## **Entrepreneurship without Borders**

# Russ McBride Charles Touma

Department of Management of Complex Systems
University of California, Merced
5200 Lake Rd
Merced, CA 95343, USA

### **Abstract**

The teaching of entrepreneurship in universities, as well as incubators and accelerators around the world typically gravitates toward the paradigmatic concept of entrepreneurship based upon the venture-capital funded high-tech silicon-valley-style startup. But there are at least two problems with this. The first is that actual entrepreneurship consists of a set of activities much broader than the subset of activities needed for high-tech startups. The second is that the goals of entrepreneurs often extend into far broader activities beyond those of high-tech startups. In the first part of this paper, we briefly review the history of 'entrepreneurship' definitions. In the second part, the implications of those definitions for teaching and mentoring are explored.

**Keywords:** entrepreneurship, startups, entrepreneurship pedagogy, entrepreneurship mentoring.

### 1. Introduction

Entrepreneurship is the engine that keeps modern economies alive, cleans away less efficient technologies, provides 50% of the U.S. gross domestic product in the form of small businesses, employs 60 million people (47% of the workforce), and is the steppingstone in the development of large firms like Apple, Google, and Amazon. For how central it is to the modern economy, surprisingly, it has been mostly avoided as a topic of study and a black box to the field of economics itself until recent decades.

This is in part due to the confused and conflicting conceptions of what entrepreneurship itself is (Davidsson, 2013). In fact, unlike many well-established sciences that can clearly state what their topic of study is, there is no universal agreement among entrepreneurship scholars about how to define 'entrepreneurship'. What is physics? The study of matter and energy. What is history? The study of past events. What is entrepreneurship? Well, depending on whom you ask, it could be new ventures (Gartner, 1985), the study of entrepreneurial opportunity (Shane & Venkataraman, 2000), a kind of arbitrage (Kirzner, 1973), bricolage (Baker & Nelson, 2005), or effectuation (Sarasvathy, 2001), among many other things. We lack agreement about what exactly we are studying, and this impedes progress for the field, theoretical development, and fails to provide boundaries for empirical work.

The shift from manufacturing and agriculture toward technology and the growth of the internet has resulted in the rise of high-tech companies which have drawn ever more attention in recent decades. The high-tech sector is now taken to be the locus of entrepreneurship. The enormous recent successes in high-tech have resulted in thinking of it as the paradigmatic entrepreneurial sector and so the upsurge in entrepreneurial scholarship and training has gravitated in lock step toward high-tech as the central form of entrepreneurship. It has produced the largest companies by market capitalization, lately. Six of the seven top firms by market capitalization currently are high-tech companies— in order, Apple (\$2.2T), Microsoft (\$1.9T), Saudi Aramco (\$1.9T), Amazon (\$1.7T), Alphabet/Google (\$1.6T), Facebook (\$923B), Tencent/WeChat (\$770B). The oil firm, Saudi Aramco, is the only non-high-tech firm in that list of the top seven.

Two factors that have conspired to shift the focus of entrepreneurship study, training, and mentoring toward the hi-tech sector. The first is a lack of a clear definition of 'entrepreneurship' itself which might otherwise include a broader understanding of it beyond the high-tech sector. The second is the fascination with the growth and strength of the high-tech sector. It is now the case that core entrepreneurial study, teaching, and mentoring all take for granted the prominence of high-tech startups and presume that the tech startup is the exemplar of entrepreneurship. The most prominent tools, like the LEAN technique, although derived from Toyota manufacturing originally were conceived within the context of software startups (Reis, 2011). Modern university courses on entrepreneurship tend to teach high-tech cases and techniques. And entrepreneurial accelerators and incubators tend to accept more high-tech startups and provide mentors with high-tech backgrounds.

In what follows we will briefly explore a definition of entrepreneurship that is more precise but at the same time much broader. If useful, this definition can provide guidance for entrepreneurial training and mentoring. Then we will look at some examples of what might be included in the field of entrepreneurship once we broaden the boundaries beyond the high-tech startup.

# 2. Lack of consensus around a definition of 'entrepreneurship'

Davidsson (2013) noted that 80% of entrepreneurship papers provide no definition of 'entrepreneurship'. The first recorded use of the term is in Savary' (1723), Le Dictionnaire Universal du Commerce, and is a concatenation of 'entre' (between) and 'prendre' (to take), translating roughly as one who serves as a go-between. This was usually used to refer to one who did contract work or organized a music concert and is still used as a compound term in French this way—entrepreneur de bâtiment, for example, is a building contractor.

The definition has evolved through time without landing on any widely accepted definiens. Cantillion (1755) saw entrepreneurs as non-fixed income wage earners. Jean-Baptiste Say (1803) suggested that entrepreneurs shifted "resources out of an area of lower productivity into an area of higher productivity". For Schumpeter (1947) the entrepreneur's destructive innovations cause market disequilibrium. For Kirzner (1973) the entrepreneur restores equilibrium to the market by removing inefficiencies through arbitrage-like activities. As entrepreneurship scholarship increased in the 1970s and 1980s there was an understanding of entrepreneurship as "whatever those people doing what we call 'entrepreneurship' are doing" and understanding that subset of people required understanding their psychological uniqueness. But type-identifying their traits proved elusive. In Gartner's (1988) paper entitled, "Who is an entrepreneur"; is the wrong question," he said: "I believe the attempt to answer the question 'Who is an entrepreneur?, which focuses on the traits and personality characteristics of entrepreneurs, will neither lead us to a definition of the entrepreneur nor help us to understand the phenomenon of entrepreneurship." Gartner instead advocated for understanding entrepreneurship as venture creation.

A continued reaction against the 'subjective' approach to entrepreneurship that Gartner decried led to an attempt by Shane and Venkataraman (2000) to make it more of a respectable, 'objective' study by equating entrepreneurship with entrepreneurial opportunities. The problem of the circular definition was seen as avoidable by analyzing entrepreneurship as the activity of pursuing entrepreneurial opportunities and defining 'entrepreneurial opportunities' as opportunities to buy low and sell high, typically as a result of changes in the political or technological landscape or the discovery of innovations.

Sarasvathy (2001) described entrepreneurship as essentially involving what she referred to as 'effectuation', the activity of generating a profit by making the specific goal defeasible and malleable, constrained and determined by the agent's relatively fixed resources rather than retaining a fixed goal and acquiring the resources to arrive at the goal.

Baker and Nelson (2005) borrowed the idea of 'bricolage' from the French anthropologist, Levi-Strauss (1962) who used the term in support of his claim that aboriginals were just as entrepreneurial as "civilized" western cultures, and perhaps more so because they creatively combined what resourced they already possessed to engineer a solution, rather than acquiring new resources. Bricolage, they claimed, is the essential activity of entrepreneurship. Effectuation and bricolage are frequently seen as forming a compatible composite idea of what entrepreneurial activity is.

### 3. Entrepreneurship as the pursuit of profit in localized uncertainty

Debates continue without any definition having achieved consensus, though there are strands of agreement. Cantillon (1755), for example, suggested that an entrepreneur is a non-fixed-income wage earner because he buys at a known price and sells at an uncertain price. And John Stuart Mill (1848) saw the entrepreneur as one who assumes the risk of the business due to uncertain outcomes. Mises (1951) suggested that entrepreneurship is the pursuit of maximum economic value under conditions of economic uncertainty, and McBride (2018) defined 'entrepreneurship' as taking action to generate economic value under conditions that are novel or uncertain for the agent. So, uncertainty has been seen as playing a central role in the activity of entrepreneurship.

This begs the question about what kind of role, exactly, uncertainty might play. There have been extensive discussions of this exact question lately though a detailed treatment of them would lead us too far astray to review here (but see the special issue in the Academy of Management Review, and Alvarez, S., Afuah, A. and Gibson, C., 2018). For the purposes here, it is at least worth noting the distinction between uncertainty and novelty for the entrepreneur and uncertainty and novelty for society at large. An example will illustrate this. A new merchant might be entirely uncertain about what products to sell or how to source them while an experienced merchant with decades of practice will encounter little uncertainty or novelty in the process. In this case, there is local, i.e., agent-specific uncertainty for the

new merchant. There is also uncertainty about the structure of dark matter in physics. This is not localized to any specific agent but rather a systemic, current limit on human knowledge in general for everyone.

This is generalized uncertainty. Innovations require a reduction in societal uncertainty. Starting a new venture requires only the confrontation of local uncertainty. If entrepreneurship is the pursuit of economic value under conditions of local uncertainty for the entrepreneur, this leaves open an enormous landscape of activities that could be considered 'entrepreneurship', namely, the pursuit of any economic value that is novel or unknown to the agent.

Opening a corner fruit stand, starting a laundromat, opening a hedge fund, designing, and selling a product, and, yes, starting a high-tech firm are all considered cases of entrepreneurship if doing so involves localized uncertainty for the entrepreneur. And we know one category of cases where there is guaranteed to always be uncertainty for anyone—whenever an agent is engaged in novel activities. This implies that anytime anyone is engaged in a novel pursuit of economic value, that person is entering uncertain terrain, regardless of whether other agents in the world have already mastered and understand that terrain. Entrepreneurial uncertaintyunderstood as local uncertainty for the entrepreneur rather than global (societal) uncertainty directly implies that entrepreneurship is a rather vast landscape and not specific to the high-tech sector, founding a firm, nor engaging in effectuation, bricolage, LEAN techniques, or any other specific technique.

One way to assess whether this understanding of entrepreneurship makes sense is to see whether it coheres with how the term, 'entrepreneurship' is typically used, and when we examine use cases it does seem to cohere (McBride, 2016). We consider the agent opening her first fruit stand to be 'entrepreneurial' and not the agent who is opening his 400th fruit stand as part of a chain. We consider the inventor selling her first electronic device to be entrepreneurial, but not as easily consider Apple as entrepreneurial. We consider the young boy who starts a lawn-mowing business to be entrepreneurial but not the 20-year-old landscape company that only mows lawns. One explanation for this disparity is that all the former cases are cases where there is ample novelty and localized uncertainty for the agent, but not in the latter cases.

So, we have a subset of definitions of 'entrepreneurship' that imply that uncertainty plays a core role, which in turn means that the proper domain of entrepreneurship includes any cases where an agent is pursuing economic value in contexts that are uncertain for the agent. This leaves open an enormously broad range of activities far beyond high-tech or standard product or service firms. And this is how both scholars and laypeople alike speak about entrepreneurship. There are diverse pursuits considered to be hi-tech. Further, the brief review of the history of attempts to define entrepreneurship reveals no definition of 'entrepreneurship' limited to the tech sector, of course (even in the times when high-tech was what we now consider "low-tech"). There are then, multiple reasons for approaching entrepreneurship scholarship, training, and mentoring as a topic that extends well beyond the tech industry despite the current association between entrepreneurship and tech start-ups.

## 4. What then is the purview of entrepreneurship?

This immediately poses a problem. If entrepreneurship is the activity of pursuing economic value under conditions of uncertainty, as Mises (1951) suggested, then the purview of entrepreneurship is enormous. Whether it is Newton famously losing millions (in today's dollars) in the South Sea stock bubble craze (Graham, 1949), a student starting a lawn-mowing business, Jobs, and Wozniak building the first personal computer in a garage, a commercial real estate venture, or the reselling of partially used cigarette butts in the streets of Karachi, it seems difficult to even begin to categorize the possibilities.

Abandoning the paradigm of the tech start-up seems to leave us adrift with little guidance about where to focus our pedagogy. What topics should be considered as 'basic' areas if entrepreneurship is understood as anyone attempting to gain profit doing anything novel for them? How should university courses in entrepreneurship be structured? How should entrepreneurship incubators and accelerators be designed? How should mentors for them be chosen and what exactly should they mentor?

According to some, the 'state space' of entrepreneurship cannot be calculated in advance. Felin, Kauffman, Koppl, and Longo (2018) discuss the example of a man in Japan who built a business using an iPad to record the pages of people's books so that they could sell their book libraries and make space in their apartments. This kind of business could not have been predicted before the invention of the iPad. Who would've predicted the success of the 'Pet Rock' in the 1970? Entrepreneurial activity depends on functions, and functional state space cannot be pre-calculated. Kauffman, one of the early researchers in Complexity theory at the Santa Fe Institute, uses the example of the screwdriver. How many uses of a screwdriver are there exactly? It can be used to unscrew screws, of course. But it is also used to pry open paint cans, or scrape caulking out of a seam, and could be used as a weapon, or tied to a stick as a fishing spear, or

perhaps short-circuit a future time travel machine. The uses cannot be prestated. Economic activity depends on human functional use, and in a rejection of Kauffman's own ground-breaking NK Landscape theory (Kauffman & Weinberger, 1989), he has suggested that the landscape cannot be pre-determined.

It seems, then that there are no boundaries in entrepreneurship of a kind that could serve as a guide for determining justifiable categories. And without any 'leading categories' it's entirely unclear what specifically should be taught. In what follows we would like to suggest that this isn't a bad thing since it respects the inherent diversity and open landscape of entrepreneurship. Entrepreneurship lacks any real kind of fixed borders, often creates surprises, and grounds out only in the needs and desires of people and the functions they deem valuable at any given point—all of which are wildly variable and evolving. As part of the process of acknowledging this border breakdown of entrepreneurship, we will mention a few exploratory topics worthy of consideration for inclusion, among many that have in the past typically been outside of the bright spotlight of entrepreneurial training.

# 5. Example topics worthy of highlight in a broader conception of entrepreneurship

The most prominent ventures with the largest returns have always captured attention so it's no surprise that tech startups have been the focus as of late. It's easy to imagine that 20,000 years ago an entrepreneurship incubator held in a limestone cave for hunter-gatherers would have discussed animal trapping techniques or methods of determining high-traffic game trails for those who wanted to trade animal meat or skins. Society today is vastly more complex and there are vastly more ways of being an entrepreneur. At least some of these should be considered for training beyond building a tech startup or buildign the typical product or service firm. In what follows we highlight a couple that we consider reasonable contenders for inclusion, but the point is to not to suggest that these be replacements but to provide such examples by way of showing how the boundaries can be extended to anyof a variety of other entrepreneurial activities. These should be considered "starter examples" under an understanding of entrepreneurship without borders.

## 5.1. Acquiring a business

Purchasing a business rather than building one from scratch is not considered a standard entrepreneurial activity and has typically fallen under the domain of "mergers and acquisitions" in MBA programs, usually delivered under the presumed context that a relatively large and established firm is considering the acquisition of another well-established firm. The instructional material often tries to answer the question about what the decision space should look like, whether the firm under consideration offers a strategic advantage, and how a hostile or friendly deal should be structured. This is approached from classic strategy theory, finance theory, and management theory.

But there is ample entrepreneurial opportunity to acquire small and medium-sized profit-generating assets and businesses. Why should a budding entrepreneur acquire a business rather than follow the standard entrepreneurial playbook of building one?

The standard entrepreneurial start-up success rate is not encouraging. Depending on the survey source, between 70%-90% of new start-ups fail within the first 5 years. According to the Small Business Association, first-time founders have a 90% failure rate, previously unsuccessful founders have an 80% failure rate, venture capital-funded firms have a 75% failure rate, and previously successful founders have a 70% failure rate. These numbers are not encouraging. And in the process of failing, one still has to work hard building out all the components of the business from nothing—the product or service, the founding team, marketing, inventory, client acquisition, financing, etc.

Buying an already-proven profitable asset or business is less risky, and provides an instant business model with instant customers, sales, systems, employees, management structure, inventory, delivery, and sales. Further, financing a proven business is much easier than finding investors for a new venture. According to DealStats (Pratt's Stats), the investment of equivalent funds used to purchase a business vs. starting a new one typically results in a 5X higher valuation and 5X earnings, assuming the startup even survives long enough to become valuable. And on average, the risk of failure for an acquisition is 2% instead of 70%-90%.

One of the same techniques used in M&A's—acquiring at a given profit/revenue multiple, improving the revenue, then selling for aprofit—works just as well when buying a \$200,000 laundromat, a \$20,000 cleaning service, or a \$1,000 YouTube channel, as it does with a \$100M tech company. Only 20% of small and medium-sized businesses that go on the market actually sell (according to BizBuySell Insights, 2019). Educating a generation of buyers to help improve that number would also improve the economy. There's no reason that a standard M&A course can't be rebuilt into a more practical course that trains entrepreneurs how to acquire small assets and businesses, instead of large-scale M&A.

### 5.2. Licensing a product

Incubator and accelerator students often assume that brainstorming a new product idea requires building an entire business to design, manufacture, and distribute that product (and all the work that is involved around building a venture from scratch to do all of that) if they want to profit from it. This is inaccurate. Many firms will pay annual royalties, typically about 7% of gross sales, for a good product idea. Some simply enjoy the process of conceiving a new product but don't enjoy the business building side.

With the rise of open innovation, where companies are seeking innovative product ideas from outside the firm, this is easy to do and typically the largest risk is in the time it takes to conceive of the idea and contact firms. Stephen Key has discussed product licensing extensively (2011, 2015) and mentored hundreds of students to successful licensing contracts. We have also included it in our entrepreneurship courses for the last 4 years.

Unlike entrepreneurial venture builds, product licensing affords something more like an algorithm, a recipe that includes: market exploration; designing a product, producing a "sell sheet"; filing a provisional patent; and contacting firms that are receptive to open innovation. In addition, the terms of a licensing contract have become more or less standardized in recent years. All of this makes it much easier for a university or incubator student to understand and pursue. Of course, some still want to build a venture from scratch. But product licensing provides a nice option for those who do not want to do so.

### 5.3. Part-Time Businesses and 'Side Hustles'

Some are not interested in a career as an entrepreneur but still want to build a small business or side-hustle while they finish their degree or get a standard job in an established company. There's no reason these should be ignored, and students should be given guidance and encouragement, even though they are not planning a \$1B tech start-up. Everything from a car detailing business, a hair-cutting business, an e-book, a dog-breeding business, a fish-breeding business, a 3D gun holster printing business, game card reselling, and a smoothie business to a caviar import business has been pursued in our entrepreneurship courses and benefitted from mentoring specific to the needs of that venture, most of which escape the broader guidelines of standard management theory and strategy advice.

The guidelines for students become more scattered than those for small business acquisitions or product licensing, and any mentoring runs the risk of becoming so diversified as to effectively require a different course for each student's venture. This is part of the challenge of entrepreneurship without borders.

### 6. Conclusion

We have looked briefly at the history of definitions of 'entrepreneurship' and noted the lack of consensus. This lack of consensus speaks to the lack of a delineated boundary to entrepreneurial topic areas. Further, at least one subset of definitions depends critically on uncertainty for the entrepreneurial agent, implying, not just that there is no clear boundary but that there definitively is no boundary, since any attempt to generate economic value under conditions that are uncertain for that agent is an attempt at entrepreneurship, and there is no limit to what an individual can be uncertain about.

Though recent pedagogy and mentoring has orbited around the tech start-up because of their recent well-known successes, we have evidence in favor of a much broader conception of entrepreneurship, one that affords the ability to better match the needs and values of a much wider range of would-be entrepreneurs. Using the tools from established entrepreneurship pedagogy, as well as the established theory from management and strategy where appropriate, while at the same time offering much deeper training in categories of entrepreneurship outsideof hi-tech, or large product or service companies, has the potential to be more rewarding for students, help improve the economy, and increase the desirability of university courses and incubator and accelerator training. We have suggested a couple of examples of what might be included under this broader conception. We encourage others to consider further categories that might be pertinent to their audience and to help extend entrepreneurship without borders.

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