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Honors Thesis

The Next Generation of Entrepreneurs

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Spring Semester, 2013

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Background

As time goes on, the “rules of the game” constantly change. This principle has been illustrated over the last few decades with the rise and fall of entrepreneurial ventures. What was once an innovative idea from a single brilliant mind is now an evolving concept that is brought into fruition by multi-disciplined teams. What worked 20 years ago might not work now. However, there is much to be learned from the last generation of entrepreneurs. Some traditional factors for success remain the same; persistence, self-confidence, patience, and luck. New factors for success include team work, collaboration, experience, speed to market, and quality of information. The global nature of the economy presents many opportunities and threats for the next generation of entrepreneurs. Opportunities include access to new markets and more customers. Threats include intellectual property infringement, regulatory laws, and being beat to market. The key for the next generation of entrepreneurs to be successful is to foster them in programs that will allow them to work in teams and leverage individual strengths. Currently under development, Green Launching Pad 3.0 will be an innovation ecosystem that provides funding and support to young entrepreneurs. This Student Centered Innovation portal will award grants to teams of students with innovative ideas and provide them with the support necessary to bring their ideas to market. Frugal innovation programs from diverse teams of high school and college students will be the hotbeds from future entrepreneurial innovation.

The establishment of innovation ecosystems like GLP 3.0 will surely foster the development and growth of local entrepreneurial ventures. Professor Venky and I believe that the steps to insure future entrepreneurial success have not been taken; therefore, my intention is to provide quality insight regarding the importance of embracing our next generation of entrepreneurs. First, I will provide a brief overview of the previous generation of entrepreneurs and their business environment. I will then introduce the next generation of entrepreneurs, and discuss their business environment. Finally, I will explain the importance of student centered innovation for the next generation of entrepreneurs, and introduce GLP 3.0.

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Previous Generation of Entrepreneurs

Business Environment

The last generation of entrepreneurial innovation has been idea based. Entrepreneurs relied heavily on their own personal skills to bring their inventions to market. There was ample access to funding sources, especially if the idea was for a web site. Investors were throwing large sums of money at unproven ideas, which fostered innovation, but may have had negative impacts on the economy overall.

Factors for Success

The factors of success for the previous generation of entrepreneurs include experience, leadership qualities, the wisdom to take calculated risks, and the ability to sell themselves just as much as their idea.

Factors for Failure

As friendly as the business environment seemed to be for the last generation of entrepreneurs, things quickly changed. When the .com bubble burst, many entrepreneurial ventures failed. Economic and political unrest quickly turned a thriving business environment into a downward spiral. Huge barriers were created in front of entrepreneurs trying to get their solutions to market.

Technology also began to change at an increasingly rapid rate. Technology six months old is now considered outdated. Many products and services that the last generation of entrepreneurs created were quickly rendered obsolete. Advancing technology also flattened out the world and created a global economy. Competition now stems from all corners of the globe. Practices such as outsourcing have led to the demise of many small domestic companies and entrepreneurial ventures. These factors for failure are what led to next generation of entrepreneurs forming.

Next Generation of Entrepreneurs

Who

The next generation of entrepreneurs is our current high school and college students. These are the bright minds that think out of the box and will create solutions to problems we may not even realize exist. The profile of an “ideal” entrepreneur would be:

“Ready to take **actions** build upon a **knowledge** and **creativity** while combining the **skills** and **intelligence**, which is **patient** and **persistent**, have the ability to work in **teams**, take **risks**, but not any type of risk and have **self-confidence** and **experience**, while it’s **honest**, sometimes **lucky**, and they have great **connections** that can help them in better doing business.”¹

What

The next generation of entrepreneurs will be participating in disruptive innovation. That is, they will be developing products and services that “change the way the game is played.” For example, GLP winner Therma-HEXX is reinventing the way we heat and cool buildings with their ThermaCEILING indoor radiant heating/cooling panels. The disruptive part is forcing people to switch from what they have been used to for so long, which in this case is forced hot air. Another example of disruptive innovation would be automobiles that could communicate with each other and operate automatically. This would take car accidents and traffic out of the equation. Disruptive innovation is looking at something and saying “there has got to be a better way.”

The fields that entrepreneurs will be focusing on include energy, software, web based services, and social media. With today’s technology, a team of young entrepreneurs can realistically turn a class project of building a mobile app into a viable company with the right support and guidance. Renewable energy and energy efficient products will be sourced from entrepreneurial innovation.

¹Sutevski, D. (2009, November 26). Entrepreneurial Success Factors. Message posted to <http://www.entrepreneurshipinbox.com/852/entrepreneurial-success-factors/>

Where

The speed at which technology is advancing has created a flat world economy. Products and services are being developed and sold across the globe, with competition becoming fiercer every day. Entrepreneurs from all four corners of the earth are fueling innovation. If someone is working on an idea in the United States, there is more than likely someone working on a similar idea in Germany, Japan, China, and Brazil.

When

The time to harness the potential of the next generation of entrepreneurs is now. The United States has the opportunity to be an early adopter in fostering the entrepreneurial spirit of its young people. Start-up incubators are necessary to help entrepreneurs get their solution to market and meet demand, before someone else in the world does. Entrepreneurial innovation is a key aspect of a strong economy. Investing in our young minds is investing in the state/country as a whole. We already have a high energy renewable resource – our entrepreneurs.

How

Student centered innovation will be the driving force behind turning the ideas of young entrepreneurs into real products and services. Programs like Green Launching Pad 3.0 create innovation ecosystems which foster the growth of an idea by providing funding, mentoring, faculty researchers, and access to industry professionals. Collaborative multi-disciplined teams will need to leverage their individual skills in order to be successful. The power of a team is far greater than that of any individual. Innovation stems from the collaboration of a team of uniquely skilled individuals. Many of these skills are learned through job experience. A diverse set of skills and experiences are what makes a team successful. Young entrepreneurial teams will need to be agile to be competitive in a global market where there is limited funding and time to bring solutions to market.

Why

There is a huge opportunity for success for the next generation of entrepreneurs. Quality information is readily available and technology is making working in teams a more viable solution. Students from universities across the country have the ability to meet, share, and collaborate through the internet. College students are extremely hard working and full of new ideas. They understand new technologies and tend to question why things are the way they are. It is wise to invest in the energy and entrepreneurial spirit that they bring to the table. Aiding entrepreneurs in getting their solutions to market is extremely important. Threats stem from fast response times from competition. Being beat to market or not being able to meet demand will likely destroy a young company.

Understanding the New Business Environment

The next generation of entrepreneurial innovation will be team based rather than idea based. Multi-disciplined teams will collaborate and leverage their strengths in order to bring new solutions to market.

Opportunities for the Next Generation

The new business environment has many opportunities for the next generation of entrepreneurs to succeed. Social Media marketing is an extremely powerful tool that if used properly, can increase the popularity of an idea or product tremendously. A clever YouTube video can go viral overnight and bring instant attention to a product or service. Crowd funding is an increasingly popular way to raise capital. A clever idea, well thought out business plan, and a good story can raise large amounts of capital through crowd sourcing. Applications like Facebook and Twitter allow a company to keep their followers up to date on exciting news or promotions. Due to the massive amount of traffic on those social media sites, and the ability to segment audiences, advertising efforts can be extremely successful. Facebook and Twitter also allow customers to offer feedback to a company. It is extremely important that companies take into consideration what people are saying about them on the internet. In order to sell a product or service in the new business environment, it is vital to have a strong internet presence.

There are many programs that will break down barriers for entrepreneurs. Innovation ecosystems like the Green Launching Pad have proven how successful providing guidance to young companies can be for the state. The government will continue to work with academia to help turn invention into innovation. Companies are more likely to stay in the state which helps foster their success. Money is a vital aspect of starting a company, but what is often overlooked is the value of mentors and academia to help guide a company through the vulnerable stages of early growth. Other groups like the Small Business Development Center are also available to assist entrepreneurs with their ventures. Certain laws, regulations, and tax breaks also foster innovation.

Threats for the Next Generation

The next generation of entrepreneurs will face extremely stiff global competition. Being beat to market or not being able to meet demand are extreme threats to the success of a business. The current economic situation is also a threat to new entrepreneurial ventures. People do not have extra disposable income to be early adopters for new innovative products and services. Change costs money, so the next generation of entrepreneurs needs to factor in the switching costs of choosing their new solution. It is also difficult to find traditional funding for early stage companies due to the current economic trends. Political unrest is a similar threat to the next generation of entrepreneurs. The constant fear of war and terrorism wreak havoc on the business environment and willingness for consumers to spend their money. Certain laws, regulations, and tax breaks can be very detrimental to small business and create huge barriers to entry.

Social media can also be a threat to the next generation of entrepreneurs. News travels in seconds and any bad publicity will almost surely be noticed by potential customers. Young entrepreneurs must be sure to protect their internet reputation and not make decisions that would reflect negatively that reputation.

Green Innovation

We, as a country, like the rest of the world, are in desperate need of new energy sources or ways to limit energy usage. This is a huge opportunity for the next generation of entrepreneurs to innovate. The United States still has an opportunity to lead the world in green innovation. Supporting our young entrepreneurs will go a long way in developing alternate energy sources. Green innovation could be what lifts our economy out of stagnation.

Global Economy / Flat World

The flat world nature of the global economy makes the speed to market for new products and services vital to success. The same innovative idea that is being developed in one part of the world is certainly being studied in another part. A similar threat is bringing a product to market and underestimating its demand. Demand for a product that

is not being met will be undercut by competition. An example of this is when Crocs shoes first came out. They did not have the facilities to meet demand, therefore China knock off brands moved in to meet the extra demand.

Customers are no longer concerned with solely with price, quality, and features that a product of service offers. The triple bottom line (people, profit, and planet) is becoming increasingly important to consumers. People want a quality product, at a reasonable price, and to feel good that it is not having a negative impact on the world.

In order to be successful in this flat world economy, the next generation of entrepreneurs must collaborate in multi-disciplined teams and acquire a global reach. Foreign markets are just as much of an opportunity as they are a threat for young companies. Agility, adaption, collaboration, and social responsibility are keys to success in the flat world business environment.

Student Centered Innovation

Green Launching Pad

GLP 1.0/2.0

The Green Launching Pad (GLP) is an innovation ecosystem that aids local start-ups in bringing their green solutions to market. GLP connects New Hampshire entrepreneurs with investors, mentors, student interns, faculty researchers, and government agencies to help with the tumultuous early stages of starting company. The founding members of the GLP program understood that promoting interaction between academia and industry would be positive for the state.²

GLP is a public and private partnership between the University of New Hampshire and New Hampshire Office of Energy and Planning, with funding from the US Department of Energy. GLP has supported eleven companies to date with the funding, professional services, and academic expertise needed to bring their solutions to market. The Green Launching Pad is a proven model for turning invention to innovation.³

I had an incredibly enriching internship with the Green Launching Pad from sophomore year through junior year. As an intern, I was able to observe finalist companies pitch their ideas to a panel of judges which was a very interesting experience. I truly realized the importance of selling yourself just as much as your product or service. If people believe in you, they will believe in what you offer. All of the finalists had very impressive green solutions, but the ones who stood out were the ones that clearly had their heart and soul invested in their solution. A successful entrepreneur is willing to do whatever it takes to bring their solution to market.

I also had the luxury of attending the various business development workshops the GLP program put on. These informational workshops covered topics such as the legalities of starting a company. I learned quite a bit of real world information at these workshops, but what I enjoyed most was networking with the local entrepreneurs and industry professionals.

² <http://greenlaunchingpad.org/>

³ <http://greenlaunchingpad.org/>

My fellow interns and I met on a weekly basis with the leadership team to plan upcoming GLP events. We were also made available to work on projects for the winning companies. My most rewarding experience came from working on several projects with GLP 2.0 winner Therma-HEXX, LLC. Robert Barmore, CEO inquired about an intern to develop a new website for his company. As a business major with a minor in IT, I jumped at the opportunity. Over the next several months, I worked closely with Mr. Barmore and he soon became a mentor of mine. After I designed, built, and launched his new website, Mr. Barmore offered me a full time position for the summer and part time during school. I accepted his offer and immediately began putting my business degree to use. I led marketing campaigns, managed social media accounts, and worked on accounting, finance, and information systems projects. As I worked on these projects, the Therma-HEXX brand name grew massively in popularity. Several prestigious news outlets featured Therma-HEXX products, and website traffic grew to hundreds of individual hits a day. Therma-HEXX went on to win New Hampshire Product of the Year in 2012. I was also exposed to various engineering projects such as surveying, AutoCAD design, CNC hot wire cutting, and product testing. I also oversaw the production process and managed production employees. Mr. Barmore kept me up to speed on every aspect of the company, to the point where I felt that I was invested in the company, and a playing a key role in the early stages of growth. At Therma-HEXX, I was part of a collaborative team and was allowed to expand my skill set. I took everything I had learned in the classroom and then applied it to the real world. The true value, however, came from my unique experiences at Therma-HEXX that I could have never been taught about in the classroom.

My time with Therma-HEXX, as a GLP intern, has proved that combining academia and industry equals success. As a business student, I gained an incredible amount of real world experience with Therma-HEXX. Everything I learned will certainly aid me in starting my own company someday. As a company, Therma-HEXX was able to tap into everything I had to offer, and use my skills to help grow their company, fast. The mutual benefit was derived from the environment that the Green Launching Pad created.

GLP 3.0

Green Launching Pad 3.0 will build off of the previous rounds of the GLP program. New Hampshire entrepreneurs with green solutions will still be invited to compete for resources, but GLP 3.0 will focus much more heavily on student centered innovation. Multi-disciplined teams of students will compete for \$10,000 grants, similar to the Holloway Competition. Funding is sourced from the public and private sectors. This is a sort of “frugal innovation.” Winning teams receive far more resources than funding alone. Mentors, faculty researches, and industry professionals will be available to help these student teams convert ideas into innovation.

GLP 3.0 will be looking for direct and indirect green innovation. An example of direct green innovation is an energy efficient product like thermal energy storage, an alternate fuel source, photovoltaics, or a new building material. An example of indirect green innovation would be a bus tracker mobile app. People would be more likely to take the bus if they knew exactly how far away it was from a given stop. This would save time and gas, which is indirectly green.

The Green Matching Pad has also been created as an academic and professional connection service. Students, faculty, and entrepreneurs can use the green matching pad to collaborate and bring ideas to life. Green Matching Pad provides an environment where students and young entrepreneurs can learn from those who successful started their own ventures.

Measure of Success

A measure of success for the Green Launching Pad program is seen in the eleven companies they have sponsored which have successfully gone to market. GLP 2.0 company Therma-HEXX, LLC won New Hampshire Product of the Year in 2012. Multiple other GLP winners have secured second rounds of funding and thousands of product orders.

Another measure of success is sponsorship from the government and local companies. There are many companies who will be partnering with the GLP program to

provide funding, mentorship, and professional services. Professional services range from intellectual property protection to accounting and marketing.

The Green Launching Pad model can be expanded to universities and colleges nation-wide, and provide the same innovation ecosystem that it does in New Hampshire.

Importance

During my senior year, I worked with a team of students on a mobile application project for our e-commerce class. We developed an app that would tell the user how crowded certain places on campus were, such as the library, or weight room. We had a great business plan and a decent portion of the mobile app complete. We even had public support as multiple articles were printed in the school newspaper regarding our idea for this app. We were however unable to bring this great idea fully into fruition. We were lacking funding, professional support, and guidance. If we were able to compete in a program like GLP 3.0, and be selected as a winner, I am confident that we would have been able to successfully launch the app and expand to other markets.

Supporting the next generation of entrepreneurs is vital to strengthening our economy. There are new rules to the game, making competition fierce. Entrepreneurial ventures are now team based rather than idea based. Most start-ups have an extremely low budget and little to no access to funding. Innovations have a short shelf life and a quick response time from competition. Programs like GLP 3.0 are vital for turning invention to innovation. Multi-disciplined student teams have the raw tools to devise new solutions, but they must be supported in order to be successful.

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