

Industry Agenda

Entrepreneurial Ecosystems Around the Globe and Company Growth Dynamics

Report Summary for the Annual Meeting of the New Champions 2013

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Executive Summary





Entrepreneurs are key drivers of economic and social progress. Rapidly growing entrepreneurial enterprises are often viewed as important sources of innovation, productivity growth and employment (small and mediumsized enterprises account for 97% of all jobs in emerging economies). Many governments are therefore trying to actively promote entrepreneurship through various forms of support.

The World Economic Forum, in collaboration with Stanford University, Ernst & Young and Endeavor, surveyed over 1,000 entrepreneurs from around the globe with the goal of better understanding how successful entrepreneurial companies accelerate access to new markets and become scalable, high-growth businesses.

Summary of Key Findings

- 1. Major differences in entrepreneurial ecosystems exist from one region to the next. While entrepreneurs do consider expansion opportunities beyond their country or region, there is a potential alignment issue with governments who often adopt a strong country/regional focus in their entrepreneurial ecosystem policies.
- 2. Entrepreneurs view three areas of an entrepreneurial ecosystem as being of pivotal importance accessible markets, human capital/workforce and funding & finance. This report is the first large-scale study of ecosystems that systematically examines which pillars of an ecosystems matter most to entrepreneurs when it comes to the growth of their companies. A potential alignment issue can arise between the time horizon of an entrepreneur and the time horizon of a politician, with the latter's typically following the electoral cycle.
- 3. In most regions, often only a small number of breakout companies are the dominant contributors to a healthy, growing early-stage company sector. There are also substantially more similarities than differences in the issues facing entrepreneurs around the globe. These similar issues can be observed in all regions and have an impact on the major growth accelerators as well as the major growth challenges for early-stage companies.
- 4. Large companies in the overall business ecosystem have the potential to provide important leverage for early-stage companies in their growth and development. However, the relationship is subject to minefields, swamps and choppy waters. The report highlights areas for productive relationships as well as areas where the relationship can inhibit growth or even be the source of revenue and job losses in an early-stage company.
- 5. Entrepreneurs themselves can play multiple important roles in the build-out of an entrepreneurial ecosystem. Using case studies from Endeavor, five important roles are illustrated mentorship, inspiration, investment, new founders and new employees.
- 6. Government and regulatory policies are viewed by entrepreneurs as both potential growth accelerators and potential growth inhibitors. The report highlights examples of case studies from different geographical regions that reflect both the positive and negative impact economic policies can have on entrepreneurs. In some cases, entrepreneurs believe that government/regulatory policies aimed at supporting economic growth can actually be counterproductive to the growth of their early-stage company.

Section 1: Focus of the Report and Information Sources Underlying the Analysis

Two questions on entrepreneurial ecosystems are central to this report:

Question 1 – What do entrepreneurs perceive to be the differences between entrepreneurial ecosystems around the globe in terms of the ready availability of the various pillars that make up an ecosystem?

Question 2 – Which pillars of an entrepreneurial ecosystem do entrepreneurs view as most important to the growth/ success of their companies?

Exhibits 1-1 and 1-2 of the report illustrate the eight pillars considered to make up an ecosystem and the individual components of each pillar. By jointly examining these two questions, this report advances the debate on entrepreneurial ecosystems in two important ways.

The first is that entrepreneurs were systematically polled to address both of the report's two central questions. By contrast, many existing analyses of ecosystems do not use evidence gathered directly from entrepreneurs as their core evidence. Making public sector investments in ecosystems without systematic input from entrepreneurs runs the risk of making misinformed decisions, leading to outcomes that differ greatly from the rapid surge in entrepreneurial activity desired. Politicians often find it convenient to make ecosystem recommendations with an electoral cycle mentality, a mentality which can differ greatly from that of entrepreneurs who are aiming to scale a new venture in a sustained way.

The second advance to the debate is that both questions were put to the same set of entrepreneurs. Much of the evidence to date has been focused on the first question. However, it is the second question that provides pivotal information about what an entrepreneur views as important to the task of growing a company. The more policy-makers understand what entrepreneurs view as important, the greater the potential for policies to be better aligned with the actions of companies, which are the engine of a vibrant entrepreneurial sector. The report also shows that there are three pillars within an ecosystem which entrepreneurs around the globe consider to be the most important for the growth of their companies, namely accessible markets, human capital/workforce and funding & finance.

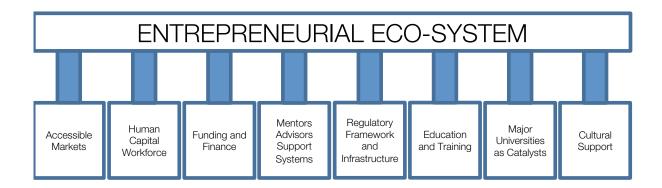


Exhibit 1-1: Entrepreneurial Ecosystem

COMPONENTS OF ENTREPRENEURIAL ECO-SYSTEM PILLARS Accessible Markets Human Capital/Workforce Domestic Market – Large Companies as Customers • Management Talent Domestic Market – Small/Medium Companies as Customers Technical Talent Domestic Market – Governments as Customers • • Entrepreneurial Company Experience • Foreign Market - Large Companies as Customers Outsourcing Availability Foreign Market - Small/Medium Companies as Customers • Access to Immigrant Workforce Foreign Market - Governments as Customers Funding and Finance Support System Friends and Family Mentors/Advisors Angel Investors Professional Services Private Equity Incubators/Accelerators Venture Capital Network of Entrepreneurial Peers Access to Debt Regulatory Framework and Infrastructure Education and Training • Ease of Starting a Business Tax Incentives Available Workforce with Pre-University Education Business-Friendly Legislation/Policies Available Workforce with University Education Access to Basic Infrastructure (e.g. water, electricity) Entrepreneur-Specific Training Access to Telecommunications/Broadband Access to Transport Cultural Support Major Universities as Catalysts Tolerance of Risk and Failure • Major Universities Promoting a Culture of Respect for Entrepreneurship Preference for Self-Employment • Major Universities Playing a Key Role in Idea-Formation for • Success Stories/Role Models New Companies • Research Culture Major Universities Playing a Key Role in Providing • Positive Image of Entrepreneurship Graduates for New Companies Celebration of Innovation

Two very different sources of information were analysed for this report:

- Responses to an online survey from over 1,000 individuals with extensive experience in early-stage companies. The Stanford Graduate School of Business' alumni database was used to seek responses to a twophase survey. The response rate was approximately 10% of the alumni polled. Many in the alumni database have not had experience as an executive of an early-stage company, so the response rate from the target population is sizably higher than 10%. We also supplemented the survey using several additional databases, e.g. from Endeavor, Pakistan and from Australia. Exhibit 1-3 (Panel A) gives an overview of the respondents. The first part of the online survey, which focused on entrepreneurial ecosystems, is analysed in Sections 2 and 3 of this report. The second part of the online survey, which focused specifically on the respective early-stage company of the respondent, is analysed in Sections 4, 5 and 7 of this report.
- Executive cases include the responses by founders and senior executives from 43 early-stage companies to a standardized set of questions about their company growth and the role of entrepreneurial ecosystems in that growth. Exhibit 1-3 (Panel B) provides a geographical breakdown of these executive cases, which cover 23 different countries.

Panel A: Entrepreneurial Ecosystems Survey

Respondents' Years of Experience in Early-stage Companies					
Years of Experience	Respondents				
1-5	222				
6-10	195				
11-15	171				
16+	332				
Not Noted	122				
Grand Total	1,042				

Breakdown of Respondents by Continent					
Continent	Respondents				
North America	664				
Europe	160				
Australia/New Zealand	28				
Asia	117				
Middle East/Africa	20				
South America and Mexico	53				
Grand Total	1,042				

Panel B: Executive Cases

Breakdown of Cases by Continent					
Continent	Number				
North America	11				
Europe	5				
Australia/New Zealand	1				
Asia	15				
Middle East/Africa	7				
South America and Mexico	4				
Grand Total	43				

Section 2: Entrepreneurial Ecosystem Differences around the Globe as Perceived by Entrepreneurs

Based on prior research and extensive interaction with entrepreneurs, investors, government officials and politicians, this report uses an eight-pillar characterization of an ecosystem (see Exhibits 1-1 and 1-2). A prior World Economic Forum report on global entrepreneurship provided extensive evidence on growth accelerators and growth inhibitors for early-stage companies.¹ Existing research on ecosystems was also examined to develop the eight-pillar characterization.² Individual components underlying each pillar were also identified. An important part of defining these components was identifying some key areas where the definition of an ecosystem from an entrepreneur's perspective extended beyond a single geographical area; for example, the accessible markets pillar includes separate components for both domestic customers and foreign customers. This "global perspective" of many entrepreneurs can lead to alignment differences between what entrepreneurs view as important and what a government views as important regarding the build-up of a thriving earlystage entrepreneurial sector in an economy.

Entrepreneurs were asked to identify which of the eight pillars of an entrepreneurial ecosystem were readily available to them as they built their venture. The higher the percentage of respondents indicating ready availability, the stronger that ecosystem pillar is considered to be in that region. Analysis was conducted for various groupings of the 43 countries represented by the respondents. Results are presented as a heat map, using three basic colours: blue, yellow and red. The darkest blue is for the pillars with the *highest percentage* of respondents citing ready availability, while the darkest red is for the pillars with the lowest percentage. Exhibit 2-1 shows the results when the respondents are grouped by continent and Exhibit 2-2 provides the results when grouped by country. Similar heat maps are presented in the full report for several other country categorizations. Each heat map also includes separate columns for: (i) Silicon Valley (defined as the broader San Francisco Bay Area); and (ii) the US excluding Silicon Valley. The very sizable differences across regions of the globe in the ready availability of ecosystem pillars can be clearly seen in both Exhibit 2-1 and Exhibit 2-2.

Accessible Markets

ViiCare (China) – information technology solutions for hospitals:

"The healthcare industry in China has much room for growth. Most hospitals in China are owned or controlled by the government, including central and local health authorities, state-owned enterprises and the military. In 2009, the Ministry of Finance initiated a long-term health reform to achieve the objective that "everyone can have access to the essential healthcare service". Significant investments were made to develop the healthcare system in China, creating substantial market opportunities for ViiCare. The domestic market in and of itself is big enough. We are striving to secure a strong foothold in the Chinese market before tapping into foreign countries."

Regulatory Framework and Infrastructure

Interpark (South Korea) - online shopping mall market: "Our growth was not so fast in the early stages. There were many problems related to online shopping, such as the delay in the proliferation of Internet infrastructure, the slow speed of the network and ineffective methods for calculating rates. Businesses connected to the value chain of online shopping malls, such as logistics systems and payments, had difficulties, too. An express delivery service was in its initial phase of growth, and the use of Internet banking, credit cards and security programmes for accounts was minimal. The economic environment was very tough and Korea applied to the International Monetary Fund for a bailout in 1997, the very year we started our business. Our growth started to speed up in earnest in 1999. The main factor behind this growth was an improvement in the speed of the Internet. ADSL had spread very fast following a drive by the government. The government and carriers focused on Internet business and invested large amounts of capital. As a result, our confidence that the Internet would be the common network proved well founded, even though it came a little bit later than we had expected."

Interestingly, Silicon Valley had the highest average percentage of respondents citing ready availability of ecosystem pillars, but the one pillar well below the other seven was the regulatory framework/infrastructure. There are also strong differences within continents. For example, and as shown in Exhibit 2-2, within Europe, the United Kingdom has the highest average percentage of respondents citing ready availability of ecosystem pillars and Spain has the lowest, while in Asia, Singapore has the highest and India the lowest.

Major Universities as Catalysts

Polyera (USA) – materials science: "In January 2005, I was scouting for technologies in US universities with the goal of finding the seed for an audacious technology company. I met Prof. Antonio Facchetti and Prof. Tobin Marks at Northwestern University and was introduced to the field of printed and flexible electronics. Antonio and Tobin were working on new classes of electronic materials that could enable novel form factors and manufacturing processes. After conducting some due diligence, it became clear that many of the world's leading electronics manufacturers were extremely interested in the field of printed and flexible electronics, but that a key bottleneck was the availability of suitable materials. Polyera was founded to address this bottleneck and enable the next generation of electronics. Because we spun-out Polyera from Northwestern, we decided to establish our labs 10 minutes away from the University. Such close physical proximity was a big advantage to the company in its early days as we were able to leverage equipment at Northwestern at low costs and avoid significant capital investments. In addition, Northwestern's material science department consistently ranks as one of the top 10 in the world, and the University has been a great source of talent. We also continue to sponsor research at the University and benefit from new ideas which originate from these programmes."

Exhibit 2-1: Entrepreneurial Ecosystem Heat Map by Continent/Region: Pillars Readily Available in Your Region

Pilla r	US - Silicon Valley	US - Other Cities	North America	Europe	Aus/NZ	Asia	MEA	South/Central America and Mexico
Accessible Markets	92%	83%	85%	72%	69%	68%	68%	62%
Human Capital Workforce	93%	87%	90%	81%	81%	73%	50%	71%
Funding and Finance	91%	76%	82%	57%	69%	44%	55%	45%
Mentors/Advisers/ Support Systems	91%	72%	78%	52%	58%	38%	36%	35%
Regulatory Frame- work/Infrastructure	67%	57%	62%	54%	54%	39%	55%	42%
Education and Train- ing	80%	62%	70%	60%	38%	34%	32%	27%
Major Universities as Catalysts	88%	67%	75%	52%	42%	30%	23%	27%
Cultural Support	90%	64%	75%	33%	35%	26%	45%	16%
Average Score	86%	71%	77%	58%	56%	44%	45%	41%

Exhibit 2-2: Entrepreneurial Ecosystems Heat Map by Country: Pillars Readily Available in Your Region

Pillar	US - Bay Area	US - Other Cities	United States	United Kingdom	Switzer- land	Ireland	Spain	Singa- pore	Pakistan	India	Australia	Mexico
Accessible Mar- kets	92%	83%	86%	82%	89%	79%	67%	70%	78%	72%	71%	52%
Human Capital Workforce	93%	87%	90%	79%	67%	74%	90%	50%	92%	72%	79%	65%
Funding and Fi- nance	91%	76%	82%	68%	61%	53%	43%	65%	22%	44%	67%	52%
Mentors/Advisers/ Support Systems	91%	72%	79%	68%	56%	53%	29%	40%	58%	28%	54%	48%
Regulatory Frame- work/ Infrastructure	67%	57%	61%	57%	61%	63%	48%	80%	31%	28%	54%	52%
Education and Training	80%	62%	70%	61%	61%	37%	62%	40%	39%	22%	33%	30%
Major Universities as Catalysts	88%	67%	75%	68%	67%	37%	38%	65%	22%	11%	38%	35%
Cultural Support	90%	64%	75%	50%	39%	42%	24%	40%	25%	17%	29%	22%
Average Score	86%	71%	77%	67%	63%	55%	50%	56%	46%	37%	53%	45%



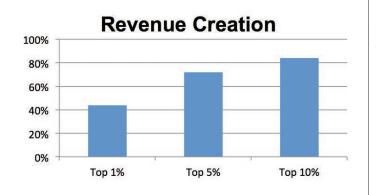
Highest % of Respondents

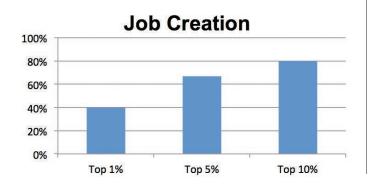
Approximately Half % of Respondents

Lowest % of Respondents

Section 3: The Relative Importance of Entrepreneurial Ecosystem Pillars to Entrepreneurs: The Big Three of Accessible Markets, Human Capital and Funding & Finance

A small number of breakout companies are the dominant contributors to a healthy, growing early-stage company sector in many economies. The following bar graphs show the results presented in a prior World Economic Forum report on global entrepreneurship³.





Across 10 countries and from a survey of over 360,000 early-stage companies, it should be noted that the top 1% of early-stage companies contribute 44% of total sector revenues created in Year 5 of a company's life, while the top 5% contribute 72% and the top 10% contribute 84%. The results for job creation show a similar pattern.

Entepreneurs were asked to indicate which pillars of the ecosystem are most important to the growth of their company. Respondents, on average, indicated approximately 2.8 pillars as being most important. Exhibits 3-1 (by continent) and Exhibit 3-2 (by country) show the heat maps for different ecosystems. Dark blue in the heat maps represents the most important contributors to company growth, while dark red represents the least important contributors. The heat maps show a consistent pattern, in stark contrast to the heat maps in Section 2 for the ready availability of pillars. The top three rows in Exhibits 3-1 and 3-2 have the darkest areas of blue. Accessible markets (row 1), human capital/workforce (row 2) and funding & finance (row 3) are the three ecosystem pillars considered to be the most important contributors to the growth of early-stage companies.

Accessible Markets

TaKaDu (Israel) – providers of software to promote efficient water use:

"The market need is huge and global, especially when considering the inadequate level of innovation in this field during the past few decades. There is an enormous and growing global need for solutions to make water supply sustainable. As an indication, in its 2013 Global Risks report, the World Economic Forum ranked 'water supply crises' second out of 50 risks in terms of impact. Insufficient water supply can trigger food shortages, demographic changes, political strife and even armed conflict. On the practical level, while the demand for water is continuously growing, more water is wasted through leakage as water infrastructure ages and deteriorates. Water utilities worldwide suffer from a deteriorating infrastructure in drastic need of capital. This forms a great opportunity for technologies that provide superior operational performance at lower costs. This is one of the key growth drivers for TaKaDu, which by using a software-as-a-service (SaaS) delivery model, helps water utilities to increase their operational efficiency while involving no upfront investment or capital cost."

Human Capital/Workforce

Green Biologics (United Kingdom) – industrial biotechnology: "Our workforce is extremely multinational and multicultural. This is perhaps a function of the area around Oxford where we are located being a magnet for scientists, as well as the UK's historic openness to scientific researchers from overseas. This has been a real advantage in allowing the company to have a culturally positive approach in the countries where it operates. This has been reinforced by early on having a business development person (hired locally) in each country. It has also helped that I and other members of the team have had extensive international experience in the target markets and so are able to draw on previous networks in these areas."

Funding and Finance

Wildfire (USA) – social media marketing platform: "We bootstrapped the business from inception until the end of 2008. At that time, we were awarded a US\$ 250,000 grant from Facebook, which was enough for us to hire a couple more developers, launch the product out of beta and achieve profitability without raising money. As a profitable company, there were all kinds of funding available to us and we raised series A funding through a venture capital firm in the area. We felt great about the team the venture capital firm had and it seemed like a good fit. When we changed the business model, we raised insider series B funding."

Regulatory Framework and Infrastructure

Capillary Technologies (India and Singapore) – cloud-based software for customer engagement:

"Moving HQ to Singapore: Singapore is becoming the Silicon Valley of Asia; start-ups are popping up all over, attracting substantial investment where there is potential in the technology and innovation space. Investors, shareholders and entrepreneurs are all realizing Singapore's advantages especially businesses looking to take advantage of the fast growth and untapped markets that the developing Asian markets have to offer. In addition, favourable regulations and extensive government support for start-ups made Singapore a very attractive choice for our new corporate HQ location in early 2012."



Exhibit 3-1: Entrepreneurial Ecosystems Heat Map by Continent/Region: Pillars Most Important to the Growth/Success of Your Company

Pillar	US - Silicon Valley	US - Other Cities	North America	Europe	Aus/NZ	Asia	MEA	South/ Central America and Mexico	Average Score
Accessible Markets	44%	59%	53%	59%	74%	65%	68%	57%	60%
Human Capital Workforce	63%	70%	67%	64%	41%	67%	59%	63%	62%
Funding and Finance	64%	62%	63%	49%	56%	56%	55%	63%	59%
Mentors/Advisers/ Support Systems	35%	24%	29%	23%	33%	27%	14%	22%	26%
Regulatory Framework/ Infrastructure	10%	11%	11%	21%	19%	27%	14%	33%	18%
Education and Training	10%	14%	12%	17%	15%	23%	18%	9%	15%
Major Universities as Catalysts	17%	9%	13%	9%	7%	5%	5%	0%	8%
Cultural Support	31%	19%	24%	10%	7%	11%	32%	11%	18%

Exhibit 3-2: Entrepreneurial Ecosystems Heat Map by Country: Pillars Most Important to the Growth/Success of Your Company

Pillar	US - Bay Area	US - Other Cities	United States	United Kingdom	Switzerland	Ireland	Spain	Singapore	Pakistan	India	Australia	Mexico	Avg. Score
Accessible Markets	44%	59%	52%	53%	61%	84%	48%	53%	89%	44%	72%	43%	59%
Human Capital Workforce	63%	70%	67%	67%	50%	68%	67%	53%	80%	61%	36%	61%	62%
Funding and Finance	64%	62%	64%	73%	44%	42%	19%	47%	49%	67%	56%	78%	56%
Mentors/ Advisers/ Support Systems	35%	24%	29%	10%	33%	21%	33%	26%	34%	22%	36%	30%	28%
Regulatory Framework/ Infrastructure	10%	11%	11%	20%	28%	21%	24%	42%	11%	28%	20%	39%	22%
Education and Training	10%	14%	12%	7%	11%		24%	0%	31%	28%	12%	4%	13%
Major Universities as Catalysts	17%	9%	13%	7%	11%	5%	10%	11%	6%	11%	8%	0%	9%
Cultural Support	31%	19%	24%	7%	11%	16%	10%	21%	6%	17%	8%	13%	15%



Entrepreneurial Ecosystems Around the Globe and Company Growth Dynamics 13

Section 4: Company Growth Accelerators and Growth Challenges for Early-stage Companies around the Globe

Sections 2 and 3 examined early-stage company growth through the lens of an eight-pillar characterization of an entrepreneurial ecosystem. This section looks at company growth from the perspective of individual company decisionmaking. Respondents to the online survey provided answers in their own words (as opposed to selecting from preset answers) to questions about the growth accelerators and growth inhibitors for their company. Exhibit 4-1 presents a categorization of 16 different growth accelerators and growth inhibitors developed based on prior research.⁴ Each of the accelerators and inhibitors cited by respondents were classified in one of these 16 categories. Exhibit 4-1 shows the respondents' top four of the 16 categories when grouped by continent, country and industry. The central focus of this section is the similarity in issues facing early-stage entrepreneurial companies across the globe.

Exhibit 4-1 shows that the same four categories of growth accelerator – market opportunity, top management, human resources and funding & finance – come first regardless of whether the respondents are grouped by continent, country or industry.

Market Opportunity

Victoria Seeds (Uganda) – full-line seed company: "The source of the initial idea was the observation that the majority of the yields achieved by Ugandan farmers were much lower than those realized at research levels – at times one third lower.... A government body was formed - the National Agricultural Advisory Services (NAAS) – to facilitate members of the private sector, such as ourselves, to go out and provide input to small farmers. The NAAS provided subsidies to farmers to allow them to demonstrate proof of concept and subsequently generate enough income to become self-sustaining. It was very exciting because the demand was there for growing improved seed. By incentivizing the private sector to participate, farmers adopted hybrid maize at levels that we didn't have before. Demand grew from just 100 metric tonnes per annum in 2004 to over 2,000 metric tonnes today. It was a huge improvement, and the policy environment was right."

Exhibit 4-1: Relative Importance of Growth Accelerator/Growth Challenge Categories

	By Continent (Exh. 4-2)		By Country	y (Exh. 4-3)	By Industry (Exh. 4-4)		
Categor y	%	Rank	%	Rank	%	Rank	
Market Opportunity	56%	1	49%	3	46%	3	
Top Management	48%	2	50%	1	48%	1	
Human Resources	42%	3	47%	2	44%	2	
Funding & Finance	36%	4	34%	4	42%	4	

Top Four Growth Accelerator Categories

Top Four Growth Accelerator Categories

Coloradi	By Continent (Exh. 4-9)			(Exh. 4-10)	By Industry (Exh. 4-11)		
Categor y	%	Rank	%	Rank	%	Rank	
Funding & Finance	52%	2	55%	1	56%	1	
Human Resources	53%	1	40%	2	45%	2	
Market Opportunity	32%	4	33%	3	32%	3	
Gov't & Regulatory	36%	3	27%	4	29%	4	

Categories of Growth Accelerators and Growth Challenges

Classification	Description
I	Market Opportunity – Customers & Competitive Landscape
11	Top Management/Board/Networks
ш	Human Resources/People/Organization Culture
IV	Funding & Finance – Cash Flow/Liquidity
v	Strategy/Business Model/Pricing
VI	Operations Management/Execution/Systems
VII	Marketing/Branding
VIII	Sales/Distribution

Classification	Description
IX	R&D/New Product Development/ Technology/Patents
x	Products/Services/After-Sales-Related
хі	Partnerships/Joint Ventures
хн	Acquisitions/Mergers
хш	Capital Markets/Financial Reporting
XIV	Legal/Lawsuits
xv	Government/Regulatory/Taxation/ Country Infrastructure
XVI	Macroeconomic/Social/Political/Events and Impacts

Human Resources

9F Group (China) – financial services:

"In order to maintain sustainable growth, we pay very close attention to our talent pipeline, making sure we develop and maintain a steady stream of people to turn to when it's time to hire. We build channels with major universities in Beijing and in other provinces to create a viable candidate pool and actively recruit via campus interviews. Currently, 98% of our company's employees have at least a Bachelor's degree, and 20% are graduates from top-tier universities in China. We have a particularly good relationship with Peking University as most of our top management are alumni of this institute."

Human Resources

Digitouch (Turkey) – digital marketing agency/affiliate marketing network:

"Our top problem in the company is human resources. It's actually my number one problem. We do have a full-time internship programme in which our employees get paid. Within the first two to three months, we try to identify if they are good for the start-up business or not..... One of the key problems that we see in any market, but much more in Turkey, is a lack of talent."

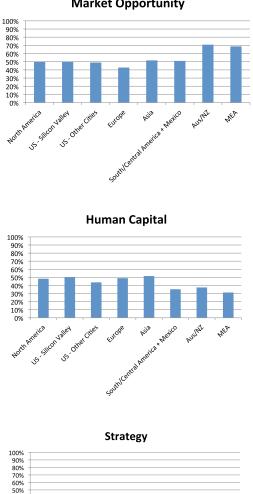
Funding and Finance

Heartland Payment Systems (USA) – credit card payments company:

"Funding was a bit of a rollercoaster ride. In addition to the US\$ 1 million that Heartland Bank invested to cofound the company, they provided about US\$ 7 million in debt financing to help fund our initial growth. In December 1999, they dropped the bomb that they had to withdraw all advances to non-banking clients before year-end, forcing us to pursue outside sources of capital, and fast. In the end, we sold one third of our merchant portfolio to a third party, and repaid the debt on 31 December. Needless to say, our relationship had changed, so we then undertook a management buy-out, in which I granted Heartland Bank rights to the cash flow from half of our merchant portfolio in exchange for their 50% ownership in the company. The environment was imperfect, but, with complete control over the business, it did enable Heartland to access the private equity ecosystem, which ultimately allowed the company to flourish."

Exhibit 4-2 presents the percentage of respondents across continents that cite a given accelerator category as one of the three major growth accelerators. The consistency across regions of the globe as regards the top four growth accelerators is readily apparent. The same finding occurs across countries and industries. There is therefore much similarity in which growth accelerators entrepreneurs across the globe view as important.

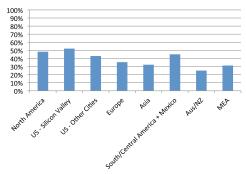
Exhibit 4-2: Relative Importance of Individual Growth Accelerator Categories by Continent



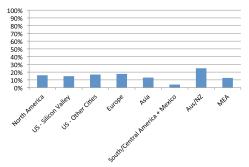
Market Opportunity

Top Management 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% NEP 1C8× Me 5. O^{tr} Silicor 5

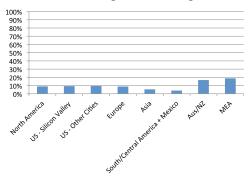


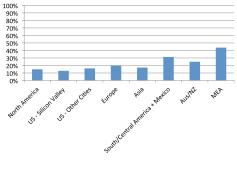


R&D and Technology



Marketing and Branding





Government and Regulatory

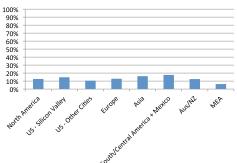


Exhibit 4-3 provides a word cloud for the top 40 words mentioned by survey respondents as growth accelerators. The top five words from our survey were "market", "customers", "funding", "companies" and "capital".⁵

Exhibit 4-3: Word Cloud for Company Growth Accelerators



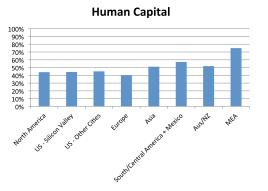
Respondents were also asked to indicate the "most important accelerators in building your revenues in countries outside your domestic market". Exhibit 4-4 provides a word cloud for the top 40 words mentioned as "growth accelerators beyond the domestic market". The top five words from our survey were "market", "customers", "local", "partners" and "products".

Exhibit 4-4: Word Cloud for International Company Growth Accelerators

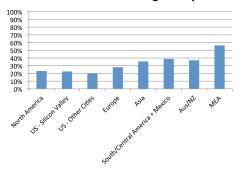


As regards growth challenges, the same categories - funding & finance, human resources, market opportunity and government & regulatory – appear in the top four regardless of whether respondents are grouped by continent, country or industry (see Exhibit 4-1). Exhibit 4-5 shows the percentage of respondents across continents that cite a given growth challenge category as one of the top three.

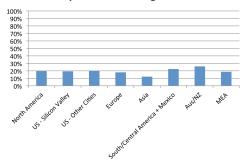
Exhibit 4-5: Relative Importance of Company Growth Challenges by Continent



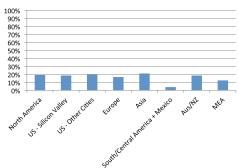




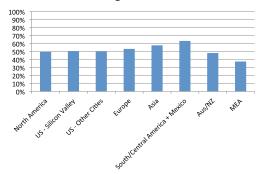
Operations Management



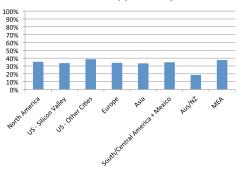




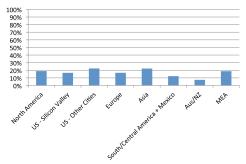
Funding and Finance



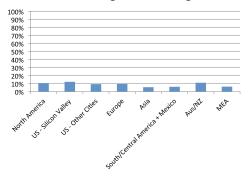
Market Opportunity



Top Management







Again, there is notable consistency across continents. This same consistency can also be seen across countries and across industries. As with growth accelerators, entrepreneurs in many parts of the world face a similar set of growth challenges. Exhibit 4-6 provides a word cloud for growth challenges. The top five words from our survey were "funding", "customers", "market", "companies" and "products".

Exhibit 4-6: Word Cloud of Company Growth Challenges

investors industry products technology cultural enough development cost high large cost

Exhibit 4-7 shows a word cloud for "the most important challenges in building international revenues". The top five words from our survey were "local", "customers", "market", "cultural" and "regulation".

Exhibit 4-7: Word Cloud of International Company Growth Challenges

distance fundinc custo risk SSUes competition travelbuilding staff trust nanaging language storeign technology companies Da ole resources government good different talent

The growth accelerator and growth challenge findings presented in this section reinforce the findings in Section 3 that entrepreneurs view accessible markets, human capital/ workforce and funding & finance as the three most important pillars of an ecosystem in terms of contributing to the growth of early-stage companies. This consistency when considering both the pillars of entrepreneurial ecosystems and company growth accelerators/growth challenges across various groupings and regions increase confidence in the reliability of these findings. new

Section 5: Large Companies as Leverage for Early-stage Companies: Navigating through the Pitfalls

Large companies can play many important roles in accelerating the growth of early-stage companies. This section develops information on the relationships between large corporations and entrepreneurs and their impact, using two key sources: (i) the online survey – respondents were asked for examples of productive relationships and of nonproductive relationships; and (ii) executive cases, in which the role of large companies is discussed – typically in response to questions about growth accelerators, growth challenges or high/low moments.

Credibility Enhancement

Galaxy (USA) – baking products:

"Building our croissant business with Williams-Sonoma has been great for both sides. We certainly couldn't have done it without them. They found the best croissants in the US, and we gained access to their millions of loyal customers. In fact, Oprah discovered our croissants in the Williams-Sonoma catalogue. We were fortunate that the orders resulting from our Oprah appearances all came through the Williams-Sonoma infrastructure (call centre, website, order processing system, etc.). We would have had an incredibly hard time trying to handle that type of volume ourselves."

Seven key areas were identified where productive relationships with large companies are possible:

- 1. Customer engagement early customers to accelerate growth
- 2. Credibility enhancement lighthouse/tentpole customers, brand display, references
- 3. Strategic investors and financing partners increasing financial resource capacity
- 4. Mentorship and advice insight into new markets and industry structure
- 5. Go-to-market partners distributors and resellers, access to outlets, logistics
- 6. Operating capability enhancement manufacturing, software, technology, know-how
- 7. Licensing leverage licensing start-up technology to enter a new market

Exhibit 5-1 provides example of quotations from the survey respondents that illustrate the "customer engagement" area. 69% of the early-stage companies in our online survey have large domestic companies as customers, while 43% have large companies in foreign markets as customers.

Notwithstanding many productive relationships, a large number end up in acrimony and are subject to high levels of frustration. Early-stage companies need to adopt an "eyes wide open" perspective both in negotiating with large companies and in executing on partnerships. There are many minefields, swamps, and choppy waters to navigate. Challenges are often reported to arise in the following seven areas:

- 1. Attracting attention attracting attention from large companies
- 2. Productively working together coordination and commitment from the large company
- 3. Value appropriation challenges associated with value creation and value capture
- 4. Maintaining focus defocused start-up companies having their attention and skills diverted
- 5. Imposed, not-so-hidden costs imposing direct and opportunity costs on start-ups
- 6. Predatory contracting and litigation lawyers/lawsuits undermine the progress of start-ups
- 7. Regulatory capture by large companies creating a nonlevel playing field

Exhibit 5-2 provides examples of the challenge of "attracting attention".

Exhibit 5-1: The Benefits of Customer Engagement

"We were able to secure a contract with a US\$ 50 billion chemical company that needed access to capacity quickly. We had the only equipment that could successfully meet their needs. This resulted in a substantial contract (greater than 50% of our initial business) during the first year of our operation, and we were able to negotiate favourable payment terms. As they wanted to enhance their throughput, the chemical company entered into an agreement to help finance the new equipment for us. It allowed us to approach banks with a guarantee from the chemical company. Good for the bank, good for us."

"We were one of the first aluminium can manufacturers in sub-Saharan Africa. When we came on stream with our first plant, our growth was greatly facilitated by having large companies as customers. Heineken, Diageo, SABMiller and Coca Cola were all enthusiastic early supporters. Their interest was in having access to domestic supply to simplify their supply chain and reduce their supply risk, even with pricing at import parity."

"A large European telco (largest in its original location and active in other locations) adopted our solution and concept and even forced all its affiliates and then its roaming partners to use it as well so as to interface effectively with their systems. Needless to say, this was great for the growth of our company."

"A huge hi-tech company integrated our solution into their suite of solutions. While this involved some integration and development from our technical group, which took a while, the result was that our sales really took off."

Exhibit 5-2: The Challenge of Attracting Attention – Getting on the Radar

"Without specific large joint customer opportunities, small companies waste astounding amounts of energy trying to gain their attention."

"I believe large companies are indifferent to start-ups, even to the point of not recognizing them as potential market competitors, and therefore have little or no role in early-stage firms. The reason is simple. Working with or against a startup simply cannot move the quarterly EPS needle."

"Early-stage companies are not part of the core business of a large company and, therefore, not a first priority. Large companies introduce very bureaucratic procedures and processes that are going to slow down the development of an early-stage company. You can end up with a situation of almost zero interest and focus."

"Some large construction companies/homebuilders are hesitant or very slow to start a business relationship with a new mortgage company. Some think that banks may remove funding lines from them for future projects if they work with us. Also, it is just easier for homebuilders to work with the banks as they have always done, and it seems hard to show them how a new approach to loan origination can add value for them and provide them with better business options in the future." "As a start-up, even though we were able to develop a product that was attractive to a certain large company, we could not qualify as a vendor because we had not been in business for three years and did not meet their minimum revenue requirements."

Riding the Wave with a Go-To-Market Partner BYP (Mexico) – painting company:

"One of the most important factors that fueled BYP's growth was the relationship with some key customers. One of our first clients was Sherwin Williams (the US headquartered Fortune 500 company specializing in general building materials) and we also started receiving orders from several major distributors early on in the company's history. We understood the significance of securing the key clients in the market, including, of course, Home Depot (the largest US retailer of home improvement and construction products). We had been trying to sell to Home Depot since they started operating in Mexico. After many attempts, we finally got a chance when their then supplier failed to deliver orders on time. The acquisition of a big customer like that is a game changer for a small company like ours.

Of course, sales growth is the great benefit of having a big company as a client. In our case, Home Depot is one clear example of such a customer. We have grown with them, as the number of their stores has almost tripled during the years we have been serving them. In some aspects, we have structured the company around their needs and we were proud to receive a "Vendor of the Year" award in 2009, a recognition given to only one supplier each year.

But there are also other great benefits of having a large client. Higher requirements in product quality (both level and consistency), image and packaging, logistics and service force us to become a better company. It raises the bar for all our operations at every level. For new products, having a certain guaranteed volume allows us to introduce a new product line with a lower risk, and then offer it to other customers.

Of course, it also poses some challenges and problems. Big companies have strict policies and mistakes are not easily forgiven. Moreover, there is a risk in having a large share of sales in one client, as investments are made over the years to serve it better and the health of the company – at least in the short run – could be at risk if we were to lose the client."

Challenge of Maintaining Focus

Cupola (UAE) – credit card processing:

"Our biggest disappointment was the collapse of a potential joint venture in Saudi Arabia. We spent over 18 months (2010-2011) identifying, nurturing and negotiating with a potential partner to set up an integrated card personalization centre and a contact centre. The failure was caused by two factors. The first was that, although the joint venture partner had promised to provide business from their own businesses and they had a lot of clout in the market, this value-add was never quantified or agreed upon explicitly. The second factor was the restriction on visas for foreign workers imposed by the authorities for our type of service industry."

Section 6: The Growth of Entrepreneurial Ecosystems: Lessons from Buenos Aires and Istanbul

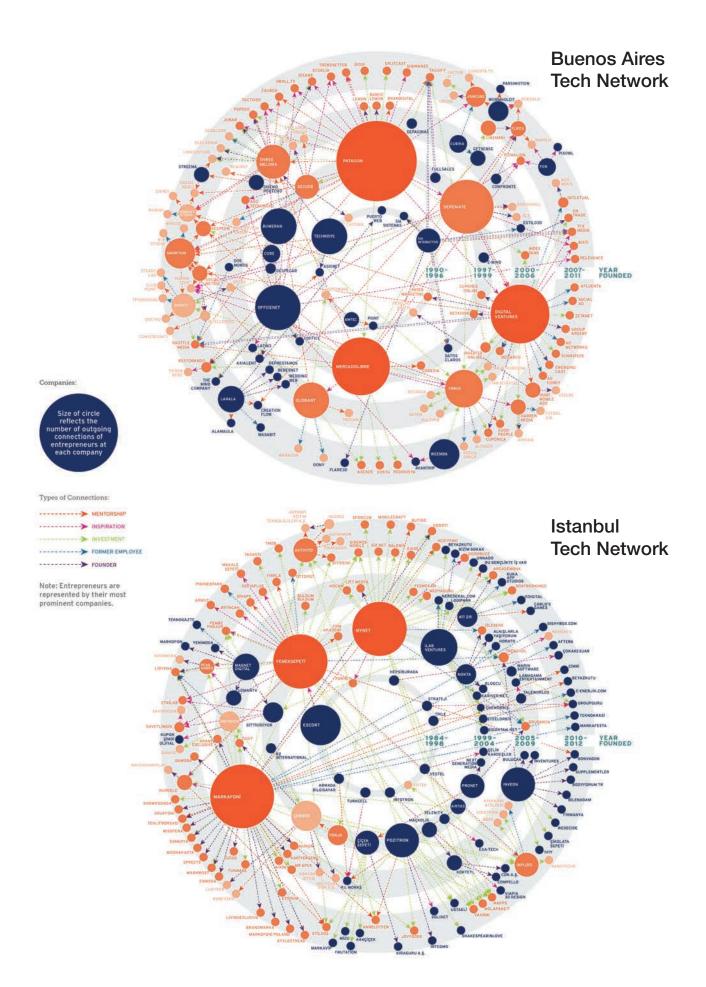
Entrepreneurs in an ecosystem can play multiple important roles. Endeavor, a non-profit organization, has much experience in promoting these multiple roles in many parts of the world. Starting in New York in 1997, it opened its first regional offices in Argentina and Chile (1978), followed by Brazil and Uruguay (2000). Subsequently, it has expanded into South Africa (2003), Colombia and Turkey (2006), Egypt, Jordan and India (2008), Lebanon and Dubai (2011), and Indonesia, Saudi Arabia and Greece (2012). Five important roles of "high-impact entrepreneurs" that Endeavor has tracked and helped facilitate for entrepreneurs starting and scaling an early-stage company are:

- 1. Inspiration inspiring other individuals to become entrepreneurs;
- 2. Founder crucible attracting and developing employees who subsequently found other companies;
- Employee crucible attracting and developing employees who subsequently become employees of subsequent early-stage companies;
- Investment source using acquired wealth to invest in subsequent new entrepreneurial ventures;
- 5. Mentor role providing key support such as advice, encouragement and access to a network.

Exhibit 6-1 shows the evolution of entrepreneurial networks in Buenos Aires and Istanbul. The full report provides a timeline for the evolution of these networks, with most detail on the Buenos Aires network. Key lessons from Endeavor's extensive role in and observations of the growth of ecosystems in each of these regions include the following:

1. Entrepreneurial ecosystems are not created overnight. For example, the Buenos Aires technology entrepreneurial ecosystem took its first steps in the mid-1990s, and it was only 15 years later that a rich network emerged. This observation is consistent with other regions. Silicon Valley evolved over a number of decades.

- 2. A few people play a central role. Networks require a few nodes that activate and connect to the rest of the in-network players. In the case of the Buenos Aires network, entrepreneurs from three companies account for a significant share of the network activity.
- 3. Infrastructure initiatives such as incubators, accelerators, large companies, investment funds and service suppliers are complementary. They will not create a network on their own, but they will provide the mechanisms for these high-impact entrepreneurs to realize their importance, activate the ecosystem and multiply their impact. They should be encouraged to become investors, mentors and board members to leverage the human capital that they have accumulated through their experience and their network.
- 4. Governments should design policies that facilitate the growth of entrepreneurial ecosystems by empowering private actors rather than public ones. Government-run incubators and venture funds have a mixed track record, and typically do no better than private ones in picking winners and losers. Governments can support opportunities for international studies, rational investment and bankruptcy regulations, and fundamental scientific research (along with the pathways to commercialization). These policies, more than direct intervention, make it more likely that the most important nodes will realize their entrepreneurial visions, find business success and stay engaged in the ecosystem as mentors, advisers and investors.



Section 7: The Role of Government and Regulatory Policies in Entrepreneurial Ecosystems: Growth Accelerators or Growth Inhibitors?

Governments and regulatory bodies can play an important role in accelerating or inhibiting the growth of many companies. This section illustrates and examines many of the diverse aspects of the relationship between the different arms of government and early-stage companies. The survey respondents provided input on two questions relating to the accelerator/inhibitor role of governments and regulatory bodies:

(a) Accelerator question: What aspects of the government policy/regulatory environment in your country/region were most beneficial to the growth of your company?

Exhibit 7-1 presents a word cloud for the top 40 words cited in response to the accelerator question. The top 12 words and their percentage of the top 40 words were: "tax" (11.0%), "companies" (7.2%), "regulation" (6.8%), "ease" (6.2%), "business" (4.6%), "government" (3.8%), "market" (3.8%), "incentives" (3.3%), "support" (3.1%), "policy" (3.1%), "capital" (2.7%) and "law" (2.7%).

(b) Inhibitor question: What aspects of the government policy/regulatory environment in your country/region were most detrimental to the growth of your company?

Government Regulations as a Growth Accelerator for Human Capital

Bubbly (Singapore) – mobile social networks and messaging: "Other aspects that really helped us include the very efficient Singapore government – where I could literally call any MP and get right to the top to get an answer or discuss how the system should work. They gave us a US\$ 1 million grant early on to subsidize our engineering hiring and then another US\$ 1 million equity investment to keep our incentives aligned longer term. They have also made it possible for us to recruit from all over the world – not just in the small labour market of Singapore. We have nearly unlimited visas, as long as we're hiring extremely high calibre engineers. We now have an engineering team from 20+ different countries and it's literally the best, by far, in South-East Asia. "

Exhibit 7-1: Word Cloud for Government/Regulatory Policies as an Early-stage Company Growth Accelerator



Political Naivety of Early-stage Companies

Reputation.com (USA) – online reputation and privacy products: "Silicon Valley does not think enough about Washington DC. It appears you have to get to behemoth size to afford getting involved there. We have seen no interest from DC in getting input or advice from us on issues of reputation or privacy, in which we have built up an expertise.... We haven't been good at influencing regulators and policy-makers. We have had this notion that we are somehow above it, beyond it. That's a big mistake." Exhibit 7-2 shows the comparable word cloud for the inhibitor question. The top 12 words and their percentage of the top 40 words were: "tax" (15.9%), "regulation" (11.6%), "policy" (4.1%), "companies" (4.0%), "business" (3.8%), "government" (3.8%), "laws" (3.2%), "cost" (2.8%), "complexity" (2.7%), "capital" (2.2%), "requirements" (2.2%) and "high" (2.2%).

Exhibit 7-2: Word Cloud for Government/Regulatory Policy as an Early-stage Company Growth Inhibitor



funding laws business government industry financial

services market good big high capital Cost slow make Companies bureaucracy state time foreign process many products POICY local complexity requirements tape Support red

Governments and regulatory bodies can also play an important role in either strengthening or weakening the three pillars of entrepreneurial ecosystems that entrepreneurs view as most important to the growth of their companies: accessible markets, human capital/workforce and funding and finance. By way of example, Exhibit 7-3 presents quotations that pertain to the human capital/workforce pillar.

The survey responses in areas related to government/ regulatory policies revealed many areas where entrepreneurs believe that government/regulatory policies were counterproductive to the growth of their early-stage companies. There was a high frequency of "red code words", i.e. words that have a negative connotation as regards an early-stage company's relationship with government or regulatory bodies. Exhibit 7-4 provides a subset of the many quotations that have "red code words" relating to big company capture, bureaucracy, complexity, inconsistent enforcement, lack of clarity, lack of transparency, regulatory burden/overkill and regulatory uncertainty.

Government Policies that Limit Market Entry

SinoCare (China) – hospital management: "China's healthcare industry is subject to strong government regulation. Prior to 2007, there was only limited access for foreign capital to China's healthcare industry, which was a major challenge for us given our foreign background. As a result, SinoCare did not experience strong growth momentum in the early days. The situation changed after 2009 when the State Council launched a new policy to encourage greater private and foreign capital involvement in the nation's hospitals and clinics as part of a health system reform programme aiming to make affordable healthcare available to the general public. Under the new policy, foreign investors can now take up the majority shareholding of a hospital, which enabled us to tap into more hospitals and subsequently accelerated our growth."

Panel A: Growth Accelerators

- "Supply of well-educated workforce" (France, Web-based services)
- "Availability of strong technical talent in Monterrey" (Mexico, internet travel)
- "Investors available with specific industry knowledge and experience" (Sweden, transport)
- "Easy to bring in anyone from anywhere in the world on a visa" (UAE, fashion retail trade)
- "Limits in California on employee non-compete clauses facilitates labour mobility" USA, venture capital)
- "Ability to get top-notch accountants and lawyers who will provide services at big discounts for anticipated future relationships" (USA, investments)
- "Government reimbursement for training in growing organizations" (USA, Web hosting)

Panel B: Growth Inhibitors

- "The granting of share options is treated as employee income at the time the option is granted" (Australia, electricity storage)
- "Immigration laws are a hurdle to recruiting foreign talent" (Austria, medical devices)
- "Archaic tax and labour structures" (Brazil, IT sales force management)
- "Rigid employment laws make it very difficult, costly and way too long to recruit the necessary staff" (France, consulting services)
- "Employment law does not allow us to hire and fire freely" (France, electronics)
- "The difficulty of providing employees with stock options given the current regulatory framework" (Mexico, retail consumer products)
- "Some aspects of social insurance are cumbersome for HR" (Switzerland, software)
- "Immigration policies prevent the free movement of qualified people" (UK, financial advisory)
- "Difficulty in getting work visas (H1-B) for foreign engineers" (USA, utilities)
- "Visa limitations on allowing foreign talent to stay in the US" (USA, venture capital)
- "So many rules and regulations. Not explained clearly enough. Not stable enough. Immigration policies we cannot hire the people when we want them and bring them here." (USA, mobile tech company)
- "It's sometimes scary to hire employees because of all the laws you have to comply with. Just one employee lawsuit in our early years could have killed the company." (USA, travel services)
- "Willingness to tolerate frivolous lawsuits around discrimination if I hired someone and then fired them six months later how can that be discrimination?" (USA, enterprise software)

Exhibit 7-4: Government/Regulatory Policies as a Growth Inhibitor for Early-stage Companies: Living in the "World of Red Code Words"

Big Company Capture

- "Government purchasing policies are biased towards big companies with financial strengths in their selection criteria, bid bonds and performance bonds" (France, consulting services)
- "Cash flow management difficult with a regulation defined to fit large and stable companies' needs" (Spain, engineering services)
- "Policies favouring the market incumbent that has a monopoly of the market and close ties to the government" (United Kingdom, port logistics)

Bureaucracy/Red Tape

 "Red tape in Greece is impossible. Forming a company that was a subsidiary of a company with US investors was a nightmare. It imposed impossible red tape deadlocks in the early stage."

Collateral Damage

- "Anti-crime laws affect legitimate business" (Mexico, real estate)

Complexity

- "Complexity and cost of creating a business" (Italy, online travel agency)
- "Complex, costly tax regimes" (Spain, basic telecom services)
- "The myriad of state-level filing requirements... this is an unimaginable amount of non-value added work for a start-up. I'd be happy to pay 20% of my profits to a 'state fund' that got divided between everyone as long as I could avoid the insane overhead of 50 different requirements." (USA, solar)

Entrepreneurial Company Naivety or Ignorance

- "Regulators do not have an entrepreneurial mindset. They are more oriented towards big business." (Japan, pharmaceuticals)
- "General ignorance about the entrepreneurial process" (USA, private equity)

Inconsistent Enforcement

- "No consistent enforcement of laws creating a non-level playing field" (Singapore, venture capital)

Lack of Clarity/Opaque/Confusing

- "Lack of clarity on taxation of income earned by foreign companies in India" (India, private equity)
- "Lack of clarity regarding the application of laws and regulations. Tax code is burdensome." (Mexico, self-storage)
- "Difficulty and consuming sales tax regimes" (USA, merchant card processing)

Lack of Transparency

- "The government absolutely must do more to promote transparency and competition in the real estate industry" (USA, real estate)

Litigation Swamp

 "There is no penalty for filing a losing lawsuit. Lawyers always have an incentive to file and force a company to settle over everything, no matter how small. If we were in a legal climate in which the loser was forced to pay all costs, and a regulatory climate that did not penalize small to medium-sized companies that cannot afford batteries of compliance attorneys, we would be able to grow twice as fast." (USA, finance and investment)

Non-Growth Mindset

- "There is an anti-oil & gas posture. Our senior government officials are a bunch of 'brake-tappers' who seem to do everything they can to detract from growth rather than help to accelerate it." (USA, oil and gas exploration)

Redistribution Mindset

"Operating in France is like operating in a place where the inmates are running the asylum. The marginal tax rate is now 75%. No great surprise that wealthy entrepreneurs start to leave the country." (United Kingdom, luxury vacation rentals)

Regulatory Burden/Overkill

- "Sarbanes-Oxley killed the IPO market. It's too expensive to keep up with the big guys. Too much regulation. It has grown to
 obscene levels. On a recent DARPA proposal we had to, among other things, certify that we weren't doing business in Sudan.
 Really!" (USA, communications networks)
- "The regulatory climate has put the burden of proof of innocence on financial institutions. Rules issued by FINRA and SEC have caused us to create dozens of compliance and legal roles." (USA, investment advice)

Time Delays/Lengthy Approval Processes

- "Environmental licenses very slow to get. No centralized bureaucracy have to deal at federal, state, city and union level." (Brazil, animal feed)
- "IRS regulations were not settled for several years" (USA, professional services)

Regulatory Uncertainty/Changing Regulations

- "Uncertainty in future revenue incentives and support" (UK, renewable energy)
- "The constant changing of federal tax regulations and the inability to predict the future" (USA, electricity services)
- "Uncertainty in future policies, sometimes even retroactive adjustments" (USA, solar power)





Executive Case Study – Capillary Technologies

Overview

Capillary Technologies provides easy-to-use, high-ROI cloud software solutions that empower retail businesses to engage intelligently with their customers in real time through mobile, social, online and in-store channels. With a vision to build the first billion-dollar product company out of India and to become a major player in the booming mobile and retail sectors, the company got its start by providing businesses in emerging economies (mainly India and South-East Asia) affordable access to state-ofthe-art customer relationship and loyalty management technology. By emphasizing paperless mobile technology, real-time analytics and consumer engagement, marketing life cycle automation and sophisticated, innovative analytics that surpass capabilities of much larger, more expensive and complex customer relationship management (CRM) solutions, Capillary Technologies quickly attracted the attention of large global retail brands - and venture capital. Rapid growth has enabled the company to build out a complete, end-to-end software-as-a-service (SaaS) CRM platform, encompassing customer engagement, clienteling, loyalty, big data analytics and social CRM suites. Capillary Technologies now serves over 140 major global brands, including Pizza Hut, Puma, Jack Wills, Marks & Spencer, Benetton, Courts, Nike and Nokia, across 10,000+ stores and over 70 million consumer interactions. Clients have attributed up to 10% growth in same-store sales to Capillary Technologies' solutions. Capillary Technologies has received numerous awards, including the Gartner 2013 Cool Vendor award and Marketing Magazine's CRM & Loyalty Silver Agency of the Year Award 2013, and was also named one of Forbes' 12 Hidden Gems. Capillary Technologies is backed by prominent institutional investors Sequoia Capital, Norwest Venture Partners and Qualcomm Ventures.

Timeline/Key Events

Aug 2008

Receives US\$ 30,000 seed loan from Entrepreneurship Cell, IIT Kharagpur

Aug 2009

Wins first client – Indus League (Future Group). Launched Mobile CRM and Loyalty offering

Sep 2009

Obtains US\$ 500,000 in funding from Qualcomm Ventures (QPrize – India Winners & Global Runners Up) and angel investors

Mar 2010

Launches instant in-store cross & up-selling for retail brands

Feb 2011

Wins first international client - Store 21 (United Kingdom)

May 2011

Launches Capillary Customer Intelligence, Big Data Analytics & Campaign Manager

Jan 2012

Launches Capillary Lifecycle Marketer, predictive intelligencepowered customer engagement

Jul 2012

Launches Capillary Social CRM for better social conversations, engagement and monetization

Sep 2012

Raises US\$ 16.5 million in series A funding from Sequoia Capital and Norwest Venture Partners

Dec 2012

Wins coveted awards: 2012 Red Herring Top 100 Global, Forbes' 12 Hidden Gems and Techcircle's Top 10 SaaS Companies India

Jun 2013

Named Gartner 2013 Cool Vendor in India, wins at Marketing Magazine's Agency of the Year Awards and named one of SiliconIndia's Top 10 most promising ventures founded by Indians

Jul 2013

Powers 10,000+ stores for 140+ leading consumer brands, engaging 70 million consumers across 16 countries; 11 offices globally employing staff of 15 different nationalities

Aug 2013

Launches Capillary Clienteling, store associate task management & customer experience management solutions

Quotations

Aneesh Reddy is co-founder and CEO of Capillary Technologies. A visionary who believes that advances in technology lead to significant advances in business value and ROI, Reddy works with enterprise consumer businesses to help them put the right communications for the right products into the hands of the right customers at the right time. He is a featured entrepreneur in leading publications such as Forbes. Harvard Business Review and The Economic Times. Reddy is a frequently featured expert at global retail, marketing and technology forums and premier educational institutes such as Wharton and the Indian School of Business. He participates in discussions around entrepreneurship and major technology trends such as cloud, mobile, social and big data. He is also an early-stage investor in various ventures including Tynker, Studypad Inc., ANTfarm and Verious Inc. Reddy holds a Bachelor's degree in Manufacturing Engineering from the Indian Institute of Technology, Kharagpur (IIT KGP).

Krishna Mehra is co-founder & CTO of Capillary Technologies, where he drives product vision and strategy for the company. As a technology evangelist, Mehra believes that true innovation happens at the confluence of technology and business. At Capillary, he has created powerful products that address large gaps in retail customer engagement and enable hundreds of consumer-facing businesses worldwide to embrace cutting-edge paradigms – including customer engagement technologies based on real-time analytics integrated mobile and social media.

Q1: What was the source of the initial idea, and how did that idea evolve into a viable growing company? How did it change over time?

Reddy: "Capillary was founded during the global economic recession (2008-2009) in the belief it could help emerging economy retailers engage with customers better using CRM technologies comparable in sophistication to those used in more developed economies but made both simpler to use and less expensive through cloud hosting. Unlike many first-time entrepreneurs who wait to validate their milliondollar ideas, we picked two areas - mobile and retail - which were both 'next big things' in India at the time. We spoke to many Indian retailers about their critical business problems and identified that even large retail chains had minimal understanding of why customers were not returning to stores to make additional purchases. E-commerce firms have the advantage of knowing their customers well and we wanted to bridge the knowledge gap for traditional bricks and mortar retailers. This turned out to be a game changer for our earlystage customers and was a key growth driver for Capillary.

Two aspects of the company stood out:

 We carefully selected angel investors who could add value as the company grew, bringing on board as many as 17 angels over a period of three years, who were all experts in their own fields, including Rajan Anandan, Head of Google India; Venkat Tadanki, CEO of Secova; and Harminder Sahni, MD at Technopark (previously KSA Technopark). 2. We focused assiduously on both client and investor acquisitions by selling assertively through relationships and demonstrating our ability to win large companies as clients.

As Capillary began delivering amazing results in tough economic conditions, our Indian clients such as Pizza Hut, Puma and so forth began referring us to their counterparts in other markets such as Singapore, Malaysia and the UK, enabling us to scale up globally. The key to Capillary's success has been our ability to keep delivering new products that increase our customers' sales revenues and their marketing ROI, and to ensure the continued usefulness of our product suite to customers."

Mehra: "We started on this journey with a consumerfocused product search and coupon idea. We wanted to do something that combined mobile with retail. Mobile was growing rapidly in India, and retail was beginning to happen. Our first idea was to launch an SMS-, locationbased discount search business. However, our early client prospects told us that, while discounts are fine to attract consumers, retailers really wanted more capabilities for understanding, retaining, nurturing and engaging personally with their customers. We shifted our focus drastically, from building technology for consumers to building technology for businesses that would help them to extract more value from consumers using a cloud computing model. Over time there have been many changes to our technology – we have added major product streams, including social, big data and instant engagement."

Q2: What were the major growth accelerators for your company in the early years of high growth?

Reddy: "*Market focus*: We started Capillary not with a 'Big Idea', but rather with a vision of creating the first billion-dollar SaaS solution company out of India with an extraordinary passion for being leaders in an entrepreneurial ecosystem. That helped us enormously because, instead of fixating on a single idea, we took our direction from market forces and found a unique focus in results achieved with early-stage clients. We were acutely aware of the exponential growth potential in India's yet-to-be-organized or technologyenabled retail sector. Our vision evolved to accelerating retail growth via personalized and targeted customer engagement.

Availability of clients: Since our value proposition was built on the core problem of driving sales during an economic recession, we were able to quickly convince top Indian retailers such as Pizza Hut, Puma, Madura Garments, Raymond and so forth to come on board as EAA customers. Our 'land and expand' strategy – opening accounts with three month proof-of-concept trials – worked tremendously well. Also, our well connected investors and advisers delivered some of our best long-term customers.

Business model: Within months of launch, our clients were seeing good success with Capillary, which enabled us to build a fairly straightforward business model – a hosted SaaS, pay-as-you-go solution, requiring no upfront investment and placing a minimal burden on resources. A retailer, for example, might agree to pay US\$ 300-500 per point of sale per month based on solutions chosen, without any prohibitive hardware or other resource costs. We empower clients to experiment with our platform in a few stores for a three-month pilot engagement and then extend use of the software to more stores and for longer durations, depending on outcomes.

Funding & client references: We received the QPrize recognition from Qualcomm Ventures and the US\$ 500,000 from angel investors at the right time. This helped us to invest substantially in our initial product offering, while the Qualcomm brand association made us a household name. Our international expansion started quite rapidly as domestic clientele referred us to their offshore counterparts. For example, Pizza Hut India led us to Pizza Hut accounts in Singapore, Hong Kong, Thailand and the Middle East; Puma India connected us to Puma businesses in Singapore and Malaysia; Robinsons Singapore got us into their Malaysia business; and Alok Industries in India took us to the UK and helped us to obtain Store Twenty One as our first international client."

Mehra: "The Capillary team: From the very beginning we focused on building a strong, empowered organization. We deliver exceptionally high-quality work, which differentiates us from our competition and fuels our growth. Most of our early hires were people we knew personally either from previous workplaces or through collaboration in robotics, entrepreneurship and other IIT KGP clubs. Hence, we knew the passionate performers on our team even before we hired them. Today we employ over 150 highly capable technology, R&D and analytics professionals holding degrees from premier technology and business institutions across India. This has helped us lay an extremely strong foundation for our technology, R&D and analytics functions: a highly capable team, which has expanded without the need for big budgets and through personal connections alone, which has always been our key strength. With almost 400 employees in total, we have virtually zero attrition, especially among staff at the mid-senior level and above. Capillary's core team has always believed in giving complete freedom to its team members; this keeps our talent engaged and focused on innovating at all times."

Q3: What role did key aspects of the entrepreneurial ecosystem surrounding your company play in the growth of your company?

Mehra: "The tactical shift in operations: We started the company in Kolkata, a Tier 2 city in India that was in the early stages of becoming an IT destination. We quickly realized, however, that Bangalore – India's Tier 1 IT hub city – would provide a better ecosystem in which to build our company. Indeed, moving to Bangalore turned out to be an important strategic move for our company since it gave us access to the right investors and advisers. It was in Bangalore that we learned of Qualcomm's Q prize at an open coffee club and later went on to win the prize, providing a major boost for our nascent company. We also made connections with Qualcomm Ventures, which later invested in Capillary.

Availability of talent: India has one of the strongest technology talent pools in the world, and since Bangalore is

home to most of the country's R&D centres, there was an abundance of talent available to help build our product suite. We built a strong technology and R&D team by acquiring top talent from noted companies such as IBM, Microsoft, Oracle, Salesforce, Dunhumby, Fair Isaac, Box.net, Infor and Dell, while also attracting fresh talent from the world famous IIT and IIM educational institutions."

Reddy: "The Great Recession: 2008 was quite an eventful year for Capillary. Just as Lehman Brothers was filing for bankruptcy, we were busy procuring a US\$ 30,000 loan from our alma mater IIT KGP to start our company. The recession came as an unexpected boon for us – we did not have to pay premium wages to attract outstanding talent and we got great discounts on major upfront investments. We were also able to position our solutions as a good recession strategy: increase share of wallet, sell more high-margin items, cross-and up-sell more assertively, identify and win back lapsed customers, convert new customers to repeat business and so forth. We had a winning value proposition amidst difficult economic conditions.

Largest series A round: With all we had going for us, Capillary was able to raise the largest series A funding for Indian product start-ups (US\$ 16.5 million) from leading institutional investors Sequoia Capital, Norwest Venture Partners and Qualcomm Ventures. These firms provide great advisory services and have helped our leadership team to acquire amazing confidence, to build ambitious growth plans for international geographies and to fund accelerated product development.

Moving HQ to Singapore: Singapore is becoming the Silicon Valley of Asia; start-ups are popping up all over, attracting substantial investment wealth. Investors, shareholders and entrepreneurs are all realizing Singapore's advantages, experiencing fast growth and gaining entry to Asia's untapped developing market economies. Favourable regulations and extensive government support for startups made Singapore a very attractive choice for our new corporate HQ location in early 2012."

Q4: What key aspects of the entrepreneurial ecosystem surrounding your company that were absent (or existed only in a weak form) created the greatest challenges for growing your company? Please describe and discuss how you met/ were impacted by these gaps in the ecosystem and their resultant challenges?

Reddy: "In 2008, India and the rest of the world were experiencing economic recession – not a very encouraging environment in which to start a business. However, we saw this as an opportunity rather than a hurdle. We bootstrapped for the first three years and functioned with very little funding because the investors were cooperating and customers were willing to pay. In the early years, one of India's largest venture capital firms wanted to invest in Capillary, but they also wanted to change our business model to focus on consumers. Our core team believed firmly in our vision and the direction in which Capillary was moving. We turned down the investment offer and, despite limited funding, grew rapidly over a very short time span by sticking to our focus areas. Another prohibiting factor was friends and family and the societal mindset in general. The start-up scene in India was very young; most people were willing to work only for large corporations that offered stable careers with job security, which made it difficult early on to attract the right people. Even when our top candidates were convinced to join Capillary, peer and family pressures to settle down and avoid risks caused many to back away from the opportunities we offered. The solution we found was to nurture talent rather than acquire it. Instead of focusing on job descriptions, we focused on people, which led to outstanding early results. Now, as we scale up, we are bringing on board senior leaders across all departments to drive the next phase of growth for Capillary. We intend to invest significantly in the professional and personal development of the people who work for us."

Mehra: "In the early stages, we faced a lot of infrastructure and regulatory challenges, as is the case for most entrepreneurs. But our focus on cloud technology helped us to grow easily and to offer substantial value to customers, while also maintaining great operating margins. But we did spend a lot of our time doing things that were not adding value, as we were part of the first wave of young first-time entrepreneurs in a country still bound by legacy corporate environments and no successful history of product technology companies."

Q5: At what stage did you invest significant resources seeking to grow your company internationally/beyond your domestic country or region? What factors were pivotal in deciding when to seek growth internationally and where to seek that growth?

Mehra: "After successfully rolling out our solutions for Indian clients, stabilizing our client base and increasingly carving out niche leadership positions domestically, we decided to investigate neighbouring markets. We observed that retailers in regions such as South-East Asia, the Middle East and Western Europe were facing similar problems and using solutions and technologies that were far behind best in class. We knew our solutions could help these businesses and were able to make strong business cases around potential revenue opportunities. Early successes in international markets inspired us to dramatically accelerate our offshore market explorations."

Reddy: "After our series A funding round, we decided to invest significantly in international markets. For some of the early markets into which we ventured, for example the United Arab Emirates and the UK, it took a long time to deliver results and cost our company millions. Investing in those markets was a very bold move for us, but we stood by our decision and, by the time Capillary started operations in Singapore, our international businesses had begun generating significant revenues and looked extremely promising. In the early stages, much of our R&D investment went to preparing our products for global markets. We started slowly receiving proactive inquires from international accounts and understood there was a strong market for our products globally. Our first few international clients came as references from existing successful clients in India. Those early experiences gave us the confidence to quickly scale offshore operations."

Q6: What were the biggest challenges in building growth internationally? How did you meet or adapt to those challenges?

Mehra: "We initially found it difficult to build sales presence in international markets. For a specialized industry like ours, it is essential to attract sales talent that can build the company's brand with their existing know-how and business networks, and are passionate about how entrepreneurial workplaces thrive. Since we were looking at three large potential markets - South East Asia, Western Europe and the United States we had to be careful not to spread our resources too thinly. What has worked well for us is the three markets approach - every year we decide to open three new territories. First we stabilize the territories, put our teams in place and acquire at least five early-stage clients rapidly, and, in parallel, invest aggressively in the three markets we opened the previous year and that have now stabilized. Markets like Singapore, the United Kingdom and the United States are showing great results for us with such a focused expansion."

Reddy: "One of the biggest challenges Capillary faced was a lack of brand awareness outside India, which made it difficult to generate new business leads. And while our Indian clients helped us move to international locations through word of mouth, this was not a model for fast growth. We solved the problem by creating an inside sales team for lead generation and a powerful outbound sales team operating out of India. While we had always used a push sales format in India, we found this did not work well in western countries. We realised western retailers were looking for more consultative approaches. We also found a large market gap; there were plenty of very expensive CRM solutions aimed at the Walmarts and Tescos of the world, but far fewer serving lower enterprise and mid-market retailers. We positioned our Intelligent Customer Engagement[™] suite, which combines CRM, big data analytics and campaign automation, to serve these neglected markets in a cost-effective, value-driven manner.

Another obstacle was hesitancy among large retail brands to work with a very young, seemingly inexperienced team. We overcame this hesitancy with a highly effective 'land and expand' approach, initiating engagements via small, high-ROI pilot projects to prove the efficacy of our products and to close increasingly large deals with world-famous brands. Over time, as we have worked with more than 140 retail brands around the world, we have developed deep retail trade expertise and extensive intellectual property, which has become a unique selling proposition for us with larger accounts."

Q7: What major role, if any, did key aspects of the ecosystem in the country (or countries) you first sought international growth either promote or impede your ability to grow in those international markets?

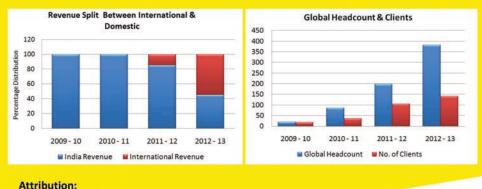
Reddy: "Expanding to international markets had a great impact on how our company functioned and made decisions. As a young start-up, we followed the Jugaad (frugal) innovation style, making short-term fixes under tight deadlines driven primarily by clients' whims and priorities. That made it difficult for us to stay focused on our long-term product development vision and may have cost us some growth. As we became more internationally driven, we had to drastically change our development and service delivery style, aligning with our longer-term business strategy and making a strong commitment to long-term planning, effective project management and reflective decision-making - taking time but delivering high-quality work by agreed dates.

Our international expansion has also enabled us to bring on board industry veterans from the CRM, analytics and consumer loyalty domains, a group of experts to which we did not have access in our domestic market and who have made our corporate portfolio guite strong. Now we have the right capacity to tackle large accounts and win massive deals all around the world."

Q8: Seeking international growth often has both high moments and dark (low) moments. Briefly describe one high moment and one dark (low) moment in seeking international growth.

Reddy: "High moment: The highest moment for us, so far, was winning our first international client, Store Twenty One in the UK. It was an important milestone in our history and we look upon the accomplishment with great pride. It had a dramatic impact on the way we run our company and completely transformed our long-term business plans. What followed Store Twenty One was a series of early international wins. I still remember one of the deals we won, which was at five times the market pricing and one of our first engagements in a new region and taught us a great deal about how to compete with established competitors without compromising on price. Today, we are not less expensive than contemporary competitors but we do deliver much greater value, faster and with less effort.

Low moment: We have experienced great learning on our journey into international markets. For example, sales cycle times were much longer than we had expected in early UAE and UK market ventures. We spent millions and waited months for decisions to be made. It took time for us to figure out that we needed a combination of stable lead generation, steady filling and strong management of our opportunity pipelines and dedicated brand building to establish our credibility in new markets. Patience and how to make decisive, smart manoeuvres in complex sales processes are two things we have learned along the way."



Prepared by George Foster and Sandy Plunkett

Illustrative Executive Cases

- 1. 9F (China) financial services company
- 2. Capillary Technologies (India and Singapore) *company* specializing in cloud-based software for customer engagement
- 3. Interpark (South Korea) online shopping mall market
- 4. PCH International (China and Ireland) provider of consumer electronics products
- 5. d-Light (USA) manufacturer and distributor of solar light and power products
- 6. Wildfire (USA) social media marketing platform
- 7. Movile (Brazil) mobile content company
- 8. Arteris (France and USA) provider of semiconductors
- 9. Freelancer.com (Australia) global marketplace for outsourced services
- 10. TaKaDu (Israel) providers of software to promote efficient water use
- 11. Taste Holdings (South Africa) vertically integrated franchiser with strong brand focus
- 12. Victoria Seeds (Uganda) *full-line seed company*

(The executive cases shown above include in-depth interviews with the founder or Chief Executive Officer of each company and can be found online at www.weforum.org.)

The full report also includes Executive Cases for the following companies:

Abacus (Pakistan) – professional services company

Aemertis (USA and India) – renewable fuels and biochemical company

AMC Juices (Spain) – *chilled fresh juice processing company* Bubbly (Singapore) – *provider of mobile social networks and messaging*

BYP (Mexico) – paint applications company

Cupola Group MEA (UAE/Dubai) – credit card processing company

Delicious Bakery (Egypt) – provider of high-end bakery products

Digitouch (Turkey) – *digital market agency/affiliate marketing network*

Galaxy Desserts (USA) – manufacturer of baking products

Green Biologics (United Kingdom) – *industrial biotechnology company*

Hangzhou Goudian Dam Safety Engineering (People's Republic of China) – provider of high technology products for hydropower dams

Heartland Payment Systems (USA) – credit card payments company

Inspirato (USA) - destination club for luxury travellers

LoopUp (United Kingdom) – provider of cloud product for business conference calling and online meetings

NEP (Malaysia) – manufacturer and supplier of water filtration systems

Netsol Technologies (Pakistan) – global provider of enterprise IT solutions

NEXON (South Korea) – developer and publisher of free-toplat (F2P) online games

OpenDNS (USA) – provider of cloud-delivered Web security services

Pintar International (Philippines) – manufacturer of bone china (porcelain) ceramics

Polyera (USA) – materials science company

Pronto Promo (Pakistan) – promotional products company QC (Mexico) – micro and small business loans company

Qualtrics (USA) – supplier of data collection and analysis products

Reputation.com (USA) – provider of online reputation and privacy products

Saham Finances (Morocco) – *African-based conglomerate* offering finance products

SinoCare Group (People's Republic of China) – *hospital* management company

Southwestern Business Process Services (SWS) (Ireland) – outsourced processing business

Tough Mudder (USA) – endurance challenge company with large-scale events

United Security Services (USS) (Argentina) – *security alarm installation and monitoring company*

Vision in HealthCare (ViiCare) (People's Republic of China) – provider of information technology solutions for hospitals

Zhejiang Huifeng Warp Knitting (People's Republic of China) – manufacturer of tricot fabrics

Endnotes

¹ Global Entrepreneurship and the Successful Growth Strategies of Early-Stage Companies. April 2011. New York: World Economic Forum.

² For example, *Startup Ecosystem Report 2012*, Startup Genome and Telefonica Digital.

³ World Economic Forum, op. cit.

⁴ These 16 categories were used in *Global Entrepreneurship* and the Successful Growth Strategies of Early-Stage Companies, World Economic Forum, 2011 – see Section 2.

⁵ Word clouds give greater prominence to words that appear more frequently in responses to specific questions.



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