paper, the growth of interest in EM by other university faculties has led to it being offered by disciplines such as computing, agriculture, engineering, social science, and arts faculties. Additionally, the increasing focus on experiential learning has led to more practitioner input in EM programs, with educators and practitioners from many different backgrounds being involved in the design and delivery of EM curricula (Crispin et al., 2013).

Recent research (Frasier et al., 2017; Katz et al., 2014; Kuratko & Morris, 2018; Mehlhorn et al., 2015; O'Connor, 2013) has highlighted that the multi-definitional perspectives of entrepreneurship and its application within many different disciplines and contexts have led some educators to reflect upon who should teach and develop curricula for EM education. As EM is embraced across more disciplines of the university, academics without the benefit of any exposure to the fundamentals of business are teaching entrepreneurship. This has become a very critical issue for many universities. While, in some universities, this is viewed positively, there are often serious negative consequences when people are "encouraged" without adequate preparation or self-awareness to become entrepreneurs and create new ventures (Miles et al., 2017; Shane, 2009). Who teaches EM presents new challenges as more disciplines seek EM education.

## 3. Methods - reflections from EM educators

To build on the literature review and provide more clarity and

insight regarding the nature, scope, and challenges of delivering EM education today, the perspectives, opinions, and experience of EM educators were investigated. During the GRSME in San Francisco held during August 2017 the key themes of EM education as outlined in the literature review above were presented and discussed at a session attended by approximately 40 delegates from American, Australasian, and UK/European academic institutions. As this was the 30th anniversary of the conference, it was an important milestone and a perfect moment for delegates to reflect on current issues of EM education.

A short presentation (15 min) was used to outline the topic of EM education (based on the literature review) and to elicit a detailed discussion with the conference delegates regarding their experience of teaching and developing EM education over the past decades. The discussion (lasting for 30 min) elicited the views, opinions, and experiences of participants regarding EM education, and what, how and where EM should be taught.

All delegates of the GRSME meeting were engaged in EM education at their home institutions and had been involved in EM education for between two and thirty years. The comments of delegates were recorded by a designated notetaker during this discussion. These were transcribed in full immediately after the session.

During the discussion of these themes, the fourth question regarding 'who' should teach EM emerged as a very relevant theme. At the end of the session, delegates were asked to document their views, perspectives, and experience after the session regarding the four questions (what, how, where, who) and send to the authors of this paper. A total of 18 delegates responded with detailed comments, opinions, and examples of their experiences of teaching EM. These included seven delegates who teach in US universities, eight delegates who teach in UK/European universities and three who teach in Australasian universities.

The transcribed notes and the written comments from the delegates were analyzed manually by using a coding process to identify the key themes evolving from each of the four questions. The process resulted in the development of a systematic analysis of the themes and patterns in the text (Denzin & Lincoln, 2008). The analysis sought to identify the common views shared by delegates regarding what, how, where and who should teach EM and to discover any differing views and experiences.

#### 4. Findings

The findings regarding what, how, where and who should teach EM are presented below. Participants used the terms entrepreneurship and entrepreneurial marketing interchangeably and indicated that the EM programs they taught included aspects of both entrepreneurship and marketing. There was general consensus regarding what and how EM education should be delivered, although there were different preferences for the tools and techniques used. There was considerable debate regarding where and who should deliver EM education.

# 4.1. What should be taught?

The participants at GRSME represented a range of experience of teaching EM. Some relatively new academics had been teaching EM for only two years, others had been teaching EM for more than ten years. They revealed that in recent years EM education included both taught modules and interactive, practice-focused input and action-led activities. Regarding what should be taught, there was general agreement on the marketing and entrepreneurship topics that could be included in course content. For example, one participant stated that:

'The concept of entrepreneurial marketing is no longer a novel or revolutionary point-of-view but is the core of most economic development platforms across the globe. How entrepreneurial marketing is reflected across cultures and landscapes may vary some, but its principles are common'.

The delegates agreed that in addition to opportunity recognition, assessment, and exploitation, content should include the strategic

perspectives of business and marketing decision making, marketing planning, innovation, customer orientation and feedback, creating a value proposition, getting a viable product to market, sales and negotiation skills and how to pitch an entrepreneurial idea. Digital marketing strategy and value creation were important within new EM courses – however, delegates indicated that marketing academics do not necessarily teach this. In some institutions, digital marketing specialists were used to lead professional sessions and carry out training within incubators or accelerators.

EM programs had different names depending on different priorities and input. For example, one participant said:

'in my experience EM courses are called different things: they are labeled as marketing innovation courses within MBA programs, often using Blank's Lean Startup framework, "Digital Marketing Entrepreneurship" and including Marketing Data Science including the Internet of Things, Big Data, Marketing, and Entrepreneurship Analytics and Datafication from a Service-Dominant Logic Value Creation perspective.'

There were some nuanced differences between the US/Australasian and UK use of language in this context. Regarding content, some US/Australasian participants indicated that they focused on a macro, strategic perspective, mirroring the entrepreneurship discipline with an emphasis on opportunity recognition and exploitation, strategic decision making, innovation, and making a sales pitch.

'We teach how marketing can help people with an entrepreneurial mindset recognize, assess, and exploit opportunities. Courses should provide a strategic decision-making perspective in entrepreneurial marketing, and how to pitch.'

Although there is a similar focus on these strategic perspectives, some UK EM courses include a more micro perspective, working from the premise that entrepreneurs not only focus on starting up new businesses but also that they make business decisions and execute business activities that are constrained by their limited resources, expertise, impact, and size.

'In my EM class, I include some marketing theories, and also how entrepreneurs and young businesses are limited in what they can do because of their limited resources.'

The majority of EM education programs were designed to equip students to think more extensively about marketing's role in innovation, exporting and global marketing. For example:

'Marketing is a natural home for studying exporting entrepreneurship and entrepreneurial marketing ..... as marketing has always been about value creation which is constantly evolving....'

EM educators stressed that they aimed to provide students with the ability to innovate and generate effective solutions to business issues. Some participants reported that they had used concepts such as the business model canvas and design thinking in this context.

'I bring entrepreneurial concepts into my courses so that students can see, especially with startup companies and new technologies, that traditional ways of doing business aren't always the best.'

EM programs also included the study of radical and incremental innovation. Some programs explicitly focused on radical innovation, exploring the creation of new products and product applications whereas other programs put more emphasis on incremental innovations such as replacing and developing existing products and ideas. Some EM programs used a wider definition of innovation, where it was not only about new product development, but also about how to innovatively develop the whole spectrum of marketing activity especially in relation to how a business reaches and serves its market.

Regarding future development of EM, program participants suggested that programs should be designed to enhance students' leadership skills and nurture personal attributes of tenacity, persistence and the skills needed to move from having a new business idea to creating a new business.

#### 4.2. How should EM be taught?

What is taught has a strong impact on how it is taught. All participants indicated that EM education should integrate concepts with practice and that experiential learning was vital in EM education today. Although it was agreed that some core course content was best suited to classroom-based teaching, experiential learning was considered to be central to an EM education. Exposing students to the real-life business experiences of practitioners and executives of organizations was central to helping students understand the entrepreneurial mindset. One participant's comment which echo's other similar views illustrates this:

'I think that how EM should be taught is a bit more complicated. We teach it within our business school at present and within the classroom, but its best efficacy might be if taught with a hybrid format that blends the classroom with interaction within the community.'

Based on their own teaching experience, participants said that they believed that students like to learn from real-world examples. Many had used case studies. However, there was general agreement that facilitating students to engage directly with entrepreneurs, by interviewing them or working with them on a real-world business 'problem'; and allowing students to engage in new venture business planning, helping to create a startup business were preferred ways to facilitate student learning. This is summarised in the following comment:

'We integrate marketing and entrepreneurial concepts with practice and emphasize learning by doing. Besides learning from real-world examples through case studies, students also learn from actual entrepreneurs by interviewing them or through interacting with actual entrepreneurs who are brought into the class as guest speakers. ... Perhaps the most important part of the learning process occurs by doing. Hence each person in the class will jointly do a group project of 2-4 people, which will require each group to develop a marketing plan for a venture idea that the team would work on during the semester. The group project will culminate in a written report and oral presentation.'

EM educators also engaged with students to develop negotiation and sales skills and helped students to refine these skills by working with mentors, entrepreneurs, and learning by doing. Many of the EM educators indicated that in recent years they have increasingly used accelerator or incubator programs as a means of engaging students in current, real-world scenarios. Participants' commented that:

'It is challenging to develop and curate content for entrepreneurial activity around an incubator in terms of the different materials, delivery, and packaging...'

'We are also working with a university incubator so that the curriculum is developed and delivered around students developing something in that incubator.'

EM educators acknowledged the importance of instilling experiential learning through co-curricular activities such as internships, entrepreneurial mentors, entrepreneurial competitions, elevator pitch competitions, and campus-based student-led businesses, for example. Participants recognized that experiential learning could be distinguished in relation to whether content and activities are more applied or theoretical, hands-on or minds-on and the EM educators indicated that it was important to instill both active and reflective learning in students. For example, writing a business plan with an entrepreneur would help a student who learns better through reflective observation, and involvement in developing a venture in an incubator would help a student who learns more through experience (Kuratko & Morris, 2018; Morris, Schindehutte & LaForge, 2002).

There were other approaches to how educators inserted or integrated the opportunity for students to learn from real-world examples. Some participants discussed 'off-the-shelf' and well-formed MOOC (Massive Open Online Courses, aimed at large-scale participation with free access via the internet) online content that offered a good

Journal of Business Research xxx (xxxx) xxx-xxx

A. Gilmore et al.

fit with some of the key subjects in EM education. Some EM educators had used Steve Blank's "How to Build a Startup" MOOC course which is designed to be used by students who are also participating within an incubator/accelerator environment and found this useful for incorporation into EM courses with the same content and context.

All participants agreed that experiential and action-based learning was vitally important for EM education. Learning in a real business environment introduced students to the challenges of working with people with different characteristics, skills, and outlook. This was considered to be essential to learning how to select business partners and team building when working in small and large organizations. It also encouraged the development of confidence, self-knowledge, and self-reliance. This is particularly important in a world where people influence business culture and where organizations develop organically.

#### 4.3. Where should EM be taught?

From the discussion with the educators, it was clear that a critical issue in EM education today is where EM education should occur and who should deliver it. Traditionally EM education was offered by business schools only; increasing it is offered in engineering schools, agriculture schools and life sciences' (particularly in the US and Australasia), in computing schools (in the US, Europe, Australasia, and the UK) and art and design schools (particularly in the UK).

All participants agreed that entrepreneurship and EM should be considered and taught as part of every marketing/business program. In some business schools in the US, EM courses are offered as a minor to all students, whether they are interested in owning a business or not. Across campuses, other departments are teaching EM modules as part of their coursework, focusing on developing an EM mindset and using the business model canvas. Ideally, business schools should collaborate with faculty from other departments to assist with delivering or developing these curricula and modules to develop the EM mindset across the curriculum. For example, one participant commented:

'I believe that EM is no longer considered only within the bailiwick of the business school but should be taught within the public, social, economic and technology development educational domains as well to name but a few.'

Educators working within the UK and European universities reported that cross-campus and university-wide EM programs had become more common in recent years and they supported the creation of cross-disciplinary programs that could be developed and taught within the public, social, economic and technology development educational domains. They agreed that in principle this was important because EM is reflected in culture and landscapes, and many business principles are common in different contexts.

'I like the idea of teaching EM across disciplines. I think it allows for greater exposure and can aid in the creative and innovation process. We do this well with disciplines outside of the business school and by pulling in concepts in other business school courses that are not EM.'

Participants indicated that sometimes cross-disciplinary programs work well and sometimes they do not, depending upon the background and experience of programs and curricula developers, teachers, mentors, and the overall university environment. For example, some participants highlighted the problem of coordinating a cross-disciplinary program and trying to achieve cross-disciplinary objectives:

'We have a Bachelor of Entrepreneurship course focused on computer game design and simulation (offered by the relevant Computing School), with online Entrepreneurship content provided by the School of Business, and the university's LaunchPad Accelerator is providing professional services, mentoring and special events while hosting the students as they develop their applications. Development, delivery and ongoing management of this cross-disciplinary degree were quite challenging.'

'Our school of computing charged off promoting a new entrepreneurship degree to bolt on an apps/games design degree... however, over time as this course has been delivered, we in the business school are doing the real

development and delivery.'

However, there were some more positive experiences of cross-disciplinary programs:

'In my experience, EM programs are designed to draw knowledge, skills, and application both from contemporary areas of marketing and digital technology, and can be taught in schools of computing and business.'

In recent years, EM programs have also been designed to be taught in two or more geographic locations. These aim to encourage students to learn in a cross-cultural environment and to experience and embrace different cultural contexts. For example, students have the opportunity to study in an Asian country and in a Western Europe/North American/Australasian country.

Overall the findings indicated that it is important to decide where the EM program is based within the university and who is responsible for directing activities, whether it is centralized or decentralized, based in the business school or somewhere else. All participants agreed that it is important that the program has consistent leadership, authority, and funding.

#### 4.4. Who should teach EM?

The discussion with EM educators at GRSME became very animated about who should teach EM, especially in situations when EM is delivered outside business schools. The two key issues identified were: who should design the EM curricula and who should deliver it.

The educators acknowledged that because the knowledge and skills required for EM have evolved and expanded from the early days of EM education, today EM education requires the involvement of people from different backgrounds, with different experiences and competencies. There was also some acknowledgment and agreement that EM could be taught across disciplines with educators from different disciplines as this allows for more diverse exposure and can aid in the creative and innovation process.

Regarding curricula design and teaching of specialized modules, many of the EM educators had some concerns about who should be involved and who should take the lead. The background and experience of the people delivering the EM education were considered to be important. Some of the educators indicated that they had experienced significant challenges in developing and delivering an EM curriculum across disciplines. The advantage of cross-disciplinary programs is that they were able to draw on knowledge and diversity from both professional and academic sources, and different disciplines and business sectors. One respondent emphasized the benefits of the cross-cultural approach taken in a program that she was involved with; it offered students both academic and practical input and exposed them to different cultural approaches to doing business. The participant explained that the program was:

'offered by two leading business schools from two different countries, one had expertise in innovation, technology, and entrepreneurship and the other had expertise in global marketing, cross-cultural markets and had strong connections with industry and large corporations willing to participate in EM programs. This combined with input from entrepreneurs and practitioners from a variety of different industries provided very rich cross-cultural and cross-sector perspectives.'

In the UK some educators indicated that agreeing content (what), how EM education was delivered and who would deliver it was difficult as many schools outside of the business school wanted the material to be much more discipline-specific, related to particular industries. In these cases, the course was delivered by an expert in EM working in tandem with entrepreneurs from relevant industries.

Increasingly in the experience of the EM educators, EM teaching teams include people from different disciplines and people with different industry backgrounds. However, participants at GRSME were of the opinion that it is vital that these teams should be led and guided by EM educators in relation to the what, how and where of EM education. For example, there should be an EM educators' team to design and teach

Table 1
Key insights from theory and findings regarding EM education.

	Insights from theory	Insights from findings
'What'		
Knowledge	How to:	How to:
	Recognize & exploit opportunities	• Recognize, assess & exploit opportunities
	Identify new markets	<ul> <li>Take a strategic perspective of business</li> </ul>
	Create new markets	Manage with limited resources
	<ul> <li>Create value propositions for markets &amp; customers</li> </ul>	Be customer orientated
		Get a product to market
		Create a value proposition
Skills	Ability to:	Ability to:
	• Develop prototypes	• Experiment & improvise
	Use design thinking	Sell and negotiate
	Use effectual logic	Pitch an entrepreneurial idea
	Use lean startup concepts	Use digital marketing/social media effectively
	Pitch an entrepreneurial idea	Create value for customers & markets
How	Conventional lectures	Classroom-based teaching methods
	Flipped classroom	Case studies
	Incubator/accelerator programs	<ul><li>MOOCs</li></ul>
	Case-based material	Experiential learning through:
	Guest speakers	Interviewing entrepreneurs
	Entrepreneurial mentors	<ul> <li>Working with entrepreneurs, mentors, advisors on real-world problems</li> </ul>
	<ul> <li>Simulations</li> </ul>	Campus-based student-led businesses
		<ul> <li>Internships</li> </ul>
		Competitions
		<ul> <li>Simulations</li> </ul>
Where	Business schools	Business schools
	<ul> <li>Agriculture, life sciences, arts, engineering, education, computing departments</li> </ul>	<ul> <li>Agriculture, life sciences, social sciences, economics, technology and computing schools</li> </ul>
	Cross-campus	Cross-campus
	•	Cross-cultural to include different geographical locations
Who	Business school faculty	Business school faculty
	<ul> <li>Educators from other departments depending on where EM is adopted/</li> </ul>	<ul> <li>Academics &amp; practitioners from different disciplines and backgrounds</li> </ul>
	taught	• Entrepreneurs
		Mentors & advisors with an industry background
		• •

EM in universities, and ideally a team of industry experts and practitioners including entrepreneurs and mentors to help students gain hands-on experience and apply theory. These reflective comments from EM educators indicate that the what, how, where and who of EM education are not separate entities but are all interrelated and are constantly evolving. An overview of the key insights from the theory and findings regarding the what, how, where and how of EM education is illustrated in Table 1.

# 5. Discussion: EM education integrating themes

Given that the business world and the global context in which most businesses operate is rapidly changing, educators need to be continually considering the four reflective questions explored in this paper in the context of the worldwide higher education system. The what, how, where and who questions of EM education all need to be placed in the context of where EM education fits within universities, and its value to the wider community.

What should be taught, has been influenced by technological advances and its impact on businesses and markets around the world and environmental changes such as the global financial crisis. University business schools have responded to these changes by developing EM programs to contribute to the creation of the all-important jobs in this changing economic and business environment. Based on this review and reflection of GRSME opinions, the core areas of EM teaching are based upon facilitating students' personal development including their EM knowledge, mindset, skills, and abilities; encouraging them to be creative, self-reliant, take initiatives and to be action orientated.

Regarding how it should be taught, a clear preference has been expressed for a focus on experiential learning. This creates a challenge for publicly funded universities in the current climate in developed

economies where the higher education sector has been under financial pressure for some time. So, the how question raises significant challenges for EM educators. Many use their own networks and contacts, and university alumni to volunteer their time to participate in EM education.

The evolving and expanding nature of the what and how of EM education has had a considerable impact on the where and who of EM education. Most universities do not smoothly function as one entity, but rather are a series of departments, which on the face of it have a common purpose, but in reality, compete with each other for resources and prestige. Much of the difficulty in maintaining a focus on higher ideals is directly related to the funding models within which universities operate. If student numbers drive the money a university entity receives, then the entity is reluctant to give up those numbers to another unit. While many university managers think it would be good to have a standard EM module (or unit) for all students across the university taught by staff in business schools, this often fails when the competition for resources overpowers the higher aim of EM education for everyone.

In recent years, many also question why business schools should be the guardian of EM education. There has been a gradual movement of social science and other disciplines into business school 'territory;' this has occurred with EM where the arts, computing, engineers and agriculture faculty are encroaching on the traditional domain, as illustrated in the participants' comments. Although many academics agree that EM education and competence training needs to move beyond business schools and into mainstream courses, there is little direction on who should lead that work (Chubb, 2015).

The challenge for the future of university EM educators is how to change, "how do you disrupt, how do you create the kind of environment in which people can step away from that large fossil and that

really clunky bureaucratic political monster, to behave in a very entrepreneurial, very fast, kind of iterate way" (Gus Balbontin, the former Executive Director of Lonely Planet, cited in Lawson, 2016). Against this background, EM educators and senior leaders in universities, need to seek new ways of ensuring that the teaching and practice of EM are integral to university education. This requires curricula and processes that enable action. To achieve this, universities need to illustrate that they are a vital part of the local and global economy.

Finally, who should teach EM within universities? In a cross-disciplinary environment, a key point is not just about who should teach but who should design and develop such courses. According to the GRSME participants' perspectives, EM should be taught by a range of faculty from different disciplines who have the desire and have something to contribute to EM education. Based on this study, EM educators recognize that they could benefit from being more cross-disciplinary in their outlook, and to proactively endeavor to work with people from different disciplines, backgrounds, and experiences.

The contribution of this study is that it provides a contemporary snapshot of the focus and practice of EM education across a range of developed economies as they adjust to the global economic realities of the 21st Century; and provides a starting point for further research regarding EM education and its development in the future. This study illustrated the changing nature of EM education and how it has evolved over recent years, from a classroom-based discipline to a much more action-based discipline with a focus on experiential learning, taking cognizance of specific business contexts. Moving forward into the challenges of the 21st Century, the new generation of EM educators should be encouraged to draw from their own experience, their networks, and university alumni to identify actual entrepreneurs; current, past, successful, unsuccessful to bring their experience into the design and delivery of EM education. Indeed, there may be some value in encouraging EM educators to seek some experience and involvement as mentors and advisors within EM firms so that they can gain a real-world business perspective. To build on this research, future research aims to involve students and entrepreneurs' perspectives and experiences regarding EM education. Bringing together this blend of knowledge in enterprising skills, enterprising mindsets, and attitudes, and being focused on student's and societies' needs are essential ingredients for future success.

#### 6. Conclusion, limitations and future research

Much has been written about EM education over recent decades. Although there is general agreement from the EM educators of GRSME regarding what and how to teach EM, they recognize that this regularly changes and evolves to meet business and global needs. Currently, there is recognition that the where and who of EM education are changing and that it requires further careful consideration as the global economy changes. EM is now a discipline whose time has come; for this to be sustainable and successful further adjustment within the community of scholars is required, and in society beyond universities.

The limitation of this study is that it can only provide initial impressions and an overview of EM education at a point in time, in the 30th anniversary year of GRSME. To overcome this limitation, this study constitutes Phase 1 of what will be a longitudinal study of GRSME EM educators and their experiences and perspectives of how EM education evolves over time. This study has illustrated that EM education needs to be designed, managed, coordinated within and across universities and other relevant places where EM has something to offer. EM education has grown from a business school activity for relatively small or specialized numbers of students wanting to start their own businesses to a much larger, cross-disciplinary activity involving a myriad of different business and non-business sectors. This provides a challenge for tomorrow's educators particularly in relation to the innovative design and delivery of EM education and the importance of leadership by key administrators to support this evolution. That those administrators see

the relevance of what they are doing is crucial, not solely for the individual institution but for the bigger picture of national and global economies.

Future research will build upon the findings presented in this paper. It will investigate how EM education evolves regarding the what, how, where and why questions. Given the global importance of lifelong learning, the challenge for the academic community is to meet the needs of potential entrepreneurs at whatever age they present and with whatever experience. Within this context the goal of EM education is to address different stages of the education process, from raising awareness of self-employment, starting a business to having the ability to think and act creatively, effectively problem solve, analyze a business idea and lead a business project. In addition, teaching and learning need to occur both inside and outside of universities with experiential learning vital to lifelong learning. The teaching of EM is crucial to the success, not only for individual students and staff but also for the institutions and communities within which they live and work.

#### Acknowledgment

The authors would like to thank all who participated in the EM education discussion at the Global Research Symposium in Marketing and Entrepreneurship, San Francisco, August 2017 and particular thanks to Dr. Abdul Ali, Dr. Adrienne Hall-Phillips, Dr. Vince Pascal and Professor Jonathan Deacon and other contributors who prefer to remain anonymous. The authors would also like to thank the anonymous reviewers for their constructive and insightful comments which have contributed to the development and refinement of this paper.

#### References

- Bjerke, B., & Hultman, C. M. (2002). Entrepreneurial marketing: The growth of small firms in the new economic era. Cheltenham: Edward Elgar.
- Bjerke, B., & Karlsson, M. (2013). Social entrepreneurship: To act as if and make a difference. Cheltenham: Edward Elgar.
- Blank, S. (2013). Why the lean startup changes everything. *Harvard Business Review*, 91(5), 63–72.
- Carson, D. (2010). Interface research: A commentary on a commentary ten years on. Journal of Research in Marketing and Entrepreneurship, 12, 8–10.
- Carson, D., & Gilmore, A. (2000). SME marketing management competencies. International Business Review, 9, 363–382.
- Chubb, I. (2015). The Australian. Nov 27, 201512.
- Crispin, S., McAuley, A., Dibben, M., Hoell, R., & Miles, M. P. (2013). To teach or try: A continuum of approaches to entrepreneurship education in Australasia. *American Journal of Entrepreneurship*, 6(2), 94–109.
- Darroch, J., & Miles, M. P. (2013). Market creation as an entrepreneurial marketing process. In Z. Sethna, R. Jones, P. Harrigan, & U. K. Bingley (Eds.). Entrepreneurial marketing: Global perspectives. Emerald Group Publishing Ltd.
- Denzin, N. K., & Lincoln, Y. S. (2008). The landscape of qualitative research (3rd ed.). London: Sage.
- Fayolle, A., Verzat, C., & Wapshott, R. (2016). In quest of legitimacy: The theoretical and methodological foundations of entrepreneurship education research. *International Small Business Journal*, 34(7), 895–904.
- Fiskin, R., & Hogenhaven, T. (2013). Inbound marketing and SEO: Insights from the MOZ blog. New York: John Wiley.
- Frasier, N., Miles, M. P., Woods, M., & Lewis, G. (2017). The creation of entrepreneurial engineers: A re-evaluation of the Standish-Kuon and Rice (2002) typology and the emergence of the entrepreneurial engineering education (EEE) typology. *Journal of Engineering Entrepreneurship*, 8(1), 85–104.
- Gilmore, A., & Carson, D. (2007). Teaching and research in small business enterprise marketing. In D. Hines, & D. Carson (Eds.). Innovative Methodologies in Enterprise ResearchCheltenham, UK: Edward Elgar (Chapter 2).
- Gilmore, A., McAuley, A., Gallagher, D., & Carson, D. (2013). Entrepreneurship and marketing interface research – A synopsis and evaluation. In Z. Sethna, R. Jones, P. Harrigan, & U. K. Bingley (Eds.). Entrepreneurial marketing: Global perspectives. Emerald Group Publishing Ltd.
- Hallbäck, J., & Gabrielsson, P. (2013). Entrepreneurial marketing strategies during the growth of international new ventures originating in small and open economies. *International Business Review*, 22(6), 1008–1020.
- Hansen, D., & Eggers, F. (2010). The marketing/entrepreneurship interface: A report on the 'Charleston summit. *Journal of Reseach in Marketing and Entrepreneurship*, 12(1), 42–53.
- Hills, G. E., Hultman, C. M., & Miles, M. P. (2008). The evolution and development of entrepreneurial marketing. *Journal of Small Business Management*, 46(1), 99–112.
- Hills, G. E., & Lumpkin, G. T. (1997). Opportunity recognition research: Implications for entrepreneurship education. *International Entrepreneurship Conference, Monterey Bay,*

- California, USA (June).
- Jaakkola, M., Möller, K., Parvinen, P., Evanschitzky, H., & Mühlbacher, H. (2010). Strategic marketing and business performance: A study in three European 'engineering countries. *Industrial Marketing Management*, 39(8), 1300–1310.
- Katz, J. A., Hanke, R., Maidment, F., Weaver, K. M., & Alpi, S. (2016). Proposal for two model undergraduate curricula in entrepreneurship. *International Entrepreneurship* and Management Journal, 12(2), 487–506.
- Katz, J. A., Roberts, J., Strom, R., & Freilich, A. (2014). Perspectives on the development of cross-campus entrepreneurship education. *Entrepreneurship Research Journal*, 4(1), 13–44
- Kirzner, I. M. (1973). Competition and entrepreneurship. Chicago: University of Chicago Press.
- Kirzner, I. M. (2009). The alert and creative entrepreneur: A clarification. Small Business Economics, 32(2), 145–152.
- Klein, P., & Bullock, J. (2006). Can entrepreneurship be taught? Journal of Agricultural and Applied Economics, 38(2), 429–439.
- Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Prentice Hall: Englewood Cliffs.
- Kolb, D. A. (2015). Experiential learning: Experience as the source of learning and development. Upper Saddle River, NJ: Pearson, FT Press.
- Kuratko, D. F., & Morris, M. H. (2018). Examining the future trajectory of entrepreneurship. *Journal of Small Business Management*, 56(1), 11–23.
- Lans, T., Verstegen, J., & Mulder, M. (2011). Analyzing, pursuing and networking: Towards a validated three-factor framework for entrepreneurial competence from a small firm perspective. *International Small Business Journal*, 29(6), 695–713.
- Lawson, K. (2016). Australian universities teaching the business of entrepreneurship. Australia Plushttp://www.australiaplus.com/international/study-and-innovation/universities-embrace-the-business-of-startups/7836038 (Accessed 11 September 2017).
- Levinson, J. C. (2007). Guerrilla Marketing. New York: Houghton Mifflin.
- Mehlhorn, J. E., Bonney, L., Frazer, N., & Miles, M. P. (2015). Benchmarking entrepreneurship education in U.S, Australia, and New Zealand university agriculture programs. *Journal of Developmental Entrepreneurship*. https://doi.org/10.1142/S108494671550017X.
- Miles, M. P., de Vries, H., Harrison, G., Bliemel, M., de Klerk, S., & Kasouf, C. (2017). Accelerators as authentic learning experiences for nascent entrepreneurs. *Education and Training*, 59(7/8), 811–824.
- Miles, M. P., Gilmore, A., Harrington, P., Lewis, G., & Sethna, Z. (2015). Exploring entrepreneurial marketing. *Journal of Strategic Marketing*, 23(2), 94–111.
- Morris, M. H., Schindehutte, M., & LaForge, R. W. (2002). Entrepreneurial marketing: A construct for integrating emerging entrepreneurship and marketing perspectives. Journal of Marketing Theory and Practice, 10(4), 1–19.
- Morris, M. H., Webb, J. W., Fu, J., & Singhal, S. (2013). A competency-based perspective on entrepreneurship education: Conceptual and empirical insights. *Journal of Small*

- Business Management, 51(3), 352-369.
- Morris, M. H., Neumeyer, X., & Kuratko, D. F. (2015). A portfolio perspective on entrepreneurship and economic development. Small Business Economics, 45(4), 713–728.
- Morrish, S., Miles, M. P., & Deacon, J. (2010). Entrepreneurial marketing in SMEs: Acknowledging the entrepreneur and customer-centric interrelationship. *Journal of Strategic Marketing*, 18(4), 303–316.
- Murray, J. A. (1981). Marketing is home for the entrepreneurial process. *Industrial Marketing Management*, 10(2), 93–99.
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: Known worlds and new frontiers. Journal of Small Business Management, 49(1), 55–70.
- O'Connor, A. (2013). A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. *Journal of Business Venturing*, 28(4), 546–562
- Osterwalder, A., Pigneur, Y., Bernard, G., & Smith, A. (2014). Value Proposition Design. Hoboken, New Jersey: Wiley.
- Oyedele, A. (2016). Emerging market global business model innovation. *Journal of Research in Marketing and Entrepreneurship*, 18(1), 53–62.
- Plattner, H. (2010). An Introduction to Design Thinking. Stanford, CA: Institute of Design at Stanford.
- Rauch, A., & Hulsink, W. (2015). Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. Academy of Management Learning & Education, 14(2), 187, 204.
- Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, 73(3), 1–18.
- Ries, E. (2011). The lean startup: How constant innovation creates radically successful businesses. London: Penguin Books.
- Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of Management Review, 26(2), 243–264.
- Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics*, 33(2), 141–149.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217–226.
- Stevenson, H. H., & Gumpert, D. E. (1985). The heart of entrepreneurship. *Harvard Business Review*, 63(2), 85–94.
- Venkataraman, D. (1997). The distinctive domain of entrepreneurship research. Advances in Entrepreneurship, Firm Emergence and Growth. 3. Advances in Entrepreneurship, Firm Emergence and Growth (pp. 119–138).
- Yang, M., & Gabrielsson, P. (2017). Entrepreneurial marketing of international high-tech business-to-business new ventures: A decision-making process perspective. *Industrial Marketing Management*, 64, 147–160.