Chapter

REACHING FOR SCALABLE ENTREPRENEURSHIP: IMPLICATIONS FOR GROWTH AND JOB CREATION

***Bruce Bachenheimer*[*1], *Robert Isaak*[†2] *and Andrew Isaak*[3#]**

[1]Pace University, One Pace Plaza, New York, NY
[2]University of Mannheim, Institute for SME Research and Entrepreneurship, Mannheim
[3]Founder and CEO, tommoko.com, Mannheim

ABSTRACT

This paper asks whether or not there is a hierarchy of entrepreneurship that goes beyond life cycle models of organizations to indicate a path to scalability. We posit a model illustrating a hierarchy that incorporates five progressive levels: solo, small, stable, salient and scalable. Embracing critical elements of any entrepreneurial venture -- the entrepreneur, the opportunity and available resources -- the model incorporates the key external variables: cultural, societal, legal and financial as well as internal attributes: confidence, skills, vision and leadership. We assume that global competitiveness motivates the

[*] +1 (212) 618 6580; bbachenheimer@pace.edu
[†] +49 (0) 621 181 2273; raisaak@gmail.com
[#] +49 (0) 163 174 4045; andrew.isaak@gmail.com

entrepreneur to develop strategies to climb the hierarchy in order to achieve salience and scalability. The robustness of the model is then tested against recent entrepreneurship literature. Finally, we discuss the hypothesis the greater the scalability of a venture, the greater the job creation, which has significant policy implications.

While entrepreneurship has always been the vanguard of innovation and economic growth, in this era of globalization, competitiveness and rapid technological transformation, entrepreneurial behavior has become imperative for individuals, firms and even nations. Individuals can no longer expect to graduate, find a job with a large corporation, and enjoy a stable career. Today, individuals must cultivate and embrace an entrepreneurial mindset to insure that they are capable of continuously adding value to their organizations. On Wall Street, this may be captured in the trader's motto: "You're only as good as your last trade."

In order to survive, companies are forced to speed up their own cycles of innovation. In addition, product life cycles have shortened drastically – and can be as short as two months for industries such as consumer electronics (Tapscott, 1997). Bi-monthly development cycles have become standard for popular open-source internet browsers-- Mozilla Firefox and Google Chrome (since 2012), while open-source operating systems like Ubuntu have quickened to a quarterly release schedule. Globalization has forced entire nations to become hypercompetitive in information technology, financial markets and the ability to attract and develop the best and brightest talent. As an illustration, consider the contrast between Singapore's quick entrepreneurial adaptation to these trends and Japan's resistance to shift resources and processes from operational efficiency-focused heavy industry and manufacturing to individualistic creativity and entrepreneurial innovation in the service sector (Lundvall & Intarakumnerd, 2006).

If entrepreneurship is, indeed, a latent form of behavior in all people just waiting to be evoked as Howard Stevenson has suggested, then identifying the channels of directing the potential energy of entrepreneurship in order to achieve economic growth is a critical policy concern for both the public and private sectors (Stevenson, Roberts, Grousbeck, & Bhide, 1999). Indeed, the future wealth of particular regions in the world depends upon each nation’s human capital, which boils down to the ability to cultivate and attract not only the brightest talent, but also increasingly those with entrepreneurial capabilities. Given repeated phases of corporate downsizing, the need for cultivating an entrepreneurial mindset among individuals has become increasingly evident and entrepreneurial spirit may be necessary to bring out

individual effectiveness, whether the individual is in a business of their own or is an employee (Mauer, Neergaard, & Linstad, 2009; Shepherd, Patzelt, & Haynie, 2010). This has led to the emergence of subfields such as strategic entrepreneurship (Kuratko & Audretsch, 2009): Kuratko and Audretsch call for "the emergence of diverse views at this stage." In this light we aim to illustrate how our model of scalable entrepreneurship is an outgrowth of previous research streams, suggesting a rewarding strategy for ventures to pursue.

DEFINING ENTREPRENEURSHIP

By designating entrepreneurship as the vanguard of the process of economic growth, that is, the engine of the process of "creative destruction" of capitalism, Joseph Schumpeter established where entrepreneurship fits in the global economy (Schumpeter, 1950) The word "entrepreneurship" literally derives from *entreprendre*, meaning "to undertake" in French. Perhaps the classic modern definition is that of Howard Stevenson of Harvard who identifies entrepreneurship as "the pursuit of opportunity without regard to resources currently controlled." Thus, the entrepreneur is a "promoter" in contrast with the "trustee" who emphasizes a more efficient utilization of existing resources (Stevenson, 1994: 5). Robert Isaak contrasts this risk-taking entrepreneur as one who is seeking effectiveness versus the "maintenance man" (or "trustee") who maximizes efficiency (R. Isaak, 2000:18,156). In addition it deserves notice that researchers increasingly differentiate between commercial entrepreneurship with the primary goal of profit-seeking, and social entrepreneurship (SE) that typically aims primarily to maximize social welfare. We believe that the goal of a truly scalable venture applies to both forms.

Entrepreneurs view risk differently than other people do. As one successful entrepreneur put it: "My idea of risk and reward is for me to get the reward and others to the take risks." (Stevenson, p. 5). This implies that the entrepreneur actually may be a creative free-rider who relies upon the infrastructure and finances of others as much as possible in order to reduce costs and to have a startup survive (R. Isaak,1998: 28). The image here is one of the entrepreneur circumventing obstacles in a lateral fashion while using existing resources or hierarchical infrastructures that are already in place as stepping-stones for success. The more sophisticated the entrepreneurial effort, the greater the barriers are likely to be in terms of knowledge, infrastructure

and capital. For example, in the age of a globalized new economy, the criteria for dynamic entrepreneurship that results in synergistic networks or economic chain-reactions (such as in Silicon Valley technological development) are many and complex (R. Isaak, 2009).

Yet, at the core,, the entrepreneur is an individual who dreams big and strives to make his or her dream concrete. Often those who appear to be the *luckiest* entrepreneurs are actually astute, imaginative and resourceful individuals who are able to catch a historical wave and set-up an infrastructure that enables them to create a distinctive niche in an emerging, hot business sector. A well-known example is Bill Gates in the software sector: Microsoft emerged in the run up to the personal computing boom. Mark Zuckerberg's Facebook in the social networking realm is another illustration. In the most successful cases the transformation proceeds from the individual level to a business gold mine to regional prosperity: this is the "golden dream" of entrepreneurship. But where does such a hypothetical hierarchy (or climbing process) of globally salient entrepreneurship begin?

What if it can be shown that given a set of prerequisites, this entrepreneurial energy is channeled into a structural hierarchy of increasingly powerful or robust forms of entrepreneurship? The goal of scalable entrepreneurship can only be achieved by aggressively seeking out product and market opportunities on the horizon while climbing this ladder to achieve the highest level of economic expansion. This process is exemplified by our model of the hierarchy of entrepreneurial development and the key hypothesis it entails: *the greater the scalability of a venture, the greater the potential for job creation.*

The inside triangle in Figure 1, with five hierarchical levels, reflects the firm's underlying business structure and the effectiveness of management in its implementation. The outside triangle represents three critical bases of the venture: the *entrepreneur*, *resources* and the *opportunity* itself. The entrepreneur recognizes a need, envisions a new solution, and has the dogged persistence to overcome the inevitable obstacles in order to implement the idea and turn the vision into reality. Resources do not necessarily have to be owned, but need to be assembled and deployed in an efficient manner. The boxes outside of the triangles symbolize other key factors impacting the entrepreneur (confidence and skills, i.e. entrepreneurial traits), the opportunity (culture/region, i.e. external environment) as well as resources (legal/financial i.e. the rule of law and availability of funding). Clearly, financial resources are among the most critical challenges to overcome at the lower levels of the hierarchy, that is when creating basic ventures, the entrepreneur is often

concerned with meeting his or her basic needs. While the opportunity itself should be attractive, achievable, durable and value-creating, the notion also embraces cycles in the macro environment as well as luck.

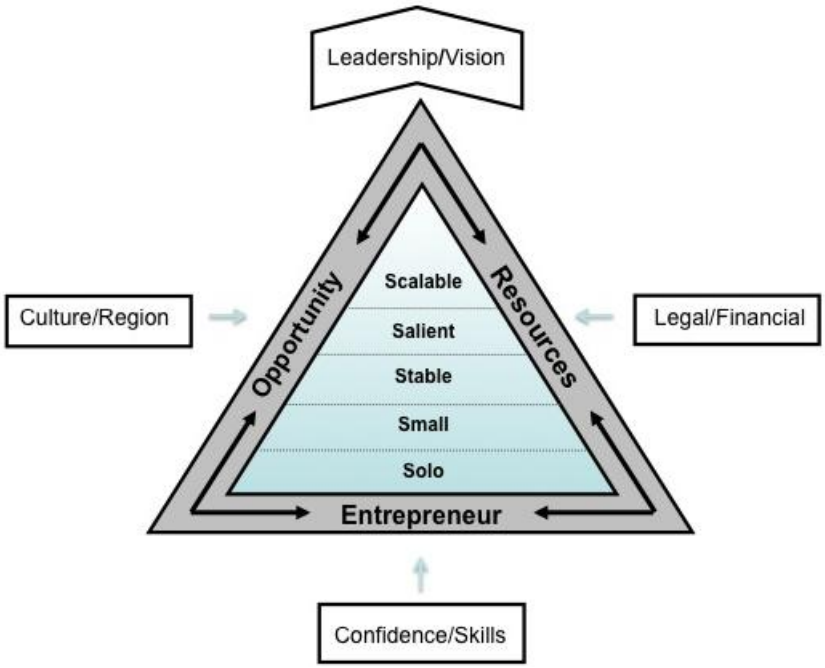

Figure 1. Scalable Entrepreneurship.

LEVELS OF THE MODEL DEFINED

Solo

Examples of entrepreneurship at the solo level include a part-time home-based startup, a sole professional practice (lawyer, accountant, freelance translator or computer programmer), or a ‘one-man shop’. What characterizes the "solo" entrepreneur engaged in a startup is a high level of *confidence* engaged with a concrete *opportunity*. The entrepreneur begins ‘building a business’ that could serve as the foundation for a growing firm, or as a viable alternative to career employment. At this point, the individual entrepreneur is the business.

Small

At the small business level, the entrepreneur is assisted by family members, regular contract workers, or a limited number of part-time or full-time employees (say less than 10 employees in total). Regular customer and supplier relationships have been established. The key characteristic of this level of entrepreneurship is *commitment*: at this point one gives up one's day-job and no longer works on the venture part-time, but is fully-engaged. Solo entrepreneurs may start a venture on the side but transform it into a sustainable business one must reach out to organize others and become fully committed. The firm is aware of current competitors and is able to maintain most customer relationships. If the entrepreneur were to be separated from the venture for a significant period of time, the firm would most likely fail.

Stable

At the stable level, there are seasoned employees (10 or more in number) who could continue to keep the business operating without the entrepreneur. Vendor relationships are well-established and customers are satisfied and exhibit a degree of loyalty. At this level, the entrepreneur has moved beyond mere commitment to *setting up management systems* that delegate some functions to others, such as daily operations, vendor control and a degree of some supervision. The firm has established standard operating procedures (which may be indicated by ISO-9000 certification) and has a reasonable corporate infrastructure in place.

Salient

Salient firms rise above the stable stage in a strategic positioning sense: the firm has developed a cutting edge or distinctive niche with enough uniqueness to give its brand a recognizable "voice" or logo. This level of entrepreneurship is characterized by *leadership towards developing a distinctive product or service and getting others to believe in it.* Once a firm has sufficiently differentiated itself from other competitors (which may be indicated by one or several patents or trademarks), it becomes salient. Salience

then refers to developing the potential to succeed nationally or even internationally based upon this distinctive edge.

Scalable

However it is measured, we argue that this venture goal in our model, scalability, is an indication of the nature of the underlying business model, the breadth and depth of the management team and robustness of the firm's infrastructure, as much as a measure of potential market demand for the actual product or service. In this context, scalability presupposes a sustainable competitive advantage and the ability to achieve rapid growth over time. As business models are dynamic, it is difficult to pinpoint the exact point in time that true scalability is reached. Suffice it to say that at this point, the entrepreneurial effort has succeeded in creating an organization that is self-propelling and that has the ability to rapidly scale up and to expand its operations: it constitutes a self-sustaining, learning organization that continually innovates and presents an inherently expandable business model. At this point, sometimes the firm will have at least several dozen employees and thus will be better off if the entrepreneur hires a manager to whom he or she can delegate most of the daily decision-making while the entrepreneur focuses on innovation. The furniture chain Ikea and the technology giant Google clearly fit these criteria.

THEORETICAL BACKGROUND

Solo Entrepreneurs Alone Create Few Jobs

Empirical evidence suggests that self-employment alone creates few jobs, particularly in Anglo-Saxon economies. Just 20-30% of entrepreneurs in the USA, Canada and the United Kingdom employ any external workers (Cf. Carroll, R. et al (2000a), (Kuhn & Schuetze, 2001) and H.J. Schuetze (2001). However, in continental Europe, a higher number of self-employed end up hiring others--46% in Denmark and 51% in Germany (Cowling, M., 2003). Transition rates from solo to small business in terms of hiring others also are low, at least in the U.S. and UK: 7-8 % take on other workers after a 3-4 year period (Carroll et al 2000), (Cowling, Taylor, & Mitchell, 2004).This suggests that culture and government incentives (in terms of regulation and taxes) may

play an important role in stimulating solo entrepreneurs to move to the next stage of creating a small business which hires others.

Small Business vs. Small Entrepreneurial Venture

There is a key difference between a small business with limited prospects for growth (where the owner may have little desire for growth) and a new venture that is currently small. Founder of Black and White Recruitment Solutions, Andrew McCready, notes that the concept "small business owner" creates a mindset of being small with limited scope for growth, while an entrepreneur is by definition a risk-taker, or someone who thinks outside the box (Abeysekera, 2011). It is not that 'Small Business' is used in the pejorative sense or carries a negative connotation, rather, that the entrepreneurial behavior is front-loaded at the start-up phase and then may diminish into mere maintenance or decay if the founder loses the urge to grow the business. When one passes a neighborhood store with a sign announcing that it will be closed for several weeks so that the owner may take a vacation, that owner may also be announcing a desire to remain a small neighborhood business thus maintaining the status quo.

In the fast-moving 21st century, it is no longer sufficient to conceive of the "take-off" phase of small business simply in terms of the delegation of responsibility and acquisition of sufficient cash, as did Professors Churchill and Lewis in developing their five-stage model of small business growth (Churchill & Lewis, 1983). In today's dynamic environment, one can conceive of a sustainable small business as a "small entrepreneurial venture" in which entrepreneurial behavior results in products or services of distinctive salience and scalability.

Small Business vs. Entrepreneurship

There is some debate about the distinction between "small business" and "entrepreneurship.". In our view, entrepreneurship implies three critical elements: new, sustainable, and scalable – that is, initiating some aspect of a business that is new (this is not limited to a new product or technology); a distinct basis for sustainable competitive advantage; and an inherently scalable business model. For example, although Dell did not create the computer, it created a new direct-to-consumer, mass-customization business model. Dell

became sustainable as a low-cost producer, which inhibited other competitors from entering the market or posed substantial entry barriers for other prospective competitors interested in the market. And, finally, Dell was scalable because the company's infrastructure enabled it to expand in order to meet rapidly increasing demand (Dewan, Jing, & Seidmann, 2000).

Confidence

The "individual" forces are used to illustrate the direct impact the specific entrepreneur, or entrepreneurial team, has on the venture's initial creation and ability to progress up the hierarchy. For example, as Nobel economist Edmund Phelps noted, "virtually everyone right down to the humblest employees has *know-how*, some of what Michael Polanyi called *personal knowledge* and some merely private knowledge, and out of that an idea may come that few others would have" (Phelps, 2006). In order to capitalize on such insights, some of the internal factors include: management support, autonomy/work discretion, rewards/reinforcements, time availability and organizational boundaries.

Entrepreneurship is stimulated initially by a sense of *confidence* so strong that it leads to a decision to take the risk of going into business or of creating a venture on one's own (Shepherd & Zacharakis, 2001). This sense of *confidence* is enhanced by proven *skills* that one has acquired in life. Social capital (e.g. network embeddedness) enables the individual to bring an "entrepreneurial event" into being (Putnam, 1993). Assembling required resources in early stage ventures is usually accomplished not by traditional commercial acquisition, but rather by leveraging one's social network.

Opportunity

Entrepreneurship scholars have diverse approaches regarding opportunity recognition before and during the new venture creation process, i.e. via social networks (Singh, 2000), motivated by exploitation (March, 1991) or in the special case of break-through innovation (O'Connor & Rice, 2001). Eisenhardt's framework maintains that ventures cycle through four phases: exploration, exploitation, adaptation and exit (Brown and Eisenhardt, 1997(Santos & Eisenhardt, 2009); what seems to unite them are the opportunities-- these are discovered, exploited, adapted to as they evolve and

finally deserted as they cease to provide sufficient profit or incentive for the entrepreneur to continue pursuit. Murray Hunter sees a larger role for opportunities in entrepreneurship, implying that these may drive the firm's strategies, capabilites and resources (Hunter, 2011). We define opportunities as scenarios where needs are not being met or are not well served or where totally new products or services are created which did not exist previously.

Resources

Almost all entrepreneurs find themselves free-riding upon existing resources in order to survive and grow (R. Isaak, 2005; Kidwell, Nygaard, & Silkoset, 2007), whether it is their parents' garage (Steve Jobs and Apple) or the university computer system (Google at Stanford) or an ideal base for a social network (Facebook at Harvard). Resources are not evenly distributed and prestige institutions in dominant nations provide wealthy infrastructures and resources that make it easier to exploit easy access to and dominance of the media and seize first-mover advantage (from Intel to Amazon to Google to Facebook in the US). Even with the emergence of the Internet and mobile technology, the media remain concentrated and dominated by powerful nations, their language, technologies and personnel (CNN in English for example) which makes marketing easier for entrepreneurs based in the States (eg. Silicon Valley).

By creating regional 'hotspots,' dominant centers of human capital create soft power, attracting the best talent. However, emerging economies have shown their ability to replicate such regional hotspots (e.g. Bangalore and Shanghai) and to bring in and to concentrate the talented human capital essential to fostering scalability. Indeed, creating such 'entrepreneurial ecosystems' is one viable strategy for fostering scalability (Isaak, 2005b). On a smaller scale, the recipe for achieving such soft power (i.e. attracting the best and the brightest) is for entrepreneurs to hire people who are smarter than they are and to maintain the necessary conditions in order to keep them.

FACTORS IMPACTING SCALABILITY

Vision/Leadership

The ultimate thrust of such an entrepreneurial sense of risk-taking is an ever more concrete *vision* of the end product of the company, the artistic

design (if, for example, an architectural creation) or the service one wants to provide, which becomes the basis for leadership, to mobilize others behind the vision (Filion, 1991).

In the description provided by Joseph Schumpeter, entrepreneurs "have employed existing means of production differently, more appropriately, more advantageously. They have 'carried out new combinations'…and their profit, the surplus, to which no liability corresponds, is an entrepreneurial profit." (Schumpeter, 1934: 132). Later on, he clarified that the key to entrepreneurship is "the doing of new things or the doing of things that are already being done in a new way" and that a person who stops innovating, ceases to perform an entrepreneurial function (Schumpeter, 1947: 149-159). So, *confidence* and the appropriate *skills* lead to something new, culminating in a *vision* to inspire others to join in the creation of an innovative venture through *leadership* (Shepherd & Zacharakis, 2001; Witt, 1998). The ability to communicate one's *vision* to others and to motivate empoyees through leadership is the key to attracting and developing talent--the most critical resource in achieving scalability.

Culture and Region

"Regional" may refer to national differences, different states within the U.S., trade zones such as the EU, or broad cultural and religious dimensions. For example, in terms of legal and financial regulations, the World Bank (IBRD) and the International Finance Corporation rank New Zealand, Singapore and the U.S. the top three countries (in that order) in terms of the most business-friendly regulation in the world (ranging from only 5-12 days necessary to start a business). In contrast, starting a new business in Lao PDR would take 198 days. And, using another criterion for a country which makes it difficult to start a business, in Syria it would require $61,00 --or 51 times the average annual income. (The International Bank for Reconstruction and Development/World Bank, 2006: 1-3; in the 2012 report, New Zealand, Australia and Canada were the easiest places to start a business). Babson College, renowned for entrepreneurship research, publishes its own indicator, the Global Entrepreneurship Monitor (GEM), which may more accurately contrast "entrepreur-friendly" environments; the US consistently scores highly on this scale--also recently, when compared with Norway's business environment (Noyes, Amo, & Elaine, 2010). One reason for this may be the heavy strategic and institutional focus on small business in the US exemplified

by structures and programs such as the SBA (Small Business Administration), SBDC (regional Small Business Development Centers) and SCORE (voluntary Service Core of Retired Executives) as well as the system of highly funded private universities in clusters like Boston (Harvard, MIT), New York (Columbia, NYU, Cornell and Pace ;-)), and Silicon Valley (Stanford, Berkley).

It is worth noting here that the implied causality between an entrepreneur-friendly environment and the flourishing of such businesses is not necessarily unidirectional. Thus research would suggest that "entrepreneurial activities of a region reflect its business climate and habitat for innovation"(Suzuki, Kim, & Bae, 2002). Rather, successful entrepreneurs often help others like them and directly contribute to this environment as well. In terms of our model, consider several entrepreneurial hierarchies (triangles) that meet at the upper ends and impact each other as well as the environments in which they operate.

These regional factors can have the effect of either flattening or steepening the triangular hierarchy in our model. For example, creating an abundance of shopkeepers (*solo*, *small*, and *stable*) with limited high-growth would constitute a flattening of the hierarchy, whereas an examination of firms in Silicon Valley would result in a steepening triangle with more space between the rungs of the ladder in terms of talent.

Cultures influence behavior significantly, particularly in terms of traditional individual-versus-group behavior and in the risk-taking versus risk-aversion spectrum of popular reactions that can be anticipated. For example, in terms of individualism versus group behavior, when asked if "Everybody is allowed to work individually and individual credit can be received," only 40% of those from Egypt and Japan agreed that their situation supported this statement, while 72% of Americans, 86% of the Russian, and 88% of the citizens of the Czech Republic agreed with the statement (Trompenaars & Hampden-Turner, 1998).

The traditional individualism in U.S. culture and the ease of setting up businesses encourage an entrepreneurial risk-taking (even speculative) mentality which leads to innovation and what can be called an "entrepreneurial culture." Part of this entrepreneurial culture derives from a widespread distrust of the state and of the government's ability to satisfy personal or social needs. In contrast, continental European countries have state-dominated cultures in which individualism is often submerged in group behavior or collective solidarity, typified by the continuing political importance of labor unions in Europe and the resulting long-term employment contracts.

Japan carries this group or collective cultural behavior even further, to the point that the entrepreneur is traditionally discouraged from standing out too much from the team, summed up in the Japanese motto 'The nail that sticks up gets hit'. For example, Akihiro Yokoi did not come forward to claim credit for the invention of the electronic pet, *Tamagochi*, for a year after it became a worldwide sensation and even let someone else in Japan have the credit: he cited the Japanese tradition that everyone should be in something together as opposed to someone pushing ahead for individual success (Barry, 2011).

The perceived desirability and feasibility of becoming an entrepreneur, or of creating a venture, are perhaps most heavily influenced by cultural and societal traditions.

For example, the perception of desirability in terms of group participation as opposed to individual risk-taking in Japan also has a negative impact upon the creation of an entrepreneurial culture, compared, for example, to cultures where individualism is promoted (the U.S, Great Britain, Australia and New Zealand). In both Japan and Germany, for example, entrepreneurial behavior is particularly notable among foreigners, who may not have access to established companies or government positions. So cultures can "call for" the desirability of becoming an entrepreneur or discourage this individualistic, risk-taking behavior.

In addition, there are cultural perceptions of feasibility. Each society creates perceptions of the possibility of successfully entering certain fields or occupations. The apprenticeship systems in German speaking cultures embracing over 400 distinctive careers are examples. In addition, those who have had entrepreneurs as parents are more apt to become entrepreneurs themselves. Where many have become entrepreneurs, available resources have been developed -- - as in the case of waves of venture capital that continue to be invested in Silicon Valley (Holstein, 2006).

Finally, culture impacts cognition on both lower and higher levels. Isaak and Liu, in a study of Chinese high-tech entrepreneurs, find that culture together with the institutional environment jointly affect the entrepreneur's logic orientation and perceived level of ambiguity on a continual spectrum (A.J. Isaak, Yipeng, 2011).

While cultural and societal factors shape the environment, the entrepreneur's ability to leverage personal social capital or networks is most critical at the lower levels of the hierarchy. The importance of social capital can be clearly illustrating by the concentration of innovative, entrepreneurial activity clustered around universities, such as Boston with MIT, Silicon Valley around Stanford, and Bangalore's Indus Valley with the Indian Institute of

Science. For example, as demonstrated by Michel Ferrary, managers of innovation have to build extensive social capital in order to gather information inside business networks (Ferrary, 2003).

Legal/Financial Factors

Regional legal factors often have an impact upon financing entrepreneurship. In January 2005, the European Union's Commission redefined "SMEs" - Small and Medium-sized Enterprises" - in order to allow a greater number enterprises to maintain their SME status and to ensure their eligibility for financial support measures such as the threshold of 25% in terms of a limit for ownership by a partner in order to qualify as an "autonomous" enterprise (European Commission Staff, 2005: 1-52).

France and Japan in the first decade of 21st century illustrate the numerous legal obstacles the entrepreneur has to overcome. In France, entrepreneurs face a massive 2,732 page *Code du Travail* so complicated that even small firms have to spend months figuring out if they are operating within the limits. Furthermore, there are some 2,000 inspectors crisscrossing France to be sure no one is violating the particular law that specifies that an individual is only permitted to work 35 hours per week -- the *Inspection du Travail* (Levratto & Serverin, 2009).

Japan makes it just as difficult for the entrepreneur: added to the cultural shame of failure, the tradition of the lifetime employment system, the seniority system and labor unions inside companies, the Japanese government imposes a tight regulatory system with numerous licenses required to start a business. Japanese regulations demand that a small business provide four different corporate officers (paid at least $3,000 each) to be reappointed every other year, and requires some $81,000 in capital as collateral: not many Japanese have this money and the banks are hesitant to lend it after numerous recent banking crises (Helms, 2003).

In addition to access to credit or financing, taxation, absence of corruption and the rule of law are important factors impacting entrepreneurial activity. These factors are among those ranked annually by the *Global Entrepreneurship Monitor's* assessment of the Total Entrepreneurial Activity by Country as well as the *Transparency International's* Corruption Perceptions Index.

Reaching Scalability

The aim of moving up the hierarchy of entrepreneurship is to avoid entropy by reaching a critical mass in terms of business competitiveness. While in theory one can reach a critical mass in a solo venture, an expanding business model can make this easier to attain.

Solo to Small

As the entrepreneur moves from the solo to small stage, he or she hires the first employees. In addition to the actual payroll itself, the entrepreneur deals with federal, state, and local regulations and requirements such as workers' compensation, withholding tax, unemployment taxes, fair labor standards, etc. An example of this transition would be Michael Dell. Building on his entrepreneurial experience of starting a nation-wide mail-order stamp auction at 12 years old, Michael Dell dropped out of the University of Texas at Austin at age 19 to launch PCs Limited in 1984 with $1,000 in savings. Buying surplus hardware inventory from computer dealers in order to satisfy customer needs, within a year Dell had moved from solo to a small company of 40 employees that focused on assembling PCs from spare-part components.

Recent empirical research suggests that as national economies become more developed, and the *service sector* becomes more important, small firms of less than 20 people play a much greater role in job creation – as in the US. Moreover, *new* small firms are the most significant in net job growth (where more jobs are created than destroyed) (Parker, 2005).

At this stage the entrepreneur's strategy is to leverage available resources (i.e. a strategy of bootstrap financing, parsimonious operations, guerrilla marketing, use of temporary workers, etc.) to go from solo to small, often with the long-term goal of a stable business in mind.

Small to Stable

This stage focuses upon increasing efficiency in managing the infrastructure, customer base, supplier relations, and the ability to monitor trends in the industry and adjust the firm's position appropriately. A good example of the shift from "small" to "stable" in the hierarchy is Mrs. Prindable's.

Empty-nester Gail Robinson, at 44, decided on a family vacation to start a business selling caramel apples, and subsequently wrote up a business plan and brainstormed with her daughter to come up with the fictional surname "Mrs. Prindable", aiming for a prim British sound. Renting a large space and installing a professional kitchen in 1984, they made sales calls to Neiman Marcus, Saks and other specialty stores. When the business peaked, Mrs. Prindable's Gourmet Apples employed 300 people in two facilities. Thus, they achieved stability, which was epitomized by their hit performance on the shopping channel QVC — a stability that lasted until Mrs. Robinson sold the business 15 years later to a small holding company, which, in turn, sold it to Affy Tapple, a Chicago gourmet apple business. Many entrepreneurs stop at this stage.

The strategy employed at this stage is typically "Operational Efficiency".

Stable to Salient

This shift comprises the ability to recruit, train, motivate and retain the depth and breadth of talented people, effective delegation of responsibility and the control and the capacity to anticipate trends in the market and position the firm. The focus is upon the ability to create value--a distinctive, replicable "edge."

An example of the transformation from a merely "stable" business to a "salient" one in terms of entrepreneurial development is Netflix, a company that mails DVDs to customers, and keeps online queues of what they want to see next. By taking the store out of video rental, Reed Hastings pushed companies like Wal-Mart and Blockbuster into a new business model. The salience or distinctiveness here is that customers no longer have limited selection, late fees, or a need to go further than the mailbox to pick up a flick for the weekend. With some 500,000 titles, Netflix is a gold mine for movie buffs and a kingmaker for small-time studios and independent films (*netflix.com* as accessed on June 7, 2013).

Strategy: efficiency to effectiveness. At the solo or small-business level, efficiency of the maintenance base of the operation is critical for survival. At the higher entrepreneurial levels, effectiveness in accessing new markets is critical for growth and job creation.

Salient to Scalable

At this stage, the focus centers on replication and creation of new products. By creating new products or services, markets, and distribution channels, the firm seeks to achieve sustainable competitive advantage through continuous innovation, remaining close to the customer and increasing the ability to quickly and economically scale production. A culture of learning, vision, and imagination not locked into fixed perceptions or caught-up in rationalization is fostered. *Scalability* here implies not only revenue and employee growth, the dynamic nature of the entrepreneur's vision and inherent business model employed, but also to geographic expansion or replication via other means such as franchising or licensing.

While "scalable" firms may become large, they remain true to their entrepreneurial roots, rather than becoming "elephants" or regressing down the hierarchy (Birch, 1994). At this level, in order to maintain competitive dynamism, constant attention needs to be paid to entrepreneurial strategy, that is the integration of entrepreneurial (i.e. opportunity-seeking) behavior and strategic (i.e. advantage-seeking) perspectives (Hitt, Ireland, Camp, & Sexton, 2001).

Recent literature on scalability exists but remains scarce, even after extensive searches in both Ebso-host and Google Scholar (Bergin & School, 2001; Dyer & Ericksen, 2005; Hallowell, 2001; Mohan & Potnis, 2010; Patel, Fiet, & Sohl, 2011; Penrose, 1955). Menasce, for instance, discusses scalability for the case of online IT-services (Menasce, 2000), explaining the importance of emphasizing the potential growth in customers and their likely future changes in behavior during the initial design phase, i.e. via capacity planning and architecture selection. Patel and colleagues argue more generally that the formation of strategic alliances is a key factor in scaling the business venture during the bootstrapping phase. This leads to the natural questions of definition and measurement of scalability. Saxena has recently attempted to create metrics for scalability and sustainability through the qualitative evaluation of social ventures (Saxena, 2011), while Sen maintains that "The process of scalability is measured logically in the same way that a business venture capitalist calculates future projections." (Sen, 2007). Interestingly, Mohan and Potnis, focusing on the novel microfinance industry, develop a five-factor model of catalytic innovation for social entrepreneurship based on: customer focus on the poor (and the corresponding social mission), operational innovation, information technology, human capital management and financial sustainability (Mohan & Potnis, 2010).

Cornell researchers Dyer and Ericksen argue that in highly competitive and turbulent industry sectors and environments, human resource scalability plays a crucial role to help the organization manage change: "the challenge for agile enterprises is to manage the inflow and outflow of employees in ways that, if possible, facilitate, or otherwise do no harm to, employee fluidity." (Dyer & Ericksen, 2005). The researchers point to hiring change-ready employees (i.e. cultural fit) and conclude that it generally makes sense to give up a large degree of management control in favor of removing bureaucratic hurdles that stifle agility by maximizing individual autonomy. Whereas Dyer et al pursue HR scalability with the goal of market agility of the firm, we focus on scalability in a broader sense with sustainable growth of the venture in mind. Agility here is strongly similar to - if not encompassed by - the concept of dynamic capabilities (Eisenhardt & Martin, 2000; Teece, Pisano, & Shuen, 1997). A firm with dynamic capabilities, while more likely to survive in a highly competitive and changing environment, need not be particularly scalable; thus the concepts are clearly related but distinct. Recall that building long-term competitive advantage is necessary for firms to reach the salient stage of our model; few reach the final stage.

Starbucks is an excellent example of a truly “scalable” entrepreneurial business, a tiny roaster in Seattle bought by Howard Schultz in 1987, it has scaled up its unique “customer experience” to more than 8,500 stores and 90,000 employees. Its typical *scalable strategy* depends on continuous innovation characterized by products which become ubiquitous such as macchiatos and the Frappuccino. The management focus is upon intrapreneurial experiments such as when a store manager in Los Angeles accidentally created the “Frappuccino”, which amounted to a multi-hundred-billion dollar result, by playfully mixing beverages with a blender she had purchased herself. Why is the company's staff so motivated to keep the entrepreneurial experimentation going? Perhaps because Starbucks was the first U.S. company to give health benefits and stock options to each employee, even to the 65% who happened to be part-time when the program was adopted. Hence, Starbucks has one of the lowest levels of attrition in the national retail business. Another reason may be the management of Schultz himself, who points out that there are a great number of unique ideas coming from both inside and outside the company and that it is not reasonable to link this innovation only to him (Koehn, Besharov, & Miller, 2008).

Strategy at this stage: sustainable competitive advantage through continuous innovation

IMPLICATIONS

This theoretical model seeks to clarify and define the stages of entrepreneurial development. The hierarchy of entrepreneurship may serve as a useful standard, or indicator, of where one is in the entrepreneurial process, what the next stages of growth entail, and which dominant strategies should be adopted to get there. Envisioning the hierarchy as a whole should help the entrepreneur craft a personal vision in a way that permits that vision to become salient and eventually scalable, in a similar way as the business model canvas can help entrepreneurs find an inclusive business model (Kim & Mauborgne, 2009). As entrepreneurs are continually confronted with a myriad of choices, and the essence of strategy is deciding what not to do, a clear understanding of the model may serve as a tool to discard options that do not lead to salience and scalability. The ability to perceive the entire hierarchy, to locate one's place in it, and to be aware of the strategies in order to advance to the next stage may serve as an incentive for the adoption of a more focused entrepreneurial strategy. This model differs from others, such as the five distinguishable phases of development described by Greiner, in that its focus is on the entrepreneur and factors, both internal and external, impacting the entrepreneur's progression of growth in a defined hierarchy (Greiner, 1997). The model's hypothesis with the clearest policy significance is: the greater the scalability, the greater the job creation.

While this hierarchy may be an inevitable progression of stages of entrepreneurial development, highly-skilled individuals may be able to rapidly progress through lower levels, while visionary leaders may be capable of circumventing them entirely, i.e. skipping steps.

One of the benefits of positing this hierarchy is heuristic. Hierarchies, naturally inspire anti-hierarchical lateral thinking, which in itself spawns entrepreneurial behavior. Just consider the rise of the counter-culture movement in the 1960s yielding *The Whole Earth Catalogue* and a multitude of environmentally friendly spin-offs. Or take the related emergence of the "open source" movement in cyber-culture (Turner, 2006). There is a "loose-tight" tension in entrepreneurial thinking that seizes corporate, venture capital along hierarchical lines at one critical strategic moment (Google's founding at Stanford for example), only to use that leverage in order to create lateral, open access to information, storage and new forms of entrepreneurship. Just as it is more fruitful to play tennis with a net, it is stimulating to have hierarchical

structure to test, to criticize and to use as a position in order to orient one's thinking.

Further, one "self-created" entrepreneurial business can spawn the simultaneous creation of others. Among the many serial entrepreneurs that Silicon Valley has produced, Jay Adelson (36) and Kevin Rose (29) are "parallel entrepreneurs" who started a second venture just as their first one was taking off.

As a further illustration, the website Digg was founded in 2004 by Adelson and Rose, permitting users to become "editors" in submitting new account links to collectively determine which should be given top billing. Meanwhile, Rose and Adelson pivoted their focus to Revision3 Corporation, a video production company built around a series of Internet TV shows and funded by investors, including Marc Andreesen, a founder of Netscape. Entrepreneurs can thus be stimulated by their own hierarchies to "moonlight against themselves," creating new ventures (Helft, 2006; *digg.com* as accessed on June 2, 2013).

If, as we propose, the hierarchy of entrepreneurship is a naturally occurring phenomenon: a progression of stages that exist in the process of developing entrepreneurial ventures, its implications cannot be ignored. The introduction of the model into the dialogue between the academic community and practitioners will inevitably foster creative thinking: whether supportive or critical, at the very least such discussion concerning a hierarchy of entrepreneurship leading to scalable business models may stimulate new ways of thinking about innovative organizations and economic growth. It suggests strategies for reaching scalability, an essential ingredient in maximizing job creation in a global era of mass unemployment. While solo entrepreneurs produce few jobs alone, if they scale up in the service sector, their role in establishing small, new firms is the key to net job creation. And larger scale firms are even more important in the manufacturing sector in terms of producing employment. The quality of the work created, the critical importance of the education of human capital for entrepreneurship, and the role of government in the training, targeting for comparative advantage and the required social safety net are vital subjects for further research not covered here. But what can be derived is that it is not enough for state and local governments to merely improve regulations, financing and tax situations for solo start-ups in order to create jobs; policy-makers must rather pro-actively subsidize scalability, entrepreneurial ecosystems and the training needed for sustainable growth.

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