Design Interjection for Business Incubators

Improving Start-Up Success Through Design

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# Table of Contents

Acknowledgments........................................................................................................... V

Preface............................................................................................................................... VI

List of Figures................................................................................................................... VII

Chapter I: Introduction...................................................................................................... 1

Chapter II: Research......................................................................................................... 3
  Assumptions..................................................................................................................... 3
  Primary Research.......................................................................................................... 4
  Secondary Research/Literature Review......................................................................... 5
  Limitations...................................................................................................................... 6

Chapter III: Design & Business......................................................................................... 7
  The Knowledge Funnel.................................................................................................... 7
  Balancing Ways of Thinking......................................................................................... 8
  Exploration & Exploitation............................................................................................. 8
  Reliability & Validity....................................................................................................... 10
  Design Thinking............................................................................................................ 11

Brands................................................................................................................................ 12
  Archetypes...................................................................................................................... 12
  Economic Value of Design in Brand.............................................................................. 13
  Structuring Design Thinking Brands............................................................................. 17

Lean Start-Up Methodology.............................................................................................. 18

Chapter IV: Business Incubator Landscape..................................................................... 21
  Incubator Students (Entrepreneurs) ............................................................................. 21
Requirements for Enrollment ................................................................. 22
Incubator Mentors ................................................................................. 22
Incubator Focus .................................................................................... 23
Program Time Frame ............................................................................ 24
Investment ............................................................................................ 24
Perceived Value of Design ..................................................................... 25
Metrics .................................................................................................. 26

Chapter V: Established Entrepreneur Mindsets ........................................ 28
Recognized Value of Design Thinking .................................................. 28
Multi-Disciplinary Collaboration ......................................................... 30
Mention of Lean Start-Up Method ......................................................... 31
Using Lean Start-Up to Gain Traction .................................................... 32
Entrepreneur View on Incubators ......................................................... 33

Chapter VI: Design Thinking Incubator Model ......................................... 34
Incubator Students (Entrepreneurs) ....................................................... 34
Requirement for Enrollment ................................................................. 36
Incubator Mentors ............................................................................... 37
Incubator Focus ................................................................................... 37
Program Time Frame ........................................................................... 38
Investment ........................................................................................... 39
Perceived Value of Design ................................................................... 40
Metrics ................................................................................................ 42

Chapter VII: Conclusion ....................................................................... 44
References .......................................................................................... 46
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Preface

This project allowed me to connect and explore two areas of interest—branding and entrepreneurship—in an opportunity to better understand how a start-up company can compete in today’s markets. My education at Kent State University helped me realize the importance of visual communication design as a tool for solving problems, both visually-based and not. As a designer with an entrepreneurial spirit, I have become aware of designs unique ability to create desire and add value to a brand, allowing a product to compete in an over-saturated marketplace.

This thesis is an exploration into the opportunities available to budding entrepreneurs seeking proper guidance for their start-up businesses. This investigation focuses on understanding how design thinking and strategy can best integrate into a business to develop successful brands. An analysis of the current incubator landscape, paired with an understanding of the mindset of successful entrepreneurs gave insight into the tools necessary for efficient business development. As a result, it offers a recommended incubator model based around integrating design thinking in business development. In effect, this thesis and the data contained within are intended to serve as a foundation for creating a design thinking focused incubator.

It is critical to keep in mind that this thesis was formulated from a design perspective. I am not a professional in the field of business and do not have experience with entrepreneurship. I am a visual communication designer with an understanding of qualitative research and its application in conjunction with the basic principles of design.
List of Figures

Figure 1: The Knowledge Funnel...................................................................................................................7

Figure 2: Reliability vs. Validity.....................................................................................................................11
CHAPTER I

Introduction

No matter how an entrepreneur defines failure, statistics on the success rate of start-up businesses is disheartening. Around 30 to 40 percent of start-up businesses liquidate all assets, losing all investor funding, while 70 to 80 percent fail to produce the projected return on investment (Nobel, 2011). There is a strong need for effective incubation facilities which compress the learning curves of the start-ups and provide them with necessary initial support in order to improve their sustainability. There are around 1,200 business incubators operating in the United States (Dahl, 2011). Joining an incubator is a great way for inexperienced entrepreneurs to receive funding and guidance to help get their ideas off the ground. It blends office spaces with mentoring programs, financial assistance, business services and the opportunity to network with experts and fellow entrepreneurs (Shread, 2013). Most incubator facilities in the U.S. are public-private partnerships, with initial support coming from the federal, state and local government bodies. Approximately half of these total facilities are affiliated with universities (Majeed & Salman, 2010, p. 427).

While traditional business models are adequate for many established companies, the types of problems that face new businesses have changed. A decade ago, entrepreneurs were not expected to start their own brands from scratch, they were simply too hard and expensive to create and could survive by simply differentiating themselves based on product or service. Since then, expectations have risen as the start-up field has grown. It’s not enough to stand out with a single idea; you have to combine it with a great product, engaging consumer experience and a voice that sets it apart from the competition. Creating a brand isn’t a project with a beginning, middle and end. Instead it requires constant vigilance and must be monitored throughout the course of the brand’s life (Kuang, 2012).
In the process of starting a company, people are often too focused on raising the capital to grow, rather than building a great brand that will draw and build a large, loyal consumer base. When design is integrated into an organization, it helps to build a sustainable future for that company. Start-ups should be equal parts design and business (Wilson, 2012). Design should be a part of the business model from the beginning and designers should partner with business co-founders to develop great products, user experience and a culture of innovation for the long run (Kuang, 2013).

This thesis will explore how design and design thinking can be interjected into business incubators to help start-up companies grow and form partnerships to create long-term success. It is a comprehensive study on how design can be implemented in every level of a start-up company to create a more sustainable, withstanding business model. Starting with understanding how integrating design and business works well for established business and a clear definition of design thinking, it will identify problems unique to start-up companies to better understand how successful tactics can be applied to an incubator system. A comprehensive analysis of existing incubators and trends identified from interviews with established entrepreneurs highlights successful and unsuccessful methods commonly found in the start-up world. Finally, a design thinking focused incubator model is proposed that effectively defines how design thinking and strategy can be integrated into every level of a businesses development to produce a more successful start-up company.
CHAPTER II

Research

Assumptions

Solving design problems of any nature begins by making assumptions and forming questions surrounding the problem. While assumptions, by no means, inform the outcome of the final solution, their role is simply to allow the user to frame his or her current understanding of the issue. Acknowledging assumptions forces the recognition of potential biases while also acting as a platform to commence research and gather insight. Personal experiences prior to conducting research for this thesis allowed the author to make several assumptions about the view of design in the world of business and its integration in incubators. These assumptions focused both the primary and secondary research around the structure of incubators and the mindset of entrepreneurs.

Assumptions included:

- Business incubators do not value design as a tool for start-up companies
- Incubators think design is used solely for applying aesthetic to a finished product
- Research shows that design can drive economic success through innovation

While design can be an effective tool for creating value within an organization, whether or not business incubators embrace it is unclear. The traditional means of employing design to sell a finished product ignores the value of design thinking and strategy (as defined in Chaper 3).
Primary Research

In-depth interviews were held with business incubator leaders, students of incubator programs, and successful professional entrepreneurs. Incubator leaders and students interviewed were chosen specifically for their varying program structures to gain insight into all types of start-ups. Interviews typically lasted thirty to sixty minutes and were conducted either over phone or in person. All participants were asked a standard list of questions pertaining to their perceived value of design and structure of incubator programs. Additional questions were asked as the conversation progressed in an organic manner and were geared towards the specific experience the individual had in the start-up world.

Qualitative data was collected and analyzed from the interviews to help guide the progress of this thesis. A variety of trends became apparent upon review of the interviews and were further validated by additional primary and secondary research. A consolidated analysis of the trends is presented below, following the same order as the narrative of this thesis where they are further detailed in Chapters 4-6:

Interviews with incubator leaders gave insight into the current business incubator landscape. Programs are structured similarly with slight differences in methods of business growth. Variances occur in these areas:

- Structure of start-up companies
- Requirements for student enrollment
- Mentors available to entrepreneurs
- Areas of focus for start-ups
- Timeframe for business development
• Approach to investment
• Perceived value of design
• Metrics for measuring success

In interviews, established entrepreneurs who have already experienced success placed great value in incorporating design thinking in start-up development. When utilized by entrepreneurs, design will not only aid in developing a rough idea into a successful product, it can create a brand around that product and build trust in the eyes of the consumer. Entrepreneurs all agreed, collaborating with individuals in different disciplines aids the development process by encouraging the exploration of different approaches to solving problems. Multi-disciplinary collaboration will also support the growth of a professional network for emerging entrepreneurs. Successful entrepreneurs all mentioned the tactics found in the lean start-up methodology, stressing the importance of creating a minimally viable product to test and refine. Lean start-up tactics allow entrepreneurs to quickly gain traction and determine how successful a business will be with its intended audience. Entrepreneurs all agree that with start-ups, traction leads to success and funding, not the other way around. The rapid testing and refining stage that entrepreneurs believe to be important for determining direction is not found in existing incubator systems. Entrepreneurs interviewed believed that incubators slow the development process by encouraging creating a completed product before launching to the public instead of quickly testing and refining a minimally viable product.

Secondary Research/Literature Review

As primary research revealed a need to look into the individual structures of different business incubators to better understand how they work, secondary research focused on design thinking and
how it can be best integrated into business as a tool for innovation. The book, The Design of Business, by Roger Martin provided the starting point with a collection of small case studies of designs integration in established organizations. The economic benefit of design thinking was explored through a collection of journals and case studies. A number of articles on design and start-up companies authored by successful entrepreneurs were also helpful in framing the problem.

The end result of this research is a thesis influenced by interviews and observations of business incubators and heavily grounded in secondary research focused on design thinking, entrepreneurship, and the integration of design and business.

**Limitations**

The primary research conducted during this study was limited to a selection of professionals and individuals within the United States with whom the author had either a direct or indirect connection with. Limitations of time and resources impacted the sample size, location and methods used for collecting data. As the author was forced to work within these constraints, research on the value of design in the world of business relied heavily on previously existing secondary research. These limitations were considered in the development and execution of this document.
CHAPTER III

Design & Business

The Knowledge Funnel

In order to stay relevant in today’s markets, businesses must constantly move back and forth along what Roger Martin, Dean of the Rotman School of Business at The University of Toronto, refers to in his book, *The Design of Business*, as the knowledge funnel (figure 1). Martin’s knowledge funnel consists of three stages in a businesses exploration of a new product or service: mystery, heuristic and algorithm (Martin, 2009, p. 5-9). The mystery stage is when a problem worth solving or an area worth exploring is identified. From a scientist hoping to gain a better understanding of a rare disorder to a salesman attempting to figure out how to better communicate with his audience, this can take an infinite variety of forms. There is no limitation to the type of mysteries that can be investigated. When a mystery is identified and possible solutions begin being explored, the workflow moves into the heuristic stage. This is a trial-and-error process where gaining a simplified understanding of the mystery helps focus the efforts of the investigation. Insights must be tested in order to narrow the field of inquiry and work the mystery down to a manageable size. After further studying the tested heuristic, it can be turned into a fixed formula; this is the algorithm stage. When a solution to the initial mystery has been identified it can be easily replicated with the same successful
results. The Algorithm stage is when a company takes the product or service that they have produced as a result of exploring a mystery and turn it into a successful business model.

**Balancing Ways of Thinking**

While it is a triumph for a company to move successfully down the knowledge funnel, from a mystery, to a heuristic, and finally an algorithm, it does not mean they should remain content with their solution. Too often a business will find an algorithm for a product or service and consider their work to be done, running the formula over and over and eventually struggling to remain relevant in the eyes of the consumers. Mike Lazaridis, one of the founders of Blackberry, put it best:

“In a business, no matter how good the process is, no matter how much you’ve got it down pat, no matter how much money you’re making, how efficient, you have to always go back and say, ‘Is there something fundamentally wrong with the way we’re seeing the market? Are we dealing with incomplete information?’ Because that’s what’s going to get you: it’s not necessarily that some young whippersnapper’s going to come up with some better idea than you. They’re going to start from a different premise and they’re going to come to a different conclusion that makes you irrelevant” (Martin, 2009, p. 61-62).

**Exploration & exploitation.** Rather than running an algorithm to the point of exhaustion, a business must constantly go back through the knowledge funnel, exploring different mysteries with new heuristics. A balance must be struck between the exploration of new ideas and the exploitation of successful ones (Martin, 2009, p. 18). In the exploration stage, a business is searching for new
knowledge and moving down the knowledge funnel, while the exploitation stage focuses on refining a solution to maximize the payoff from existing knowledge.

Too often, an organization will focus on one or the other and the longevity of the company suffers as a result. When a business is dedicated exclusively to exploring new ideas, it typically results in a shortened lifespan. Prolonging the exploration will not generate the capital necessary to allow a company to continue exploring. On the other hand, while it may seem fortuitous to quickly flip from exploration to exploitation, as it may provide a longer lifespan, it will eventually exhaust itself (Martin, 2009, p. 19). Remaining in the exploitation phase of the process does not foster a sustainable business model; an organization cannot keep exploiting the same piece of knowledge forever. Regardless of the fundamental differences in the way exploration-focused and exploitation-focused businesses think, it is critical that a balance be found if an organization wants to see long-term success.

Even with balance, the discomfort of the exploration stage can be difficult for many business-minded people. The uncertainty and openness that comes with exploring a mystery has no correlation to future success. However, in order to properly steer the exploration, it is important to rely on intuition rather than fact, which can be unnerving. While it may feel secure to rely on what is already known, it is unlikely that innovative ideas will arise from that mindset (Martin, 2009, p. 21). American philosopher Charles Sanders Peirce was fascinated with the concept of original ideas. He believed that new ideas could not arise from simply looking at what had been done in the past. The traditional modes of thinking, deductive and inductive, could not point to a completely new concept.

Deductive reasoning focuses on studying what has been done before, looking from the general to the specific. Inductive reasoning relies on studying the past and understanding it from the specific
to the general. Relying on these two modes of thinking will only give a variation of what has come before, not an insight into what could be. Peirce introduced a third mode of thinking he referred to as abductive reasoning, which is the process of making observations and positing what could be, allowing the user to make logical leaps in the mind. These logical leaps act as a guide when diving into a mystery and exploring the unknown. In order to properly move along the knowledge funnel, it is critical that an organization moves back and forth from mystery to algorithm, and partake in abductive reasoning as a tool to navigate the uncertainty inherent in the mystery stage.

**Reliability & validity.** Any organization that plans to continually travel along the knowledge funnel must also strike a balance in the way problems are approached. While abductive reasoning is a powerful tool in predicting what could be, it should not be solely relied on. poMartin describes this balance as a 50/50 mix of reliability and validity (Martin, 2009, p. 53-54). On the reliability end of the spectrum lies analytical thinking. Analytical thinking relies on proof through inductive and deductive reasoning; studying what has come before, to better understand the faults and merits. The goal is to find a consistent replicable solution. Meanwhile, on the validity end of the spectrum lies intuitive thinking. Intuitive thinking focuses on understanding truths without proof, through abductive reasoning. While reliability favors certainty, intuition supports exploring the unknown and proposing what could be. The balance between these two modes of thinking is what is referred to as design thinking (figure 2.).
**Design thinking.** Tim Brown, founder of IDEO, defines design thinking as, “a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity” (Brown, 2008, p.86). In addition to reliability and validity, Brown stresses the importance of a third type of reasoning that must be thrown into the mix of long term success and innovation. The reasoning he is referring to is desirability, which is what makes sense to people and for people. Desirability focuses on fundamental and ever-changing human needs to drive the design away from the expected and overdone. Brown notes that a competent organization will integrate each of these three constraints, but a design-thinking driven organization will guide them into a harmonious balance (Brown, 2009, p.15-20). Organizations that rely on feasibility end up creating predictable products that can be easily copied. Companies that focus on viability fail to consider the feasibility of its creation. A company that only considers desirability worries too much about human wants and ends up creating products or services that are ephemeral. Design thinking is the well-orchestrated use of feasibility, viability and desirability.
Brands

Entrepreneurs must develop their brands quicker than ever before. With the oversaturation of data, news, entertainment, and advertising, a brand must have a good story to engage its audience in order to remain relevant. Without giving meaning to a brand, the message may be seen or heard, but never absorbed. Brand strategists Margaret Mark and Carol S. Pearson explore this idea further in their book, *The Hero and The Outlaw*. They explain that there was a time when successfully creating, building, and marketing a brand were relatively easy and inexpensive tasks. Demand exceeded supply and markets were virtually uncluttered. The products themselves were physically different from each other, so brands did not have to apply a meaningful message to compete with one another; simply put, they built their brands solely around the product differences (Mark & Pearson, 2001, p.7-9). Today, with the increase in competition in all markets, it is exceedingly difficult to create a product or service that cannot be easily imitated or duplicated. In order to stay relevant in the eyes of the consumer, a brand must find a way to connect with them in a meaningful way, beyond identifying product features. Mark and Pearson argue the importance of strategically handling a brand’s message, saying that, “marketing without a system for managing meaning is analogous to ancient navigators trying to find port in treacherous seas on a starless night” (Mark & Pearson, 2001, p.10-11). Without applying a strategy for how meaning will be applied to its brand, an organization will fail to continuously connect with its core audience.

Archetypes. A helpful way to develop a brand is to choose an archetype that best represents it. Psychiatrist Carl Gustav Jung developed the idea of an archetype, which he describes in his book,
Psychology and Religion, as “Forms or images of a collective nature which occur practically all over the earth as constituents of myths and at the same time as individual products of unconscious origin” (Margaret & Pearson, 2001, p. 4). Assigning an archetype to a brand helps transform an idea into a real character that can be pictured, described and imagined. It gives a better understanding of where the brand stands and how it can grow. A deeper understanding of a brand gives a clear view of how a product or service can best connect with its consumers. Entrepreneur and cofounder of Contour Cameras, Marc Barros, relays the importance of comprehending a brand:

“If you think that brand is as simple as hiring an agency to create your logo, you have a very long road ahead of you. Understanding that brand is everything you represent is the first step toward a long journey in creating something that matters” (Barros, 2013).

Building a brand, however, is not simply a formula that can be replicated for every organization. It is entirely dependent on what the brand is based around (e.g., a computer, clothing, or furniture). It is the role of design and design thinking to solve each problem and decide the appropriate solution for how a brand can best relate to its unique audience. Yves Behar, an industrial designer and founder of fuseproject, a San Francisco based design studio, plainly states, “The work of design is not to skin stuff. It is not to put a nice dumb box around whatever is inside. It’s the whole conception. Design should deliver the whole ecosystem” (Behar, 2011).

**Economic value of design in brand.** Design should not be the last step in the evolution of a product. It can add great value to a product or service, beyond shelf appeal. The type of value that design adds to a product or service is best described by Japan’s Director of Design Policy, Mika Takagi. She claims, “Sensibility-value is a value that becomes evident when the user of a product empathizes with it, or
feels touched by it, the consideration and commitment that its manufacturer has given to designing the product” (Raulik-Murphy, Whicher & Cawood, 2009, p.7). Design does more than simply add value to a finished product or service and its importance in growing a start-up should not be overlooked.

There is a direct economic benefit to including design in the evolution of a brand. In 2003, the Danish Design Centre, in collaboration with the University of Copenhagen, conducted a study on the economic effect of design using the Danish economy as its reference (Kretzschmar, 2003). The survey was based on over 1,000 interviews with private Danish companies composed of a minimum of ten employees. The study examined:

- An organization’s total investment in design
- The performance of gross income, the trends in hiring, and the increase in turnover of companies
- The differences in the areas of gross income, employment, and exports between companies adopting a comprehensive approach to design and those that do not apply design in any way (p.7).

For the purpose of the study, the Danish Design Centre defined design as, “strategies, development, and styling – everything that takes place prior to production or implementation of products” (p.3). A ladder was created to categorize the varying amounts of design used within an organization. The four different levels were:

- Companies that do not use design
- Companies that only purchase design internally in the form of staff design-training
- Companies that only purchase design externally from outside design providers
companies that purchase design both internally and externally (p.10)

The results of the study highlighted a strong correlation between the use of design and a positive economic performance. Organizations where design is a core value and that purchase design services both internally and externally perform better. Danish organizations that purchased design experienced an increase in total gross revenue over a period of five years, equating to around 22% above average. Companies that participated in an increase in design activity achieved an additional 40% gross revenue increase compared to companies where design activity is either constant or decreased (p.4). Design is more than simply applying an aesthetic to a finished product when harmoniously integrated into an organization — it creates a lasting positive economic impact.

In 2007, The Design Council conducted a research study to analyze the value of design in business (The Design Council, 2007). The results illustrate how great an impact design can have on the business world. Simply put, “Design can directly and significantly improve sales, profits, turnover, and growth. Using and valuing design brings bottom line benefits, and those who understand and act on this insight have a competitive edge over the rest” (p.4). Some of the defining results include:

- Businesses where design is integral to operations are twice as likely to have developed new products and services
- Shares in design-led businesses have outperformed key stock market indices by more than 200%
- For every £100 a business spends on design, turnover increases by £225 (p.8)

As a part of the study, The Design Council also worked with start-up businesses to teach design integration. As opposed to the established businesses in the study, success could not be measured by
improved sales or turnover and different metrics were utilized to determine success. The results give insight into how design integration can greatly benefit a start-up organization:

- 50% of businesses increased their ability to raise investment finance
- 80% changed strategic direction and moved away from being purely tech-focused to becoming more customer-focused
- Half saw better management or reduced commercial risk (p.15)

The Design Council noticed increased success in companies that were identified as design-alert businesses. The study defined a design-alert business as an organization that has designers at managerial and executive levels, employs external design consultants, and provides some form of design training for employees. These companies were found to be twice as likely to have developed new products or services, twice as likely to have increased investment in design, and more likely to apply design to developing new products. Businesses that utilized these tactics were more prosperous than those that did not. Design-alert companies use design to add value to all levels of business operations (p.20). As part of the study, The Design Council highlighted eight ways that a company can add value using design:

- The retail experience
- Online services
- Physical services
- Customer relationships
- The design of products or services
- Finance or insurance options
- Developing a trusted and valued brand
• Bundling products and services to create packages (p.36)

Design can be used by an organization to recognize opportunities and create solutions to increase overall value.

**Structuring design thinking brands.** In *The Design of Business*, Roger Martin explains how to best structure an organization to bring more focus on design thinking. To add the greatest amount of value to a business, the environment must encourage a successful driving back and forth across the knowledge funnel. In order to create that type of environment, Martin claims three aspects of an organization must be set up differently: the structures, the processes, and cultural norms (Martin, 2009, p.122-128). Approaching structure differently means refocusing on a project-oriented structure to help reinforce the notion of solving mysteries. A team can work iteratively, creating prototypes or proposed solutions, eliciting feedback and refining heuristics. Project-oriented, team-based structure means that problems can be uncovered along the way and edits can be made before a finished solution is proposed. The different processes that Martin references are anything that gives innovation a chance to flourish. Financial planning should be reorganized so that existing heuristics and algorithms fund the exploration of new mysteries (Martin, 2009, p.126-128). Traditional financial planning does not allow for the exploration of mysteries, as there is a risk that either the solution will fail or an algorithm will never be reached. Finally, Martin’s third suggested reconsideration is cultural norms. When the goal for an organization is focused on validity, having constraints can force creative solutions.
**Lean Start-up Methodology**

Start-up companies encounter unique problems that differ from those that are established. While most companies benefit from an existing base of consumers and revenue from past products to fuel future investigation, start-up companies must find a way to overcome those obstacles. Eric Ries, a successful entrepreneur and author of *The Lean Start-up*, suggests a unique set of principles that start-up organizations should adopt to improve their chances of success. Ries states:

“Too many start-ups begin with an idea for a product that they think people want. They then spend months, sometimes years, perfecting that product without ever showing the product, even in a rudimentary form to the prospective customer. When they fail to reach broad uptake from customers, it is often because they never spoke to prospective customers and determined whether or not the product was interesting — the start-up eventually fails” (Ries, 2011).

The traditional method of entrepreneurship encourages a start-up company to build an entire ecosystem surrounding it and only show the product to the consumer once it is completely finished. This system creates solutions that rely heavily on intuition and uncertainty, setting an entrepreneur up for failure. While risk is a natural aspect of the start-up world, it does not mean that the risks taken should be uncalculated. Ries offers the lean start-up method, a new system that encourages rapid prototyping and testing to drive innovation and a user-centered focus.

An entrepreneur should begin not by asking, “can this product be built?” but rather, “should this product be built?” and “can a sustainable business be built around the development of this product?” and then enlist early adopters, add employees and begin building a product. Once the need is determined, the entrepreneur must build, what Ries refers to as, the MVP, or minimum viable
product. The MVP is the most basic form of the product, kept simple and developed quickly so that it can go through a rapid experimentation process (Ries, 2011). The start-up must create custom metrics to analyze the success of the MVP through the eyes of the early adopters so that they can track progress. Iterations should be built and analyzed based on the knowledge gained from previous tests. This continues in a build-measure-learn loop until a successful product or service is discovered.

Developing a product in this manner ensures that before the final launch, it will already have established customers; it will solve real problems and give the entrepreneur detailed specifications on what is needed for the final iteration.

In addition to describing the steps necessary for the lean start-up method, Ries outlines a set of principles that define entrepreneurship through this lens:

- **Entrepreneurs are everywhere**
  - Location does not define success in the world of entrepreneurship.

- **Entrepreneurship is management**
  - A start-up is more than just a product or service; it is an institution that requires management specifically geared to its context.

- **Validated Learning**
  - Start-up organizations must learn how to build a sustainable business. Running experiments to test each aspect of the company and its products can validate this learning.

- **Innovation Accounting**
  - A new kind of accounting, specific to start-ups, should be adopted to allow entrepreneurs to prioritize work.
• Build – Measure – Learn
  
  o A start-up must build ideas into products, measure how customers respond, and then learn whether to pivot or continue down the current path (Ries, 2011).

Tim Brown’s description of a design thinking organization, a business that finds a balance between feasibility, viability and desirability, shares the same qualities as Eric Ries’ lean start-up methodology. Design thinking is an approach to problem solving that encourages the development of quick iterations and continuously testing those iterations to gain insight into the next round of development. The lean start-up method is a process for starting a business that uses those same techniques for product development. In order to successfully adopt the lean start-up method, a start-up must embrace design thinking as an integral part of the organization.
CHAPTER IV

Business Incubator Landscape

Incubator Students (Entrepreneurs)

All entrepreneurs in any incubator are encouraged to work in teams. In some cases, entrepreneurs are allowed to apply to a program as an individual and a team will be built around the entrepreneur’s idea. Other incubator programs require that entrepreneurs already have a dedicated team before applying. However, all incubator programs will emphasize the importance of having a team to work on developing an idea. Jim Cossler, CEO of the successful Youngstown Business Incubator, stated,

“The truism of investing is that people invest in people first and ideas second. People would like to rather invest in an A+ management team with a B idea, than a B management team with an A+ idea. Because, what we know is that A+ people will turn B ideas into A+ ideas. But A+ ideas can’t turn B people into A+ people. So, what is critical once we determine and idea is good, is to surround it with the expertise that is going to give investors confidence to put money into the company” (J. Cossler, personal communication, October 12, 2013).

Building a company is a commitment that requires the help of many different individuals working together. Different incubator programs have different opinions on who comprises a successful start-up. Some programs suggest having at least one person on the team with past start-up experience to give investors confidence in their success, while others suggest a team tailored more specifically to the area of focus.
**Requirements for Enrollment**

For most incubators, acceptance into the program requires a well-considered idea and plan of action on behalf of the entrepreneur. Whether or not the final idea the entrepreneur launches to the consumer is a reflection of the initial plan is based on the requirements of the program the entrepreneur enters. Many incubators, including the prestigious Y-Combinator in San Francisco, encourage hopeful entrepreneurs to send in multiple ideas on their application “as evidence that you can have good ideas. Most successful start-ups change their idea substantially” (Y Combinator, 2010). Paul Allen, CEO of the Cleveland-based incubator Bizdom, said, “Even when people do have a germ of an idea, it’s almost like they have no idea, because there is a lot of work to do between there and building some product or something that takes hold” (P. Allen, personal communication, October 30, 2013). Incubators are looking for entrepreneurs that can generate a wealth of interesting ideas, not a fully developed one; that is the role of the incubator.

**Incubator Mentors**

All incubator programs provide a group of mentors that are either on-site or in an external network. These mentors give guidance to the entrepreneurs in their respected fields of focus. In some incubators mentors act as unofficial members of the start-up teams. In these cases the mentors offer services that official members of the start-ups are incapable of completing themselves, like software development or graphic design. Other programs require entrepreneurs to independently source those services and mentors are successful entrepreneurs who simply offer guidance from personal experience.
Incubator Focus

A point of dissension between incubators is whether or not the programs should host multiple start-ups in similar areas of focus. Some incubators strongly believe that creating a space where multiple people are encountering similar problems will allow the start-ups to better work together to overcome obstacles. Youngstown Business Incubator only works with business-to-business tech start-ups and believes this gives start-up businesses an advantage. Jim Cossler, CEO of Youngstown Business Incubator explains this method stating,

“Rather than attempt to be good at everything and end up producing mediocre results, we thought it far better if we become good at one thing and produce absolutely world class results. So we have narrowed ourselves down to only doing business-to-business software” (J. Cossler, personal communication, October 12, 2013).

Other business incubators do not share the same mindset for narrowing the start-up groups to one specific focus. Flashstarts, a successful business incubator in Northeast Ohio believes there is strength in bringing multiple areas of focus together in one space. Charles Stack, CEO of Flashstarts explains the theory,

“Every business idea is different, and you can’t apply a formulaic approach. And you see a lot of accelerators do that. They have a formula that they apply. And it may work with certain patterns but it’s a flaw. I’m a big fan of pattern recognition as an operating principle, where you identify a pattern and then apply a tool. Rather than have this one tool and apply it where it feels appropriate” (C. Stack, personal communication, October 9, 2013).
Allowing start-ups with varying areas of focus to work together encourages one to inspire another and force the entrepreneurs to recognize another way of thinking.

**Program Time Frame**

There are two common ways that incubators approach the length of a program. Most incubator programs run for a pre-determined length of time, ranging from 3–9 months. Entrepreneurs are accepted into the program based on a promising idea and are expected to have the idea developed into a profitable business by the end of the program. Although incubator services are not completely severed at the end of the pre-determined amount of time, there is an expectation of completion. The other approach to time is to not set a time frame for the program. Time for entrepreneurs is not pre-determined, however, after a certain amount of time success or failure becomes evident. With this approach there is less pressure on the entrepreneurs to deliver, but incubators are ultimately in control of whether or not the business remains in the program. Bizdom’s Paul Allen stressed the importance of time, stating, “If you don’t have any traction after six months, then there is not much we can do for them, because our focus is really on demonstrating that these folks have something going in six months” (P. Allen, personal communication, October 30, 2013).

**Investment**

Just as with time, there are two common ways that incubators approach investing in the entrepreneurs that are admitted into their programs. The first is investing in a start-up as soon as they are accepted into the incubator program. Incubators will invest anywhere from $20,000 – $30,000 in
return for 6% – 10% of the common stock of the company. This gives the entrepreneurs the initial investment they need to get a product to the market in a reasonable amount of time. Incubators are able to take such a large portion because they have not yet gained any revenue or traction. The second scenario is when an incubator does not invest any money into the companies upon acceptance. Instead, incubators offer entrepreneurs a physical space and all the corresponding services and amenities to begin working. Then, only after the program is finished and the start-ups begin to gain traction, do the incubators decide whether or not to invest in the businesses. Jim Cossler of Youngstown Business Incubator explains how this is beneficial for both the incubator and entrepreneur: “Until we get an idea to sustain profitability, we don’t charge anything. So the burn rate is really, really low here” (J. Cossler, personal communication, October 12, 2013). While this system is a safer investment for the incubator, it usually results in the incubator getting a smaller stake in a start-up business.

**Perceived Value of Design**

Most incubator leaders stress the importance of design, noting its use for separating a product from the competition and creating a seamless user experience. Paul Allen states,

“We think designers are very important. I think how a human interacts with a mobile app, a web app, and a consumer product, determines whether or not it’s something that people are going to want, to buy, or tell other people about. So we put a real emphasis on design — period” (P. Allen, personal communication, October, 30, 2013).
As with the study developed by the Danish Design Centre on the economic effect of design, there are varying levels for the role of design in incubator programs ranging from no design to designers as members of the team. Some incubators do not use design as anything more than a tool for marketing a completed product. In these cases, the role of design is diminished to an aesthetic applied to a finished product to help differentiate it from competitors on a surface level. Other incubators embrace design by offering guidance from design mentors. These mentors have experience in graphic design and share their knowledge and give insight into the direction of the interface of the product. Currently, the highest level of design involvement is when start-up teams hire designers. In some cases, incubators encourage entrepreneurs to hire designers to help guide the aesthetic direction of an already developed idea. While most incubators recognize the importance of design, even the most design-friendly are not giving design a role greater than applying a face to a finished idea.

**Metrics**

Each incubator has its own unique method of measuring the success of its respective start-up businesses, though many of them share similar tactics. These include:

- Sales
- Number of jobs
- Average salary
- Total Payroll
- Number of partnerships
- Customer base
Success in the start-up world is universally measured through traction. How incubators measure traction differs from one program to the next, but without proof of continued success, investors will not have the confidence to further fund a start-up company. Paul Allen explained how Bizdom measures success,

“We want to see traction. So we want to see paying customers, signed contracts, we want to see revenue through those contracts. We want to see letters of intent if we don’t see signed contracts, or we want to see partnerships. Otherwise, there’s not much we can do for them” (P. Allen, personal communication, October 30, 2013).

Within a start-up business, traction means success.
CHAPTER V

Established Entrepreneur Mindsets

Recognized Value of Design Thinking

Successful entrepreneurs recognize the benefit of incorporating design into every level of an organization. Design thinking sparks innovation by allowing a business to approach a subject from a different perspective. Jeff Hoffman, CEO and founder of Priceline, promotes design thinking as a tool for reinventing existing industries,

“People tend to just think incrementally, not exponentially. Incrementally means, if I have spent 20 years working in the health care industry and I am trying to design its future, but I am staring at its past, I am not going to design anything new. I am going to take this 20 year lump, that is filled with inefficiencies and paradigms and I am going to come up with version 21.0, which is going to slide down a little bit over here” (J. Hoffman, personal communication, November 1, 2013).

Hoffman points out that design thinking allows people to approach problems differently, rather than just creating an iteration of an existing system. Roger Martin describes this process for businesses as a balance between exploration and exploitation. Rather than exploiting an existing system, Hoffman suggests using design thinking as a tool to explore new possibilities.

For start-up companies, integrating design thinking into every aspect of the business requires incorporating design in the early development process. Entrepreneur and past incubator student, Chris Haynes, emphasizes the importance of design for start-up companies, “Design should be there from step one. Even if you have a business idea, a designer needs to be working with you to develop
that idea” (C. Haynes, personal communication, November 17, 2013). Haynes recognizes design as a powerful tool in creating innovation. Design thinking can help a start-up company to explore new ideas and posit different approaches to solving problems rather than encouraging the exploitation of a solution. Instead of using design to apply a pleasing aesthetic to a finished product, design should be used to develop an initial idea into a successful product. Haynes business partner, Darren Mills, elaborates on this point, stating:

“You don’t want to throw lipstick on a pig by hiring the best talent out there, but have crap ideas and crap management. You need to have design integrated into all the parts. It can change the way your company runs by creating a habit of always asking, ‘How can I simplify this? What is this communicating to the user?” (D. Mills, November 17, 2013).

Design is a powerful tool for change and should not be undervalued in the start-up world. In order to compete in today’s markets, companies must develop a strong brand with a compelling story. Mills explains how design has become increasingly important for a business to utilize, “As of the last maybe two years, every company that comes out is so design based, every new app has a perfect user experience, and it’s everything you would expect to happen, happening” (D. Mills, personal communication, November 17, 2013). This is the a priority in the eyes of the consumer. Design will not only aid entrepreneurs in developing a rough idea into a successful product; it can create a brand around that product and build trust in the eyes of the consumer.
Multi-disciplinary Collaboration

Current incubator students and established entrepreneurs both agree that creating a collaborative space for entrepreneurs to share ideas with each other as well as a network of professionals with different backgrounds aids significantly in the growth of a new business. Each incubator has its own unique atmosphere for its entrepreneurs, designing a space that allows the exploration of different approaches can be very beneficial. Jeff Hoffman, founder and CEO of Priceline, acted as a mentor in a radical experiment from George Kembel, founder of The Institute of Design at Stanford, called Unreasonable at Sea. Kembel’s Unreasonable at Sea was a semester-long program in which students traveled the world together on a ship in attempt to launch a start-up company with the world as the collaborative workspace. The point of the experiment was to encourage entrepreneurs to explore taking different approaches to solving problems by forcing students out of their typical incubator setting. Hoffman explains the importance of creating a collaborative atmosphere, “The more engaged you are, the more people you talk to, the more places you go, obviously, you are just building your knowledge base and your experience base. It helps you in everything you can do later” (J. Hoffman, personal communication, November 1, 2013). Giving students the opportunity to view the world through a different light allows those students to approach solving business development problems through that different light.

Collaboration should happen between entrepreneurs within an incubator, as well as between entrepreneurs and a network of professionals in varying fields. One of the greatest benefits of taking part in an incubator system is the opportunity to network with professionals as an idea is being developed into a business. Mike Duneic, a current student at the FlashStarts incubator, recognizes this benefit, “The funding helped, but really, you know what was the biggest help was the network”
(M. Duneic, personal communication, November 24, 2013). Incubators should offer entrepreneurs connections to a pool of professionals with different backgrounds. These professionals can guide entrepreneurs as a business idea is developing and provide different approaches to solving problems along the way.

**Mention of Lean Start-up Method**

Entrepreneurs who were past incubator students and had been involved with start-ups previously stressed the importance of applying the lean start-up method to the development of an idea into a successful business. Many incubators do not practice the lean start-up method, instead, entrepreneurs are given a large amount of funding and expected to deliver a completed product. Without creating iterations and testing those concepts, entrepreneurs are relying strictly on instinct to inform the decision-making process. Former incubator student, Darren Mills, expresses concern for entrepreneurs that are not testing ideas, “If you keep changing some sort of design, whether it is user interface or internal, if you keep changing that design, but those changes are not made on intelligence, then you're just doing busy work” (D. Mills, personal communication, November 17, 2013). Mills argues that entrepreneurs have the unique advantage of deciding which direction to take a product, and even a business. However, making those decisions blindly, without testing a hypothesis leaves more of the finished product up to chance. The direction of a product and the development of an organization should be based off of informed decision-making.

Mill’s business partner, Chris Haynes, believes all incubators should adopt the lean start-up method in order to improve an entrepreneur’s chance of success. Mill’s describes his experience in an incubator:
“You go to an incubator and say, ‘hey I’ve got this idea,’ and they are like, ‘oh let’s build this whole massive thing and launch it.’ As opposed to, ‘hey guy’s I’ve got this idea and I’ve got 100 users.’ ‘Awesome, well let’s sit down and figure out how you’re going to take some steps to have 200 users next week” (D. Mills, personal communication, November 17, 2013).

Incubators want entrepreneurs to quickly develop a finished product rather than make informed decisions on critical problems by testing different concepts. This method leaves the future of a business, and the development of a product, completely up to chance, relying strictly on the entrepreneur’s intuition for guidance.

**Using lean start-up to gain traction.** The importance of traction cannot be undervalued in the start-up world. Entrepreneurs all agree that with start-ups, traction leads to success and funding, not the other way around. When asked about the ease of finding investment, Jeff Hoffman stated,

> “Here’s the fundamental truth that people don’t know; money always finds good ideas, because good ideas get out. In entrepreneurship, it is absolutely the truth that, if you go out and create value in the world, then the world rewards that value” (J. Hoffman, personal communication, November 1, 2013).

Hoffman argues that acquiring investment money is not an issue if the product or service created has value in the eyes of the consumers. The only way to prove value is by gaining traction; it helps an entrepreneur understand where an organization stands in an industry. Chris Haynes explains how traction takes precedence, “You don’t have to have money to make a business. You’ve got to make an idea happen first, then you’ll get money, and then you take it further, and then you get some more
money” (C. Haynes, personal communication, November 17, 2013). Traction should be the initial goal of a start-up, not investment. A passionate entrepreneur can build a unique product or service and create traction without investment. Hoffman believes seeking traction encourages entrepreneurs to explore: “If the only thing you want is that money in return as another dollar for that dollar, you won’t get a lot of opportunity” (J. Hoffman, personal communication, November 1, 2013). Attempting to gain traction without investment forces entrepreneurs to innovate, whereas having an initial investment can pressure entrepreneurs into treating growing a company as a blanket formula.

**Entrepreneur View on Incubators**

Although many incubators prefer the term accelerator, entrepreneurs and past incubator students believe that incubators actually slow down the growth process. Chris Haynes explains how not adopting the lean start-up method actually slows down development, “We went to the network and they wanted us to build this huge mansion, but I’m building it brick-by-brick and we are really seeing more success that way” (C. Haynes, personal communication, November 17, 2013). Rather than create a minimally viable product to test and refine, the incubator encouraged Haynes to develop a finished product to launch to the public. The lean start-up method allows the user to move quickly to develop and test new ideas, then use those findings to inform the next move. Expecting entrepreneurs to build a finished product before gaining traction delays growth.
CHAPTER VI

Design Thinking Incubator Model

Incubator Students (Entrepreneurs)

In a design thinking driven incubator, entrepreneurs work collaboratively in a team of dedicated professionals. The entrepreneur should be in charge of determining the members of the team and must decide how the team can be tailored to fit the focus of the specific business. Upon acceptance to the program, entrepreneurs should be paired up with a design student to develop an idea together. As soon as the idea is being narrowed from a mystery into a heuristic, the designer and entrepreneur should define a team to assist in the development of the product or service. The designer and entrepreneur must have equal say and power in the decisions concerning the company’s future.

Chris Haynes, past incubator student, recommends pairing designers and entrepreneurs for a successful outcome,

“Pair these designers up with the student as soon as they come to an idea. Let the business guy teach you about business, while the design guy is saying, ‘Well I like your idea, but hold on, why don’t we take the whole thing a step back so we can see designs implication on step one and then work toward step two’” (C. Haynes, personal communication, November 17, 2013).

Haynes believes integrating design in the idea-generation phase can help a business arrive at the most successful solution. By pairing together designers and entrepreneurs early to develop an idea, it ensures that no part of the design of the product is overlooked, whether it is the product’s brand or the user experience. In The Design of Business, Roger Martin describes a common occurrence of
designers getting caught up in the mystery stage and never progressing through heuristics to a final algorithm (Martin, 2009, p. 19). For this reason, it is important that designers work with the entrepreneurs to develop an idea. Designers are focused on exploring mysteries, while entrepreneurs are concentrated on exploiting a successful algorithm. Together the pair can balance each other out and make sure the focus is not entirely exploration or exploitation.

While the entrepreneur should ultimately be in charge of choosing a designer to pair with, the incubator should offer a network of capable designers. The designers in the network must be familiar with design thinking and strategy as a method for developing ideas. Jeff Hoffman expresses the benefit of employing design students: “Students are wide open thinkers – they don’t pre-filter” (J. Hoffman, personal communication, November 1, 2013). Design students who are in well-respected programs are the perfect group for a design-thinking incubator to pull from. Design students have experience with branding, strategy and design thinking tools, and have not yet been exposed to the prejudices of working with clients, resulting in more unfiltered, creative thinking. Scott Belsky, co-founder of Behance explains how design students can greatly benefit start-up success:

“If I were a design graduate with an entrepreneurial interest and a problem that I was passionate about solving, I’d look for people in business and technology with a similar interest. I would give the same advice to business school graduates that want to be founders. Go find a co-founder that really complements you and will be the central part of the DNA of your business. That will make it successful” (Belsky, 2011).

A design-thinking incubator should help entrepreneurs connect with recent design school graduates to develop innovate ideas for a sustainable business.
**Requirement for Enrollment**

While a design-thinking incubator should not be the one providing entrepreneurs with business ideas, it is important to accept people who are capable of positing several interesting ideas. Asking hopeful entrepreneurs to submit several viable options helps the incubator determine if an entrepreneur is able to think creatively, or if they are narrow-minded. A design-thinking incubator should look for entrepreneurs that are interested in exploring mysteries, not exploiting existing ideas. Once in the incubator, an entrepreneur can work with a designer to determine just exactly which path to take. Jeff Hoffman strongly believes that entrepreneurs who can offer multiple business ideas will find more success:

“No gravity is what I always tell them, just throw the idea out. So 99 out of 100 of them are just funny, we laugh and people say, ‘Oh I wish I hadn’t said that out loud.’ But, if you don’t open the filter, completely open the filter and just do that, you never get to the 100th idea, which is just so crazy that it’s brilliant” (J. Hoffman, personal communication, November 1, 2013).

Hoffman uses this tool of idea generation in workshops, and the importance of proposing different concepts for business development should not be undervalued. If exploration is the focus of a design-thinking incubator, then the ability to propose multiple business ideas means the entrepreneur won’t be focused strictly on exploitation.
**Incubator Mentors**

Entrepreneurs should first determine the specific team members necessary to create a product, and then personally recruit talent to join the start-up. Mentors, rather than offering services like design, coding, and marketing by playing the role of a team member, should offer unbiased guidance. The incubator should be in charge of identifying a network of successful and established entrepreneurs to connect the students within the program. It is important that the entrepreneurs selected do not initially invest in the companies within the program so that guidance offered is only in the best interest of the start-ups. Darren Mills, past incubator student, stresses the importance of finding good mentors:

“We need a mentor that walks students through the process so that they can learn from his or her experience. They need something to tell them at different points, where they are, and what they need – and a mentor can provide that” (D. Mills, personal communication, November 17, 2013).

Established entrepreneurs can offer incubator students helpful guidance from personal experience. Most start-up businesses encounter similar issues, and rather than learning the hard way, incubator students could get advice from mentors in order to avoid these setbacks.

**Incubator Focus**

There should be no specific focus for entrepreneurs in a design-thinking incubator. A limited focus for an incubator means the incubator will apply a fixed formula to growing a business, but each
company is different and requires different approaches. Building a company requires designing each step of a company’s creation. Belsky explains:

“I recognized that this [Behance] was such a design-centric business, not only in the sense that we’re serving the design and the creative community, but also that the product range, the message, the brand, the communications, everything, including the business model itself, needed to be designed” (Belsky, 2011).

Building a company is not a fixed formula that can be applied to any entrepreneur’s idea. Entrepreneurs and designers must work together to tailor the growth of a company to its specific needs.

**Program Time Frame**

Entrepreneurs in a design-thinking focused incubator must be given ample time to explore mysteries, narrow down heuristics and determine a successful formula that will gain traction. An ideal amount of time to allow entrepreneurs to move through the knowledge funnel without sacrificing exploration or exploitation is six months, an average of the time frames found in existing incubators. Too much time will encourage entrepreneurs to remain in the exploration stage and too little time will force entrepreneurs too quickly through exploration into exploitation. Instead, the time frame must help foster the balance between exploration and exploitation.
Investment

A design-thinking focused incubator should not award funding and investment to entrepreneurs simply for being accepted into the program. It is important that, as an idea is being developed and a business is forming that, entrepreneurs are not influenced by outside opinions before beginning to explore mysteries. Instead, entrepreneurs must find ways to gain traction without receiving initial funding. Darren Mills explains how investment can hurt entrepreneurs,

“Some ideas just need money to do, and the business model is set up in such a way that you need the money on the front end of it. But if that’s the case, you pretty much prepare yourself that you’re going to have to give something away from your company. The key to eliminating cost is adjusting your business model. The one thing an entrepreneur can do is keep changing the way the engine works” (D. Mills, personal communication, November 17, 2013).

Entrepreneurs should have complete freedom to explore as an idea is developed into a viable business. When a start-up company receives funding and gives a percentage of the company to investors, it loses the freedom to explore. Rather than decide what aspect of the company an entrepreneur is willing to sacrifice, the business model should be reworked so that traction can be gained without funding. At the end of the design-focused incubator program, investment can be made either by the incubator or an outside investor. Forcing entrepreneurs to gain traction without investment encourages entrepreneurs to innovate and explore new ways of approaching an idea in order to gain traction. Without receiving initial investment, entrepreneurs have the freedom to truly explore without the pressure to deliver.
Perceived Value of Design

Design is recognized as equally important to the foundation of a company, thus a design-thinking focused incubator should teach entrepreneurs and designers how to work together to create design-thinking focused start-ups companies. Designer and entrepreneur must work together through a series of strategy exercises to determine a mystery to explore and a heuristic to test and refine. Design not only helps entrepreneurs explore different mysteries, but also enables the differentiation between a product and brand, and its competition. Using design from the beginning ensures an accurate portrayal of the brand and its ability to connect a business to its consumers. Entrepreneurs and designers must work together to create a balance between exploration and exploitation as they develop a business.

A.G. Lafley, retired CEO of Proctor and Gamble, understood the importance of design when hired in 2000 to help the struggling consumer-goods company. Lafley’s first move was to hire Claudia Kotchka to lead Proctor and Gambles new design initiative. Together, Lafley and Kotchka imbedded design methodology into the leadership system of the organization. Kotchka explains the role of design, “We wanted design to be sitting on the leadership team, wherever decisions get made, and have a voice. And we wanted the business units to really understand design, participate in design, and not see it as a black box” (Martin, 2009, p.87). The result of integrating design was noticeable within three years; a once struggling company doubled it’s profits to nearly $200 billion, making Proctor and Gamble one of the ten most valued companies in the world. Integrating design and business to encourage a balance of exploration and exploitation was the key to success for the once struggling Proctor and Gamble. Kotchka’s approach to incorporating design thinking for a business breaks down into three parts:
• Deep and holistic user understanding
• Visualization of new possibilities, prototyping and refining
• The creation of a new activity system to bring the nascent idea to reality and profitable operation (Martin, 2009, p.88)

While a start-up company and an already established business experience different issues, entrepreneurs within a design-thinking incubator can learn from the success of Proctor and Gamble’s design integration. Design students can work with entrepreneurs while an idea is being developed and offer insight into a user focus and the ability to quickly prototype and refine.

Having design on the leadership team of a business ensures that, as the company grows and changes as a result of innovation, the brand retains an accurate portrayal of the company’s goals. John Heskett, Chair Professor at The School of Design at Hong Kong Polytechnic University, explains in his journal, Creating Economic Value by Design, how Apple successfully monitors its brand during growth.

“Apple created a new market with the introduction of its iPod and the iTunes system in late 2001, which revolutionized the retail music business. Despite intense competition from imitators, it has maintained its superiority due to consistent development of the product range, the continuing quality of its technology, and the strong identity that carries it” (Heskett, 2009).

Apple is able to consistently innovate to better connect with consumers, and while the company changes and the product range diversifies, the brand is closely monitored to make certain it still resonates with the audience in the same manner. Having design integrated into all levels of the organization allows Apple to change, yet remain incomparable in the eyes of the consumers.
In explaining how design and business can work together, Roger Martin offers five things that
design thinkers need to do to be more effective with colleagues at the extremes of the reliability and
validity spectrum:

• Reframe extreme views as a creative challenge
  o Embrace the challenge of finding creative ways to help colleagues see the
    opposing viewpoint
• Empathize with colleagues on the extremes
  o Understand how colleagues think to learn how best to communicate
• Become fluent in the language of reliability and validity
• Put familiar terms to unfamiliar concepts
• When it comes to proof, use greater amounts to your advantage (Martin, 2009, p.168-177)

Design students must use these tips when learning how to best integrate design into the business
development process. While design can be a great benefit to any organization and should be
recognized as an important aspect of growth, understanding how to communicate and collaborate
with team members with varying mindsets is equally important.

**Metrics**

Most incubators track success by analyzing a start-up company's sales, number of jobs,
average salary, total payroll, and number of partnerships. These methods are for incubator programs
in which the entrepreneur is expected to quickly get a completed product to market and launch
without publicly testing initial iterations. However, allowing entrepreneurs the freedom to explore through quickly creating and testing various iterations should only be analyzed based on traction. Entrepreneurs in a design-focused incubator will not be given investment upon acceptance to the program, meaning the only way to track progress is not through return on investment, but rather success must be determined by traction. Throughout the program, progress can be tracked by an entrepreneur’s ability to test and refine. Ries explains this form of monitoring growth: “Progress in manufacturing is measured by the production of high quality goods. The unit of progress for Lean Start-ups is validated learning – a rigorous method for demonstrating progress when one is embedded in the soil of extreme uncertainty” (Ries, 2011). When striking a balance between exploration and exploitation is the goal of an incubator, the most successful mode of analyzing an entrepreneur’s growth without stifling exploration is through traction.
CHAPTER VII

Conclusion

The primary objective of this thesis has been to understand how the exploration mindset of design thinking and the exploitation focus of business can be best integrated to ensure long-term success for start-up companies. Restructuring the traditional business incubator system to the proposed design-thinking focused incubator model will allow start-up businesses to adequately compete in today’s markets.

In order to remain relevant, a business must constantly travel back and forth along the knowledge funnel, exploiting proven algorithms and using that success to fund the exploration of new mysteries. Integrating design thinking into an organization allows for a successful balance of exploration and exploitation. Start-up companies must focus on that balance as mysteries are being explored and a product or service is developed. Moving too quickly to exploitation doesn’t give an entrepreneur enough time to determine a valuable outcome, while remaining too long in the exploration stage will drain all the resources they have available. Design thinking is the key to helping entrepreneurs strike a sustaining balance in the knowledge funnel.

Now more than ever, an entrepreneur must develop a strong brand with a compelling story in order to connect with its consumers. As a business is moving from a mystery to a heuristic, and finally an algorithm, a brand should be built coinciding with the product being developed. Design thinking ensures that the product and matching brand story are focused on fundamental human needs. Fostering this strong connection between a business and its consumers through brand value is imperative if a start-up expects to rise above the competition.
The current field of business incubators available to prospective entrepreneurs does little to integrate design into the growth of a business. Many incubators begin investing in a business as soon as an entrepreneur is accepted to the program. Entrepreneurs are then pressured to quickly develop a finished product and launch it within the market so that a return can be made on the incubator’s investment. Rather than encouraging the entrepreneurs to explore a mystery and build a brand through delayed investment, the incubator’s focus is on making a quick profit.

A design-focused incubator will utilize the lean start-up method to allow entrepreneurs the freedom to explore mysteries and ultimately build stronger brands. Entrepreneurs will be paired with designers to work side by side and explore different ideas and develop a successful user-focused product or service. Together, the designer and entrepreneur can create a balance between exploring mysteries and exploiting an algorithm to ensure long-term success.
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