

**ENTREPRENEURSHIP,  
INNOVATION AND TECHNOLOGY  
A Guide to Core Models and Tools**

**Oswaldo Lorenzo**

**Peter Kawalek**

**Leigh Wharton**

## **ABOUT THE AUTHORS**

### **Oswaldo Lorenzo**

Oswaldo Lorenzo is Professor of Digital Strategy, Innovation and Operations at Deusto Business School (Spain). He is also Visiting Professor in Alliance Manchester Business School (UK). He was previously Professor of Management at IE Business School (Spain). He received his PhD from Warwick Business School (UK). Professor Lorenzo has also been guest professor at IESA (Venezuela, Panamá), Tec de Monterrey (México) and IAE Business School (Argentina). He has advised a number of companies and institutions in Europe and Latin America. He has been part of the founding teams of both a consulting firm and an internet business in Latin America. His papers and articles have been published in California Management Review, Information & Management, Journal of Business Ethics, and Communications of the Association for Information Systems.

### **Peter Kawalek**

Peter Kawalek is Professor at the School of Business and Economics, Loughborough University, United Kingdom, where he is Director of the Centre for Information Management. Previously he was head of the Business Economics and Strategy Group at Alliance Manchester Business School, and also has experience as Visiting Faculty at Deusto Business School, Basque Country, Spain, Instituto de Empresa in Madrid, Spain, and Letterkenny Institute of Technology in Letterkenny, Ireland. He is Professor-in-Residence at four23 studio, a Communications Design boutique in London. His books consider the role of technology in organizations and society. He has extensive experience in different sectors including board level commissions in the media industry and to senior officer and ministerial level in governments. Peter's PhD is in Computer Science.

### **Leigh Wharton**

Leigh Wharton works in partnership with people and organisations creating new ventures via his own companies, Bubble Partnership Ltd for commercial businesses and Bubble Enterprises CIC for social enterprises and social projects in the community and voluntary sectors. He has run his own successful consultancy businesses for more than 13 years, delivering a whole range of projects and services over that period of time. External Lecturer & Module Co-ordinator of the Alliance Manchester Business School Global MBA. Leigh Wharton is DBA candidate and MBA from Alliance Manchester Business School.

## INTRODUCTION

Entrepreneurs are fabled in the press, sometimes in the history-book, and are acknowledged with a special place in economic theory. The combination of entrepreneurship, innovation and technology has become the source of disruptive business models that transform industries and markets. The integrative understanding of these three drivers of today's economy is fundamental to business. This book aims to connect *core models* and *tools* that are already created by well-known authors and scholars in order to deliver a unique guide for building successful business models through the adoption of new technologies and the use of effective innovation methods. The book is composed of five chapters as follows:

Chapter 1 presents the managerial processes of the entrepreneurial lifecycle. This goes through the different stages of business opportunities, ideation and testing, business model generation, resource acquisition, management and execution. Chapter 2 describes the process of business model innovation and situates this as a fundamental part of a broader entrepreneurial lifecycle. The chapter goes through the concepts of business models, disruptive technologies, disruptive innovation and the different ways in which the innovation of business models occur. Chapter 3 presents core methods and tools that support innovation across the entrepreneurial lifecycle. Chapter 4 describes the skills required to manage the entrepreneurial journey and the innovation process based on technology adoption. Finally, chapter 5 presents an integrative approach of entrepreneurship, innovation and technology in a way that connects one another to the creation of business value.

The entrepreneurial journey is very difficult, almost by definition. We hope you enjoy your journey overall, and that you overcome the challenges and embrace the successes. As you progress along your entrepreneurial road, we also hope that you take full advantage of the models and tools explained.

## Chapter 1: Stages of the Entrepreneurial Lifecycle

### Chapter at a glance

Main Topics:

- The entrepreneurial lifecycle
- Identification and assessment of business opportunities
- Ideation and testing
- Generation of business models
- Effectuation and the acquisition of resources.
- Management and execution of an entrepreneurial project.

Case Study N°1:

- The McDonald's Story of "The Founder".

### Learning outcomes

After completing this chapter the reader should be able to:

- Identify the different stages of the entrepreneurial lifecycle.
- Find, assess, and select business opportunities.
- Conceptualise an idea and test its assumptions through the customer validation process.
- Describe the different components of a business model.
- Identify and acquire resources through the principle of effectuation.
- Identify critical factors for the management and execution of an entrepreneurial project.

### Management issues

The issues for entrepreneurs and managers raised in this chapter include:

- How do we successfully identify and assess business opportunities?
- How do we test and validate an idea?
- How do we fully describe a business model?
- How do we acquire resources under a context of financial restrictions?
- What are the critical recommendations for the management of an entrepreneurial project?

## Links to other chapters and resources

The main related chapters are:

- Chapter 2 examines business model innovation approaches and the application of technology into the business model innovation.
- Chapter 3 describes methods and tools to support the ideation and testing processes.
- Chapter 4 introduces the entrepreneurial skills required to manage the different stages of the lifecycle.

The main related resources are:

- The future needs research by Fraunhofer Institute.
- A startup is not a smaller version of a large company by Steve Blank.
- Effectual entrepreneurship by Stuart Read and his colleagues.
- The Lean Startup by Eric Ries.
- Business model generation by Alexander Osterwalder.
- Entrepreneurship and Innovation: Global Insights from 24 Leaders by Rothman Institute of Entrepreneurship.

### **1.1. Introduction**

In this chapter we depict entrepreneurial action as consisting of a number of stages which together make up a lifecycle. Specifically, the chapter identifies and describes the following stages in that lifecycle: business opportunities, ideation and testing, business model generation, resource acquisition, management and execution.

#### ***Business opportunities:***

Entrepreneurs transform industries and markets. Through this, they create or allocate value for customers and society more generally and at large. Some entrepreneurs focus on solving people's needs whilst others create new opportunities from unseen possibilities. From such observation we conclude that opportunities can be found or they can be made. These different kinds of entrepreneurial action, amongst the finders and the makers, characterise the study of entrepreneurship. Examples of both types of entrepreneurs are given and analysed in the following pages.

#### ***Ideation and testing: ideas, products and customers***

The fundamental activity of an entrepreneur is to turn ideas into products, to measure the customer response, and to learn from this loop. Steve Blank's model of customer

development and customer validation is a helpful and proven approach that allows entrepreneurs to quickly and effectively test their hypotheses. The concepts of “pivot” (major correction) and “minimum viable product” are fundamental facilitators of this kind of learning cycle.

### ***Business model generation:***

Startups need to search for repeatable and scalable business models. In so doing, entrepreneurs can map their business hypotheses through the Business Model Canvas that comprises nine building blocks: 1) Customer Segments, 2) Value propositions, 3) Channels, 4) Customer Relationships, 5) Revenue streams, 6) Key Resources, 7) Key Activities, 8) Key Partners, 9) Cost Structures.

### ***Resource acquisition:***

Once the entrepreneur has defined his or her hypothesis and is ready for the execution of the journey, he faces one of the most critical challenges: the acquisition of the resources needed for the startup and early stages of this journey. Entrepreneurs need to plan different phases of business development and to align these with their startup funding. A failure to complete this process is common and a lack of money is widely given as an explanation as to why many would-be entrepreneurs have not already started planned or potential ventures. However common this situation is, the history of entrepreneurship also highlights a set of examples where experienced entrepreneurs started working within their means and allowed their goals to emerge over time (i.e. effectuation).

### ***Management and execution:***

Once the entrepreneur finds a repeatable and scalable business model she goes onward to the execution phase: customer creation and company building. This execution phase is reasonably self-explanatory and comprises of creating end-user demand and building the organization to meet that demand. This involves transitioning from a startup to a scalable business.

The following sections present a detailed explanation of each of these stages and offer a set of examples and complementary resources such as links to articles, videos and podcasts.

## ***1.2 Business Opportunities***

It seems that the search for the attractive opportunity is somehow in the blood of an entrepreneur. In popular culture, some entrepreneurs are considered as heroes in our times: Jack Ma (Alibaba), Elon Musk (PayPal, Tesla, SpaceX), Steve Jobs (Apple), Arianna Huffington (The Huffington Post), Richard Branson (Virgin), Wang Laichun (Luxshare Precision), Sheryl Sandberg (Facebook and Leanin), Jeff Bezos (Amazon), Larry Page (Google), Sergey Brin (Google) and Mark Zuckerberg (Facebook) – these are all examples of admired entrepreneurs. The profiles, opinions and life-stories of such entrepreneurs feature widely in popular journals. A little less famous, but also very highly noteworthy are entrepreneurs including Pierre Omidyar (eBay), Kiran Mazumdar-Shaw (Biocon), Sal Khan (Khan Academy), Anita Roddick (Body Shop), Marth Lane Fox (Lastminute.com), Kevin Systrom (Instagram), Weili Dai (Marvell Technology Group), Errol Damelin (Wonga), Bill Drayton (Ashoka Foundation), Muhammad Yunus (Grameen Bank), Ibrahim Abouleish (SEKEM), Xabier Uribe-Etxebarria (Sherpa), and Alberto Mendez (BQ). Overall, famous or not, entrepreneurs are commonly regarded as self-made, imaginative and determined seekers of business opportunity and value.

A recurrent question that follows for researchers and experts is how successful entrepreneurs find and select an opportunity. Researchers frequently interpret this by asking whether such opportunities are found or made. Stuart Read<sup>1</sup> and his colleagues in the book titled “Effectual Entrepreneurship” contrast these two alternative views. In the “found” view, entrepreneurs attempt to capture a new underserved or latent market. Under the “made” view, entrepreneurs create or transform, generating new opportunities from innate possibilities.

A very practical enunciation of the “found” view is the Fraunhofer<sup>2</sup> mode of approaching applied research. “We seek and find solutions – innovative products, technologies and processes which make our lives healthier, safer and more worthwhile.” From this perspective, Fraunhofer focuses on people’s needs and it searches, selects and embarks on new innovation projects. Fraunhofer has identified market opportunities in six fields: health, security, communication, mobility, energy

and the environment. We can identify examples successful entrepreneurs working on one or several of these fields in order to resolve problems in life. (See Table 1.1).

The story of John Crowley<sup>3</sup> represents a perfect example of an entrepreneur's involvement in the solution of people's needs. Crowley's own children were diagnosed with Pompe disease, a rare and fatal neuromuscular disorder. He embarked on an entrepreneurial venture to find a treatment that would save their lives. The touching movie<sup>4</sup> "Extraordinary Measures" was inspired by this true story. He records, "As a company, the first thing we did was sit in a room and talk about where we wanted to be in five and ten years. The answer was easy for me. I wanted to find a cure for Pompe disease, and then come up with technologies to treat a range of human genetic disorders."

Although the main focus of books and articles is upon those entrepreneurs who focus on people's needs in order to create a profitable business, there are many others who seek instead to understand people's needs so that they can then generate a socially beneficial outcome. As explained by Peter Brinckerhoff<sup>5</sup>, "social entrepreneurs are people who take risk on behalf of the people their organization serves." Thus the term 'social entrepreneur' refers to someone who uses the same techniques as the entrepreneur of a profit oriented business, but who does so in order to create and manage a not-for-profit, socially ameliorative businesses. Such social businesses are a very important topic of study these days as there is high awareness of social problems and increasing critique of our dominant capitalist model.



**Table 1.1. Fraunhofer Framework and Examples of Successful Entrepreneurs**

Field	Fraunhofer's aim <sup>6</sup>	Successful Entrepreneurs
Health	Ensure that access to medical care remains affordable to all in long term. Produce innovations which make prevention, diagnosis and therapy more reliable, faster and cheaper.	John Crowley, CEO of Amicus Therapeutics, Inc.
Security	Pursue the goal of protecting people as much as possible. This may include, for example, risk assessment solutions, emergency management systems, data protection infrastructure, and building controls.	Kurus Elavia, CEO, Gateway Group One.
Communication	Deliver valuable information to communication networks, which for example help drivers to avoid traffic jams or doctors to check the health of patients.	Dr Rich Khatib and Dan Vahdat Founders of Medopad Webpage: <a href="http://www.medopad.com">www.medopad.com</a>
Mobility	Increase mobility to widen people's horizons. This may include for example new developments to avoid traffic jam and accidents, or new technologies to encourage broader use of public transportation	Stacy Zoern, founder of Kenguru. Webpage: <a href="http://www.kenguru.com">www.kenguru.com</a>
Energy	Ensure that power and heat are available at affordable process in future. Use energy more efficiently and make a greater effort to develop renewable sources.	Miles Barr, co-founder of Ubiquitous Energy Webpage: <a href="http://www.ubiquitous.energy">www.ubiquitous.energy</a>
Environment	Protect the natural environment by, for example, reducing the consumption of resources, lowering emissions, and using less toxic materials.	Vincent Alessi, Founder of Covaron Advanced Materials Webpage: <a href="http://www.covaron.com">www.covaron.com</a>

Lilian Rodriguez López is a successful example of this kind of social entrepreneur. She has been involved in the development and leadership of the Hispanic Federation for about 20 years. The Hispanic Federation serves more than ninety Latino health and human service agencies in New York, New Jersey, Connecticut and Pennsylvania. She clearly defines a social venture as follows: “your contributions are your revenues, your funders are your clients, and your business is health and human services. But, we manage businesses with a heart. Our imperative is the social good of the communities and the people we serve.” She distils four key lessons for running a non-profit business. First, take full advantage from all experiences; even negative experiences will make us stronger. Second, “if it was easy, everybody would be doing it”. Succeeding implies high levels of discipline, perseverance and dedication. Third, determine your values and stand for them. Many things will affect the job: public policy, legislation, government budgets, etc., then, it will require standing for what you believe is fair. Finally, give back to society in any form that you can<sup>7</sup>.

Returning to the “made” view of entrepreneurship, it becomes understood that the market cannot be defined in a simplistic way but that opportunities emerge over time through an interactive process of learning amongst customers, partners and the entrepreneur. Perhaps, Steve Jobs is one of the most fabled examples of this approach. Once he argued: “A lot of times, people don’t know what they want until you show it to them<sup>8</sup>.” Jobs was able to create new products and even product categories (e.g. Mac, iPod, iPhone and iPad) by the development of creative and transformative practices based on his individual motivations and the interaction with different stakeholders (e.g. colleagues, partners, customers, employees, etc.)

A key iteration occurs between Apple’s App store and the ecosystem of third party apps. The first generation of iPhone was launched for the American market on June 2007. The App Store opened on July 2008. It is widely known that Jobs resisted opening the iPhone to third party developers. He always wanted to hold firm control over his products. It seems that board members and senior managers including the now-chairman Art Levinson, convinced him of the opportunity of inviting third party developers to create new products and services to be distributed through the Apple platform<sup>9</sup>. After some time, Jobs changed his mind and made the decision to retain the

control with a strict app approval process but allowing third party developers to create new services for customers. It was not the first 'store' concept to be developed for a phone but it quickly became the most successful.

### ***1.2.1 Is this a good opportunity?***

The most obvious question asked by an entrepreneur is whether the opportunity he has identified will or will not work. According to Dun & Bradstreet and INC. magazine, 33% of all new businesses fail within the first six months, fifty percent of new businesses fail within their first two years of operation and seventy-five percent fail within the first three years. It follows that the most important task of an entrepreneur in her first miles of a journey is the assessment of the opportunity in order to test the idea before spending more of her time and money (or other resources).

According to John Mullins<sup>10</sup>, there are three crucial elements to be assessed in an entrepreneurial journey: markets, industries and the key people who make up the team. These three crucial elements manifest as three basic questions: Is the market attractive? Is the Industry attractive? Can the team deliver? Cutting to the core, markets consist of buyers and industries consist of sellers – can we match them up?

### ***Is the market attractive?***

Zappos.com is an online shoe and clothing shop based in Las Vegas, Nevada. Zappos<sup>11</sup> was founded by Nick Swinmurn in 1999 and, few months later Hsieh and Lin decided to invest \$2 million through their investment firm Venture Frogs. After minimal gross sales in 1999, Zappos brought in \$1.6 million in revenue in 2000. The company reached \$1bn in annual sales in less than 10 years and was acquired by Amazon in 2009 in a deal worth \$1.2bn. Zappos is a very good example of a great market opportunity identified by its founders. At that time, the footwear market in US was a 40 billion dollar market and 5% of the market was attended by mail order. Hsieh and Lin thought that if people bought 2 billion dollars of shoes through mail order catalogues, the Internet would be a substantially larger market. Hsieh and Lin invested on this opportunity and Hsieh involved himself as co-CEO.

In general terms, the assessment of the market comprises of two levels of analysis: the macro-level and the micro-level. The macro-level attempts to measure the size of the market. Measures can include, for example, the number of customers or the aggregated money spent by these customers. As part of these measures, the entrepreneur also analyzes the macro-environmental trends associated to the opportunity (e.g. the demographic, technological, regulatory and sociocultural issues of the environment).

With respect to the micro-level analysis, entrepreneurs should identify and evaluate a smaller segment of customers within the overall market. For John Mullins, there are four key questions at this level:

- i. Is there a target market segment where the startup might better resolve their pain at a price he or she is willing to pay?
- ii. Are these benefits different from other competitors?
- iii. How large is this segment?
- iv. Is it likely that the entry into this segment will provide entry to other segments?

Shouldice Hospital is a well-known case taught in a number of business schools in the areas of strategy, service management, human resource management and operations management. Shouldice is also an excellent example of the micro-analysis level of an opportunity, as identified by Mullins. During World War II, Dr. Edward Earle Shouldice (1890-1965) invented an innovative technique to help men with hernias. His method improved results and reduced recovery time. As Shouldice's method became known nationwide, there was a spectacular demand for hernia surgery. Dr Shouldice was able to identify a market segment where his unique and differentiating solution solved a customer's pain. In turn, it was this discovery that motivated him to found his own hospital in 1945<sup>12</sup>.

### ***Is the industry attractive?***

Once entrepreneurs analyze the market, the next step is to assess the industry. As mentioned, markets consist of buyers and industries consist of sellers. So, who is working there already and how is the extant industry faring? Usually, entrepreneurs

prefer to compete in industries in which competitors are profitable and in industries in which they can lever a sustainable advantage.

The most-used framework to analyze an industry is Porter's Five Forces (See Figure 1.1). For example, by analyzing the Personal Computer (PC) Industry between the 1980s and the early 2000s, one can see that industry's challenges that companies like Apple and IBM had to deal with and that affected its competitive advantage. In general terms, the PC industry became commoditized. Rivalry was very tough because of a high level of fragmentation, rapid technology obsolescence and price decline. The industry was also witness to progressively increasing buyer-power as consumers became more sophisticated and knowledgeable. In addition, the barriers to entry became very low because of more standardized components and the emergence of white-box providers. New technologies pushed PC prices down and suppliers (e.g. Intel and Microsoft) held significant bargaining power over manufacturers. In summary, the PC industry was, and remains, a difficult business. This is the reason why a number of companies like Apple and IBM have progressively abandoned this industry.

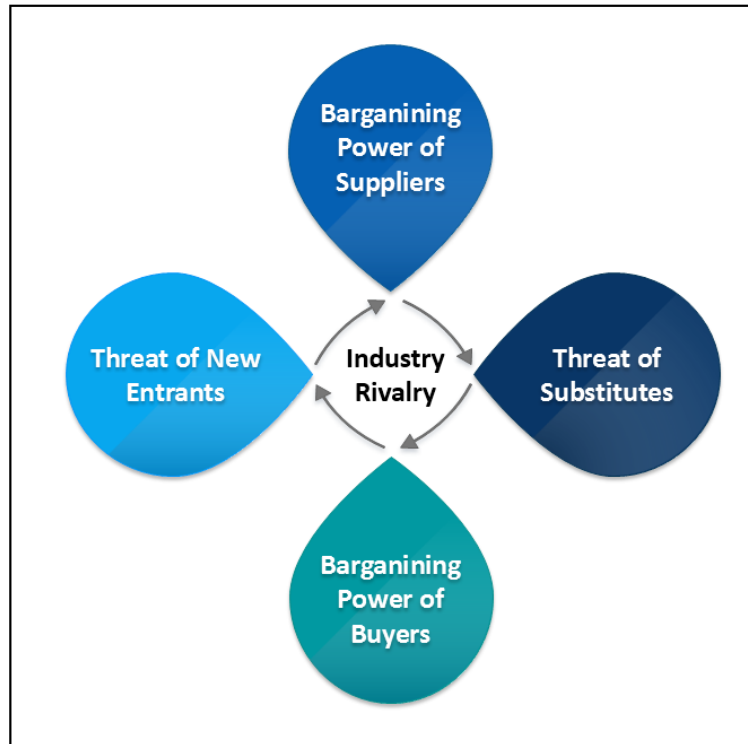
Entrepreneurs should also analyze the industry at its micro-level. For example, some questions to be addressed are as follows:

- i. Is the business model viable?
- ii. How is the relation of revenue to the capital investment required?
- iii. How much is the cost of customer acquisition and customer retention?
- iv. How long does it take to obtain a customer?
- v. How good is the contribution margin?
- vi. What are the characteristics of the operating cash cycle?

For example, the emergence of social media is transforming models and costs of customer acquisition in several industries including consumer goods, financial services, and content-based industries. To take the example of American Express, by developing communities of customers (e.g. Open Forum) and partnering with networks like Facebook (e.g. Link, Live & Love), the company is changing its customer acquisition and retention methods. These changes allow it to reduce costs and to increase willingness to pay. Open Forum<sup>13</sup> is an advice-sharing platform where entrepreneurs exchange advice to make smart decisions and succeed. On Facebook® the Link, Like, Love

campaign delivered card-member deals, access and experiences based on the likes, interests and social connections of card members and their Facebook friends<sup>14</sup>.

**Figure 1.1 The Porter's Five Forces**



Source: Michael Porter. "How Competitive Forces Shape Strategy". HBR. March-April. 1979.

### ***Can the team deliver?***

Steven Blank<sup>15</sup> clearly states "Typically, great start-ups are teams." But what are the key characteristics of a successful team for an entrepreneurial journey? The answer to this question depends on the industry. In a bit more detail, it is based on the identification of critical success factors for the specific industry, i.e. those factors that, done right, almost guarantee superior performance.

In his post<sup>16</sup> of July 29, 2013, Blank wrote specifically about the set of team skills required for the web/mobile startups. He identified three roles: the hacker, the hustler, and the designer. The hacker is the chief technology officer who can create the resulting technology that customers want. The hustler is the leader of the team (i.e. the CEO), the one who builds the team, ignites their passion, manages projects,

updates the business model, forms partnerships and guides the team along the validation path while cementing its culture. The designer follows the best practices in brand identity building, user experience, information architecture and wire-framing, while constantly informing the customer archetype. Wearing multiple hats, the designer builds layouts and, in most early-stage startups, is the copywriter as well. Ideally, the designer is also integral to the get, keep and grow marketing plans generated by the startup for both business-to-business and business-to-consumer campaigns.

The founding team includes the founder and a few other co-founders with complementary skills to the founder. This is the group who will build the company. The team's goal is to take the original idea and search for a repeatable and scalable business model- first by finding product/market fit, then by testing all the parts of the business model (pricing, channel, acquisition/activation, partners, costs, etc.)

Through the history of Apple, Steve Jobs built his team through a search for complementary skills that were fundamental to the industry. After his return to Apple, Jobs knew he needed to strengthen the Apple's operations and supply chain management. He needed a person with strong capabilities to manage and control the execution of the company (e.g., economies of scale, economies of scope, the management of a business network based on partners, suppliers and developers, and the management of a worldwide operation). He recruited Tim Cook. While Jobs delivered creativity and innovation, Tim Cook brought execution skills to the team. However, the death of Jobs has opened a global debate about the way Apple would compensate for his loss to the team. For many analysts, as a CEO, Cook is not as obviously pioneering in the race for innovation in the industry. Nonetheless, Cook has been able to maximize Apple's business results. Perhaps, this could be considered as expected result given that Cook exploits a set of successful products that Jobs had already created.

### ***1.2.2 NUF, New Useful Feasible: A tool for a quick assessment of opportunities.***

New Useful Feasible or NUF<sup>17</sup> is a simple and easy-to-use tool to assess business opportunities. This is particularly helpful for the assessment of solutions for market needs. Although this tool does not give much detail, it gives you an initial

understanding whether an idea will work. It is useful for filtering out ideas to identify, for example, the top five best ideas from a list.

How to use it? The solution of a problem or need is scored from 0 to 10 on each of the New, Useful and Feasible attributes.

- I. New: the solution has not been tried before.
- II. Useful: the solution solves the problem or addresses the market need.
- III. Feasible: the solution can be implemented in practice. This includes the cost of the idea and its difficulties to be implemented and used.

**Figure 1.2 NUF**

---

Check if an idea is likely to be effective and work in practice

Grade each idea from 1 to 10 on three parts:

- ☐ **New:** never tried before
- ☐ **Useful:** solves the problem
- ☐ **Feasible:** can be implemented in practice

Criteria	Score	Observation
New		
Useful		
Feasible		
Total		

---

### **1.3 Ideation and Testing: Ideas, Products and Customers**

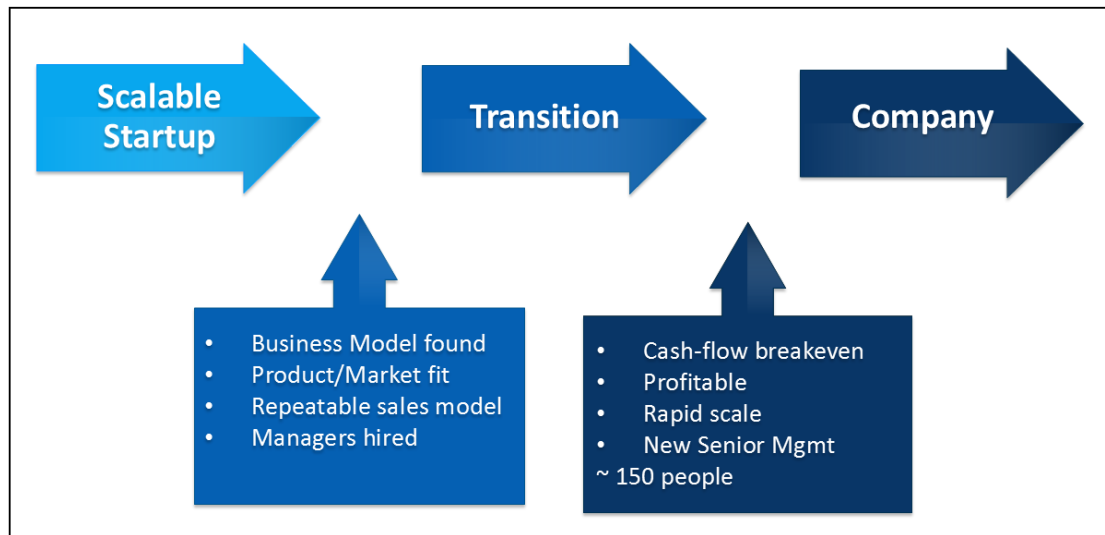
The fundamental activity of an entrepreneur is to turn ideas into products or services, measure the customer response, and to learn from this loop. There are a number of frameworks that describe the way of conceptualizing an idea, creating a product and testing it in the market. A useful example is Steve Blank's model of customer development and customer validation<sup>18</sup>. Blank's model is also closely connected to the Business Model Canvas<sup>19</sup>, which will be described in detail in the next section of this unit.

Steve Blank clearly states that startups are not smaller versions of large corporations. For him, a startup is an organization formed to search for a repeatable and scalable business model. That is a key difference and needs to be understood. See Figure 1.4. A



business model describes how the company makes money. A startup needs to find a repeatable business model so as to grow and become a large company.

**Figure 1.3. Getting from Here to There**



Source: A Startup is Not a Smaller Version of a Large Company. See it at the Steve Blank's blog: <http://steveblank.com/2010/01/14/a-startup-is-not-a-smaller-version-of-a-large-company/>

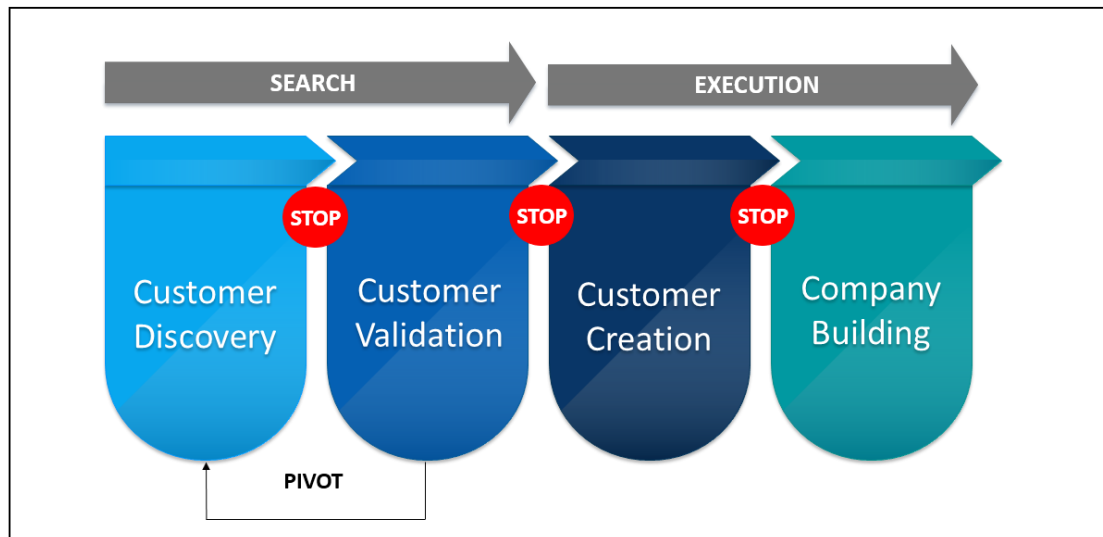
From this perspective, Blank developed the concept of the 'customer development process.' This is a four step process consisting of customer discovery, customer validation, customer creation, and customer building. See Figure 1.5.

The first two steps are part of the "search" objective of a startup. The first is customer discovery. This step is where the entrepreneur builds his/her hypothesis and he/she seeks to test the assumptions. The second step is customer validation where the entrepreneur sees if the proposed solution matches customer problems. This is often called product-market fit. One interesting point here is the concept of pivot. The pivot is a type of change designed to test a new version of hypothesis about the product, the customer, etc.

The third step of the process is customer creation and the fourth step is company building. These two final steps are part of the objective of a startup; that is, when the entrepreneur finds the repeatable and scalable business model comes the moment in

which he/she arrives at the execution phase. The execution phase comprises of creating end-user demand and building the organization to transitioning from a startup to a scalable business.

**Figure 1.4. The Customer Development Process**



Source: Steve Blank. The Four Steps to the Epiphany. Successful strategies for products that win. K&S Ranch. 2nd edition (July 17, 2013).

The concept of the pivot was introduced by Eric Ries in his book Lean Startup<sup>20</sup>. Ries talks about the dilemma of knowing whether to pivot or persevere. The entrepreneur needs to make a decision: to keep the current assumption and product, or to make a major change or correction in order to test a new hypothesis about the product, the customer and so forth. Every entrepreneur eventually faces this challenge in developing a product: deciding when to pivot and when to persevere.

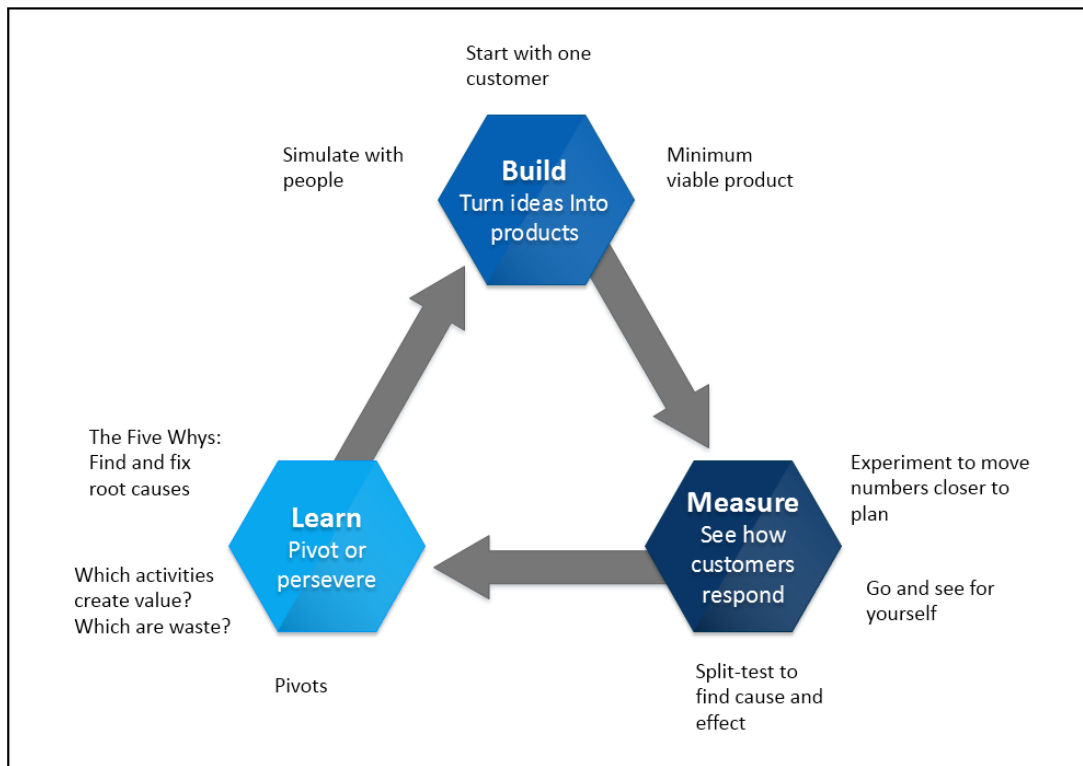
As mentioned by Blank, iteration in the “search” phase of the customer development process (i.e., customer discovery and customer validation) should be fast and should originate a learning episode that allows the entrepreneur to keep progressing with small changes (persevere) or to make a major change or correction (pivot). The issue of how quickly the entrepreneur learns is very important. Minimizing the cycle-time of iteration is crucial for behind it lies financial expenditure and also the psychological expenditure that the entrepreneur makes in order to keep motivated and active in her or his journey.

The lean startup methodology developed by Ries is based on the lean manufacturing philosophy of Operations Management. This advocates the elimination of waste in manufacturing and service processes. The application of lean philosophy into entrepreneurship theory and practice is based on the discovering and elimination of the sources of waste that can potentially plague entrepreneurial ventures. The lean startup approach asks entrepreneurs to measure their productivity differently to the emphases we see given in manufacturing and service processes. Startups must prevent building something that nobody wants, even if they complete it on time and on budget. The objective of a startup is to build the *right thing* as quickly as possible. The right thing is that which customers want and will pay for.

One of the main concepts in the Lean Startup model is the Minimum Viable Product (MVP). The MVP is considered the fastest and cheapest way to go through the learning process of Build-Measure-Learn (See Figure 1.6). The fundamental objective of the MVP is to test the startup hypotheses. There are a number of MVP examples that can be mentioned, from a simple smoke test (an advertisement) to early prototypes with missing features.

One of the classical examples of the MVP is the story of Drew Houston, CEO and Founder of Dropbox. This example is described in detail by Ries in his book. Although apparently easy-to-use, Dropbox implied significant technical expertise in the development process; for example, to achieve integration with a variety of computer platforms and operating systems (e.g. Windows, Macintosh, iOS, Android, etc.) This is considered as one of the main competitive advantages of the company. The challenge for Houston and his team was that testing a prototype was almost impossible because of these significant technical obstacles and the need for a reliable online service component. The solution was to make a video. Houston made a three-minute video demonstration for a community of early adopters. The video<sup>21</sup> was watched by hundreds of thousands of people and the beta waiting list went from 5,000 people to 75,000 people overnight.

**Figure 1.5. The Lean Startup Model**



Source: Eric Ries. *The Lean Startup. How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Business New York. 2011.

#### **1.4. Business Model Generation**

In many of his conferences and presentations Steve Blank frequently argues that “no Business Plan survives first contact with customer”. According to his thesis, instead of a business plan, a startup needs to search for a business model. What is a business model? There are many definitions in the literature. Here we use the Alexander Osterwalder’s definition that is associated with his tool that is known as the Business Model Canvas. Osterwalder’s model comprises nine building blocks: 1) Customer Segments, 2) Value propositions, 3) Channels, 4) Customer Relationships, 5) Revenue streams, 6) Key Resources, 7) Key Activities, 8) Key Partners, 9) Cost Structures.

With the Business Model Canvas, the entrepreneur can map his/her entire business model in just one image. (See Figure 1.7). Osterwalder’s webpage<sup>22</sup> features a useful video description of “Business Model Canvas in 2 minutes”. Table 1.2 summarizes the definition of each building block of the Business Model Canvas that he presents.

**Figure 1.6. The Business Model Canvas**

**The Business Model Canvas**

Designed for: \_\_\_\_\_ Designed by: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
	Key Resources		Channels	
Cost Structure		Revenue Streams		

CC BY-SA 4.0 | This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/4.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

**DESIGNED BY: Strategyzer AG**  
The makers of Business Model Generation and Strategizer

**Strategyzer**  
strategyzer.com

Source: Business Model Generation by A. Osterwalder. See it at: [www.strategyzer.com](http://www.strategyzer.com)

It is argued that entrepreneurs should design, develop and test as many business models as possible. Using multiple business models for a startup allows the entrepreneur to design and test these multiple hypotheses. As mentioned by Blank: “paper is free”; then use it to create and define hypotheses and make them visible by putting the canvas on the wall.

Zappos is a potent example of how business model generation works. One of the key challenges in the Zappos model of selling shoes through the internet was dealing with the issue of “fit”. How could Zappos ensure customers receive shoes that fit? Zappos built a value proposition that included free returns, extensive online product information, maintaining a call center, and free and fast shipping.

It looks generous, but Zappos realized that without providing free returns, customer uncertainty would hit sales. Initially Zappos allowed customers to return shoes within

60 days but they later extended this to 365 days. By testing, monitoring and measuring an initial hypothesis, Zappos found that most profitable customers were those that returned more products. These customers bought several products (e.g. five pairs of shoes), received and fitted them, selected the ones that best fit their feet, and returned the others. Then, returns accounted for 35% of Zappos' gross sales but the overall value to the company went up.

**Table 1.2. Description of each building block of the business model canvas.**

Building Block	Description
Customer segments	This building block defines the different groups of individuals or organizations your company aims to reach and serve.
Value propositions	This building block describes the products and/or services that create value for specific customer segments.
Channels	This building block represents how your company communicates with and reaches customer segments to deliver the value proposition.
Customer relationships	This building block defines the types of relationships a company establishes with specific customer segments.
Revenue streams	This building block represents the cash your company produces from customer segments.
Key resources	This building block describes the most important resources your company needs to make the business model works.
Key activities	This building block defines the most important tasks and activities your company must do to make the business model works.
Key partnerships	This building block describes the network of providers and partners your company must integrate into the business model to make it works.
Cost structure	This building block describes all costs undertaken to run the business model.

The free and fast shipping, as one of the other aspects of the value proposition, required evolution of the Zappos business model through several iterations in the search for a repeatable business model. The value proposition implied the attentive design and adjustment of the back-end part of the business model canvas (i.e., key activities, key resources, key partners). The initial model tested by Zappos was partnering with shoe companies in a way that the company would receive orders from its website, before forwarding the orders to the shoe manufacturer, and this vendor would prepare and ship the orders. Over time, this model changed, driven by Zappos' strategy based on customer satisfaction.

The Build-Measure-Learn cycle started with the drop-ship model. The first learned lesson with this model was that Zappos did not know when a customer order had been shipped. In fact, in these early stages, a notable percentage of customer orders were delayed and customers were unhappy. As a consequence, Zappos started to stock its own inventory, but also continued to use the drop-ship model with some vendors. Given the company growth in sales, Zappos started experimentation with third-party fulfillment through UPS. After 8 weeks, Zappos learned that this model would not work because the company model involved more stock-keeping units (SKUs) than the system could handle. Zappos had about 80,000 SKUs at this time. Eventually, Zappos made the decision to develop its own distribution center in order to provide an excellent customer service.

### ***1.5 Resource Acquisition***

Once the entrepreneur has defined her hypothesis and is ready for the search and execution of the journey, she faces one of the most critical challenges: the acquisition of resources to enable the commencement of the journey. Most entrepreneurs focus their effort on the search for startup capital; in plain terms, the search for money. A lack of money is frequently considered as the main reason entrepreneurs are likely to postpone or cancel a venture. Implied within this is a causal sequence through which entrepreneurs first determine the goals they want to achieve and secondly search for resources to achieve those goals. However, Saras Sarasvathy<sup>23</sup> developed the concept of effectuation as an alternative way of proceeding when starting an entrepreneurial venture. Her investigation focused upon 30 founders of companies and revealed some surprising but teachable principles: the rationality of these founders was the inverse of causal. They used effectual reasoning.

As defined by Sarasvathys:

“Effectual reasoning, ... does not begin with a specific goal. Instead, it begins with a given set of means and allows goals to emerge contingently over time from the varied imagination and diverse aspirations of the founders and the people they interact with.”

The first principle of effectuation is “working with your means” and there are three main categories of means to all individuals: who am I, what I know, and who I know. The history of entrepreneurship brings up many examples of how this effectuation works. It might be surprising but Starbucks coffee chain provides a good case study. Howard Schultz is the famous Chairman and Chief Executive of Starbucks. He is rightly accredited with significant vision, having seen the potential of an Italian-type coffeehouse in the USA. He articulated the function of the coffeehouse as “a third place between work and home.” Look more deeply into the case and one sees that there was significant learning still to accomplish after the vision was established; some mistakes were made and there were vital elements of repositioning<sup>24</sup>.

**Table 1.3. Map Your Means**

Who you Know	Who you know	What you know	What you know	Who you are	Who you are
Your rolodex (linkedin, Facebook)		Your prior knowledge and education		Tastes, values, & preferences	
Classmates, alumni		Knowledge from your job		Passions	
Serendipitous encounters		Knowledge from your life		Hobbies	
The strangers in your life		Informal learning, hobbies		Interests	

A straightforward recommendation tabled by Stuart Reed and his colleagues in their book ‘Effectual Entrepreneurship’ is to map your means. The idea is that the entrepreneur thinks through the different aspects of effectuation, considering networks, knowledge and identity. (Table 1.3. Map Your Means).

The story behind SwitchFlops is a useful example here. It brings out an example of the application of the principle of “working with your means” described above. SwitchFlops was founded by Lindsay Phillips in 2007. This entrepreneurial journey



started from a footwear concept developed by Lindsay as part of one of her high school art projects: ceramic flip flops. The idea progressively evolved to create one shoe with many straps that she decided to apply for a patent before she graduated high school. The patent was granted in 2004. At that moment she joined her mother to start her venture. Thanks to the help of her parents, her family friends' networks and connections, Lindsay was able to develop her business, manufacturing in China, exhibiting at trade shows, and selling her sandals to stores. One of her main learnings is: "Love what you do and work hard at it".

A natural expansion of the concept of starting with your means is the concept of forming partnerships. By expanding the network of partnership, the entrepreneur is able to bring new means for the venture. One successful and interesting example of this principle is the ICEHOTEL created by Yngve Bergqvist in Sweden. Yngve found and worked with a set of stakeholders, who were willing to join him to make this ambitious project feasible. Yngve decided to look at the potential and opportunities that his region offered (i.e. ice and plenty of it). The ICEHOTEL is a hotel constructed each winter using ice from the Torne River. He worked with Japanese ice sculptors and Japanese travel agencies to bring tourist from Japan to the ICEHOTEL. Many Japanese tourists love visiting Alaska in winter to see the Northern Lights. In addition, Yngve developed a collaborative partnership with Absolut Vodka to create an ice bar concept that expanded to big cities worldwide.

Although the above mentioned factors suggest the entrepreneur can begin a startup with their own means, all entrepreneurs will need to fund their venture sooner or later. Financial capital could be needed for funding product development, to pay employees, for investment in specific technology, or for scaling the business. The normal route is to secure funds from an Angel or Venture Capital investor. As an alternative, some recognized experts recommend looking for creative ways of financing the startup. Martin Zwilling, an established contributor to Forbes, wrote a post<sup>25</sup> entitled "10 More Creative Ways to Finance Your Startup". In this article he summarized Karlene Sinclair-Robinson's ten top sources of financing, based on her own book. These are: 1) personal financing, 2) personal credit lines, 3) family & friends, 4) peer-to-peer lending, 5) crowdfunding, 6) microloans, 7) vendor financing,

8) purchase order financing, 9) factoring accounts receivables, and 10) IRA financing. (See Table 1.4). All of these sources are good and creative options for the management of a startup's initial cash flow resources, but at a certain moment of the journey, when the startup is ready for the transition to become a full business, the entrepreneur may still need to share his/her venture with Angel or Venture Capital investors.

**Table 1.4. 10 ways to finance your startup**

Sources	Description
Personal financing	Entrepreneurs who have not thought about saving money or have thought of using their own savings to start a business.
Personal credit lines	A number of startups have been built based on personal credit lines and/or the use of credit cards.
Family and friends	People who believe in you. This investment can be converted to equity later when the business grows.
Peer-to-peer lending	A group of people that comes together to lend money to each other.
Crowdfunding	Using the internet to find a crowd of people, with small amounts each, to back your business.
Vendor financing	Convincing providers to defer your payment (beyond the 30-day payment terms) until the product or service is sold by you.
Purchase order financing	Purchase order financing institutions will advance required funds.
Factoring accounts receivables	Similar in concept to PO financing, but the advance to amounts not yet due or collected from customers.
IRA financing	Investment Retirement Account funds are very accessible alternative funding sources.

Different authors and experts talk about different phases of the startup funding process. Normally, seed-funding phase comes first. These funds typically originate from the entrepreneurs themselves, from alternative ways such as those mentioned above, or from crowdfunding efforts. This seed money allows the entrepreneur to build a skilled team, draft a business plan, and to start running the venture. Venture capital investors will appear and show interest in the entrepreneur's startup after the journey has already started the take-off. In the short video<sup>26</sup> "How to Fund a Startup", the reader can see a five-phase process of funding a startup throughout its lifecycle. See more details in Table 1.5.

**Table 1.5. Five-phase process of funding a start-up.**

Phase	Year & Sources
Phase 1: Seed funding	Year 0: Entrepreneur funds, Friends and Family, Crowdfunding
Phase 2: Round 1 of funding	Year 1: Group of people (Venture Capital Fund) invests on the business (Hundreds millions) expecting to see the return in ten years' time.
Phase 3: Round 2 of funding	Year 3: Group of people (VC funds) invests on a business doing well (tens of millions).
Phase 4: Expansion	Year 5: Funds coming from subordinated debts or preferred equity. Returns arriving.
Phase 5: IPO or Sale	VC ready for receiving the return. 700% return on their investment in companies which go public.

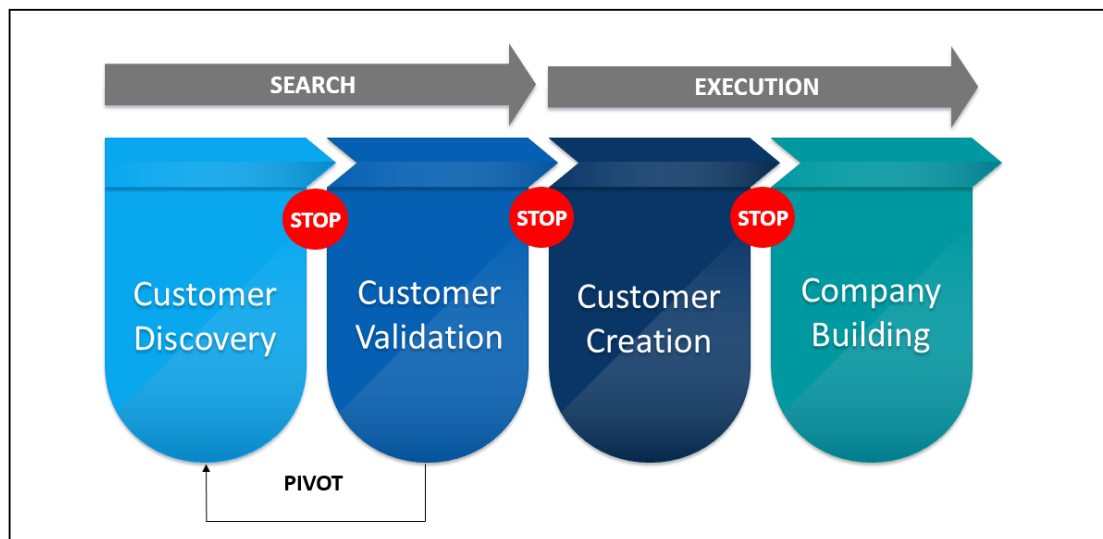
### ***1.6 Management and Execution***

Linking back to Section 1.3 and the customer development process described by Steve Blank, this section focuses on the execution phase of customer development, see Figure 1.8 below. Once the entrepreneur finds a repeatable and scalable business, he goes to the execution phase: customer creation and company building. This comprises creating user demand and building the organization to transition from a startup to a scalable business.

The Business Model Canvas is very helpful in the execution phase. Assuming that the value proposition has been designed and tested, the objective is to execute the identified activities and to manage the resources for the delivery of the value proposition and the satisfaction of customers.

Evidence demonstrates that millions of entrepreneurs come up with great ideas, but most of them fail at the execution part of the strategy. Larry Bossidy and Ram Charan in their book titled "Execution: The Discipline of Getting Things Done"<sup>27</sup> argue that execution depends on three fundamental areas: people, strategy and operations. McChesney, Covey and Huling in their book titled "The 4 Disciplines of Execution"<sup>28</sup> describe the challenges and opportunities for entrepreneurs when executing a startup. See Table 1.6 below.

**Figure 1.7. The Customer Development Process**



Source: Convergent Technologies: War Story 1 – Selling with Sports Scores. See it at the Steve Blank's blog: <http://steveblank.com/2009/06/25/convergent-technologies-war-story-1-%E2%80%93-selling-with-sports-scores/>

Tom Davenport, a well-known professor in Management at Babson College, describes a set of differences between companies' execution and entrepreneurial execution. This is based on four dimensions: strategy formulation, process management, performance measures, and culture<sup>29</sup>. Davenport argues that entrepreneurial execution should treat employees "neither as passive recipients of a fully-executed strategy, nor as sole creators of it." Strategy formulation should allow employees to submit ideas, but the founders should develop the core attributes of the strategy such as the markets to be approached and the products to be offered. Process management should also involve employees in process design and process implementation. In this way, the startup should follow a 'process thinking' model emphasizing cross-functional collaboration, customer orientation and measurement of key outcomes. The Lean Startup concept should be extended to the real application of 'lean' principles into processes; that is, each worker is considered as a learning individual who continually attempts to make a process better.

**Table 1.6. Start-up and Execution: Challenges & Opportunities**

Execution	Start-ups
Challenges	<ul style="list-style-type: none"><li>▪ Building the strategy, structures, and systems from scratch without a clear framework or boundaries</li><li>▪ Recruiting and welding together a high-performing team</li><li>▪ Making do with limited resources</li></ul>
Opportunities	<ul style="list-style-type: none"><li>▪ You can do things right from the beginning.</li><li>▪ People are energized by the possibilities</li><li>▪ There are no rigid preconceptions</li></ul>

With respect to performance measures, studies of effective entrepreneurial execution suggest that metrics should be delivered to those who do the jobs that the metrics measure. Hence, process metrics should go to the process workers concerned, customer metrics should go to those working with clients, etc. At the beginning, these measures should be presented visually and in a simple way. Eventually, Davenport highlights that a startup should have a culture of experimentation and learning. Under this perspective, any strategy or process within the entrepreneurial execution should be treated as a hypothesis. See Zappos again in section 1.4 in this chapter.

#### **1.6.1 Process Map Definition**

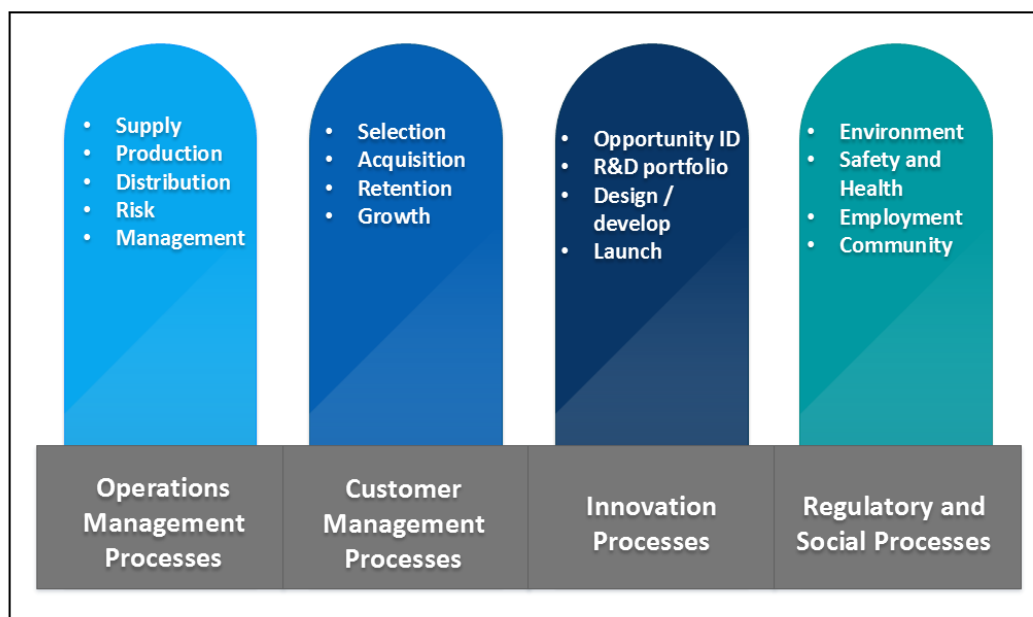
We have seen that a fundamental element of entrepreneurial execution is process management. In particular, startups should clearly define key processes and key activities needed to deliver the value proposition to customer segments. This again relates to the Business Model Canvas. For an entrepreneur, the definition and design of business processes and activities could be considered as a technical skill required for the development and execution of the venture. However, what is important at the beginning is an understanding of the key processes required to run the company. As these processes become understood, it becomes likely that the entrepreneur will require the recruitment workers with specific skills in order to manage and execute those processes. The task of defining a business process map could be carried out utilizing different frameworks already published in the literature. Kaplan & Norton's

well-known model<sup>30</sup> is one option, as is the taxonomy of business processes developed by Diaz, Lorenzo and Solís<sup>31</sup>.

Kaplan & Norton suggests that any company will have four types of generic processes (See Figure 1.9).

1. Operations management processes: processes that produce and deliver products and services.
2. Customer management processes: processes that enhance customer value.
3. Innovation processes: processes that create new products and services
4. Regulatory and social processes: processes that improve communities and the environment.

**Figure 1.8. Four Types of Processes in the Balanced Scorecard by Kaplan & Norton**



Source: Strategy Maps. Kaplan & Norton. Harvard Business School Press. 2004.

Diaz, Lorenzo and Solís suggest a taxonomy of business processes based on the value chain of any company. They propose a set of eight generic business processes and their specific key activities. See Table 1.7.

**Table 1.7. Business Processes and Their Key Activities**

Process	Key activities
Product Development	<ul style="list-style-type: none"> <li>▪ Design (formulation, risk and reliability analysis, costing)</li> <li>▪ Engineering change management.</li> <li>▪ Specification management.</li> <li>▪ Portfolio management.</li> </ul>
Procurement	<ul style="list-style-type: none"> <li>▪ Purchase</li> <li>▪ Payment Cycle</li> <li>▪ Inbound Logistics</li> <li>▪ Supplier performance management</li> <li>▪ Purchasing order administrative processing</li> </ul>
Order Fulfillment	<ul style="list-style-type: none"> <li>▪ Demand Planning</li> <li>▪ Order administrative processing</li> <li>▪ Product Delivery</li> <li>▪ Distribution</li> <li>▪ Transportation</li> <li>▪ Inventory allocation</li> <li>▪ Collecting payment from customer</li> </ul>
Transformation	<ul style="list-style-type: none"> <li>▪ Production planning and scheduling</li> <li>▪ Workforce planning and scheduling</li> <li>▪ Products (goods and services) execution</li> <li>▪ Internal logistics</li> <li>▪ Conformance quality</li> </ul>
Customer relationship Management	<ul style="list-style-type: none"> <li>▪ Marketing</li> <li>▪ Pricing</li> <li>▪ Sales force support</li> <li>▪ Promotional activities</li> <li>▪ Selling</li> </ul>
Asset Management	<ul style="list-style-type: none"> <li>▪ Network facilities design</li> <li>▪ MRO (Materials, Repairs, Operations) management.</li> <li>▪ Maintenance planning and scheduling</li> <li>▪ Process design and improvement</li> </ul>
After-sales services	<ul style="list-style-type: none"> <li>▪ Warranty mgmt.</li> <li>▪ Labor scheduling</li> <li>▪ Reverse logistics</li> <li>▪ Lifecycle cash flow exploitation</li> <li>▪ Post-transformation</li> </ul>
Human Resource Management	<ul style="list-style-type: none"> <li>▪ HR planning and scheduling</li> <li>▪ Recruitment</li> <li>▪ HR Development</li> </ul>
Business Process Management	<ul style="list-style-type: none"> <li>▪ Process design, modeling, implementation, and monitoring</li> <li>▪ Total Quality Management</li> </ul>

Source: A taxonomy of business processes developed by Diaz, Lorenzo and Solís. See it at: [http://latienda.ie.edu/working\\_papers\\_economia/WP04-24.pdf](http://latienda.ie.edu/working_papers_economia/WP04-24.pdf)

### Case Study Nº 1: The McDonald's Story of "The Founder".

According to Leigh Buchanan, Editor at Inc. Magazine, "The Founder" represents the perfect entrepreneur movie<sup>32</sup>. The movie focuses upon the work of Ray Kroc, who was not in fact the actual founder of the McDonald's restaurant chain, but who took over the small, fledgling business established by the brothers Richard and Maurice McDonald. With its origins as a small burger stand in San Bernardino, California, Kroc worked to scale-up the business across multiple locations in the USA and ultimately on to its modern-day, global footprint.

The brothers McDonald recognized a problem to be solved related to the popular drive-in restaurants of the first half of the last century. In this early mode, a carhop (a waiter or waitress) brought fast food to people in their cars. The process created a lot of waste in terms of delays for customers, delivery of inexact orders, persistence with products of low demand, and the type of clients using the parking area. They created a new model of service which we all now know. Instead of waiting to be served in their vehicles, customers would use a walk-up window. The McDonald brothers reduced the items offered, and focused on those responsible for 80% of sales. They replaced plates and cutlery with paper wrappers, and they reduced the delivery of meals to 30 seconds after ordering.

Kroc – originally a salesman of milk shake mixers - noticed also the family-friendly market-positioning of the McDonald's experience. This was quite different to many burger bars of the time but wit it Kroc recognized the potential for new market growth, for new demographics

One of the finest moments of the movie occurs when the brothers McDonald design and test a proposed new kitchen to enable faster-than-ever delivery. They chalk layouts of the kitchen on the floor of a tennis court and ask employees to simulate the activities and motions of food preparation. This is done over many hours until they find the perfect kitchen layout.

Kroc invented nothing. What he did was to take the brothers' invention and spread it throughout the country. He used a franchise model for this expansion. In this process, Kroc was very loyal to the high standards of product and service of the McDonald brothers, extending from standards for cleanliness to the number of pickles per patty (a key concern and obsession for the brothers McDonald). Kroc had to deal with many different challenges over the development of the McDonald empire: inappropriate franchisees, high costs of electricity because of ice-cream, tough conversations and disagreements with his partners, financial problems and divorce.

Struggling with these different problems, the film shows a moment of epiphany when Harry Sonneborn, McDonald's first CEO, explains to Kroc that the way to make money is to buy land in target markets and then lease it back to franchisees. "You're in the real-estate business", Sonneborn said.



Somehow, the film conveys mixed feelings about Mr. Kroc. On one side, he represents the best of an entrepreneur by developing the customer and the business after the idea was initially tested in San Bernardino. On the other side, he seems to be something of a predator – taking the acclaim of the status of ‘founder’ and pushing the brothers McDonald out of the business<sup>33</sup>.

**Questions for discussion:**

Please watch the film “The Founder”. Then, answer the following questions:

- a) Outline the entrepreneurial lifecycle of McDonald. In particular, describe the way the need or problem was identified, the way the idea was created, the way the business model was generated, the resources acquired over time, and the way the business was scaled up.
- b) Identify different moments of iteration in the search phase of the customer development process.
- c) Analyze how the brothers McDonald and Mr. Kroc were dealing with the acquisition of resources to develop the business. In particular, identify examples of effectuation from the case.

**1.7 Essential and Additional Resources:**

**Essential Resources to be reviewed and discussed:**

- ✓ Blank, S., 2010. A Startup is Not a Smaller Version of a Large Company. Available at <https://steveblank.com/2010/01/14/a-startup-is-not-a-smaller-version-of-a-large-company/>. Accessed 02/11/2017.
- ✓ Blank, S., 2012. The Importance of Teams. Available at <https://www.youtube.com/watch?v=AXalrYeO9oQ>. Accessed 02/11/2017.
- ✓ Crowley, J., 2010, ‘Extraordinary Measures’, In B. James and M. Brian, ed. 2010 *Entrepreneurship and Innovation: Global Insights from 24 Leaders*, Madison, Rothman Institute of Entrepreneurship, Ch. 8.
- ✓ Elavia, K., 2010, ‘Securing Relationships One at a Time’, In B. James and M. Brian, ed. 2010 *Entrepreneurship and Innovation: Global Insights from 24 Leaders*, Madison, Rothman Institute of Entrepreneurship, Ch. 12.
- ✓ Online MBA, 2017. How to Fund a Startup. Available at <http://www.onlinemba.com/blog/video-how-to-fund-a-startup/>. Accessed 02/11/2017.
- ✓ Ries, E., 2011. How Dropbox Started As a Minimal Viable Product. Available at <https://techcrunch.com/2011/10/19/dropbox-minimal-viable-product/>. Accessed 02/11/2017.
- ✓ Rodríguez, L., 2010, ‘Social Entrepreneurship: Doing Good While Doing Well’, In B. James and M. Brian, ed. 2010 *Entrepreneurship and Innovation: Global*

*Insights from 24 Leaders*, Madison, Rothman Institute of Entrepreneurship, Ch. 19.

**Additional recommended resources:**

- ✓ Blank, S., 2009. Convergent Technologies: War Story 1 – Selling with Sports Scores. Available at <https://steveblank.com/2009/06/25/convergent-technologies-war-story-1-%E2%80%93-selling-with-sports-scores/>. Accessed 02/11/2017.
- ✓ Blank, S., 2013. Building Great Founding Teams. Available at <https://steveblank.com/2013/07/29/building-great-founding-teams/>. Accessed 02/11/2017.
- ✓ Bossidy, L., and Charan, R. Execution: The Discipline of Getting Things Done. Available at <http://www.altfeldinc.com/pdfs/execution.pdf>. Accessed 02/11/2017.
- ✓ Brinckerhoff, P., 2000. *Social Entrepreneurship: The Art of Mission-based Venture Development*, New York, John Wiley & Sons.
- ✓ Chunka, M., 2011. Five Dangerous Lessons to Learn From Steve Jobs. Available at <https://www.forbes.com/sites/chunkamui/2011/10/17/five-dangerous-lessons-to-learn-from-steve-jobs/#5be80e2d3a95>. Accessed 02/11/2017.
- ✓ Davenport, T., 2007. Entrepreneurial Execution: The Future of Strategy. Available at <https://hbr.org/2007/12/entrepreneurial-execution-the>. Accessed 02/11/2017.
- ✓ Díaz, A., Lorenzo, O., and Solíz, L., 2004. A Taxonomy of Business Processes. Available at [http://latienda.ie.edu/working\\_papers\\_economia/WP04-24.pdf](http://latienda.ie.edu/working_papers_economia/WP04-24.pdf). Accessed 02/11/2017.
- ✓ Fraunhofer Institute, 2008. The Future Needs Research. Available at [https://www.fraunhofer.de/content/dam/zv/en/documents/Thefutureneedsresearch\\_tcm6-95541\\_tcm63-785.pdf](https://www.fraunhofer.de/content/dam/zv/en/documents/Thefutureneedsresearch_tcm6-95541_tcm63-785.pdf) Accessed 02/11/2017.
- ✓ Kaplan, R., and Norton, D., 2004. *Strategy Maps*, Harvard, Harvard Business School Press.
- ✓ Mullins, J., 2013. *The New Business Road Test: What entrepreneurs and executives should do before launching a lean start-up*, London, Financial Times.
- ✓ Osterwalder, A., 2010. The Business Model Canvas in Two Minutes. Available at <https://strategyzer.com/canvas/business-model-canvas>. Accessed 2010.

- ✓ Osterwalder, A., and Pigneur, Y., 2010. *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, Zürich, Strategyzer AG.
- ✓ Porter, M., 1979. How Competitive Forces Shape Strategy. Available at <https://hbr.org/1979/03/how-competitive-forces-shape-strategy>. Accessed 02/11/2017.
- ✓ Read, S., Sarasvathy, S., Dew, N., Wiltbank, R., and Ohlsson, A., 2011. *Effectual Entrepreneurship*, Oxford, Routledge.
- ✓ Ries, E., 2011. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, New York, Crown Business.
- ✓ Sarasvathy, S., 2001. What makes entrepreneurs entrepreneurial? Available at <http://www.effectuation.org/sites/default/files/documents/what-makes-entrepreneurs-entrepreneurial-sarasvathy.pdf>. Accessed 02/11/2017.
- ✓ Society for Effectual Action, 2017. The Story of Icehotel. Available at <http://www.effectuation.org/?x-portfolio=ice-man-cometh-the-story-of-icehotel>. Accessed 02/11/2017.
- ✓ CBS Films, 2009. Extraordinary Measures. Available at <https://www.youtube.com/watch?v=cmnMdwYAhTY>. Accessed 02/11/2017.
- ✓ Zwilling, M., 2013. 10 More Creative Ways to Finance Your Startup. Available at <https://www.forbes.com/sites/martinzwilling/2013/03/06/10-more-creative-ways-to-finance-your-startup/#639b50de32d9>. Accessed 02/11/2017.

---

<sup>1</sup> Stuart Read, Saras Sarasvathy, Nick Dew, Robert Wiltbank, and Ann-Valerie Ohlsson: *Effectual Entrepreneurship*. Routledge. 2011.

<sup>2</sup> Fraunhofer is currently Europe's largest organization for applied research, with more than 13,000 staff sharing a total budget of 1.3 billion euros: "People need health, security, energy, communication, the environment and mobility. These are the main challenges that occupy everyone's attention today. And it is on these six thematic fields that we focus our research capacities." See more about this organization at its webpage: <http://www.fraunhofer.de/en.html>

<sup>3</sup> See John Crowley's story in Chapter 8 of the textbook "Entrepreneurship and Innovation: Global Insights from 24 Leaders".

<sup>4</sup> See the trailer of the movie "Extraordinary Measures" in the following link: [https://www.youtube.com/watch?v=tZV\\_bMgB-zA](https://www.youtube.com/watch?v=tZV_bMgB-zA)

<sup>5</sup> See Peter Brinckerhoff's book titled: "Social Entrepreneurship: The Art of Mission-based Venture Development". John Wiley & Sons.

<sup>6</sup> See it at the report titled: The Future Needs Research. Download it at: <http://www.fraunhofer.de>

---

<sup>7</sup> Chapter 19: Social Entrepreneurship: Doing Good While Doing Well. In the Book: Entrepreneurship and Innovation: Global Insights from 24 Leaders." Rothman Institute of Entrepreneurship. 2010.

<sup>8</sup> Forbes link: <http://www.forbes.com/sites/chunkamui/2011/10/17/five-dangerous-lessons-to-learn-from-steve-jobs/>

<sup>9</sup> See for example: "Steve Jobs was an effectuator too!" at: <http://effectuation.nl/en/item/effectuation/steve-jobs-was-effectuator-too/17>

<sup>10</sup> See the John Mullins' Book: The New Business Road Test. FT Prentice Hall.

<sup>11</sup> A few months after their launch, the company's name was changed from ShoeSite to Zappos (a variation of "zapatos," the Spanish word for "shoes") so as not to limit itself to selling only footwear

<sup>12</sup> See the detailed history of Shouldice Hospital at the following link: <http://www.shouldice.com/our-history.aspx>

<sup>13</sup> See it at: <https://www.americanexpress.com/us/small-business/openforum/explore/>

<sup>14</sup> See it at: <http://about.americanexpress.com/news/pr/2011/link.aspx>

<sup>15</sup> See Steve Blank video: The Importance of Teams. See it at: <https://www.youtube.com/watch?v=AXalrYeO9oQ>

<sup>16</sup> See it at: <http://steveblank.com/2013/07/29/building-great-founding-teams/>

<sup>17</sup> See more information about NUF in the slideshare presentation: [27 creativity and innovation techniques explained](#) by Ramon Vullings and Marc Heleven.

<sup>18</sup> Steve Blank. The Four Steps to the Epiphany. Successful strategies for products that win. K&S Ranch. 2nd edition (July 17, 2013).

<sup>19</sup> Alexander Osterwalder and Yves Pigneur. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley John + Sons. (August 1<sup>st</sup>, 2010)

<sup>20</sup> Eric Ries. The Lean Startup. How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business New York. 2011.

<sup>21</sup> See the video at: <http://techcrunch.com/2011/10/19/dropbox-minimal-viable-product/>

<sup>22</sup> See the video at: <http://businessmodelgeneration.com/canvas/bmc>

<sup>23</sup> See Saras Sarasvathy's article published in HBR 2001: "What makes entrepreneurs entrepreneurial?"

<sup>24</sup> <http://www.effectuation.org/article/coffee-found-or-coffee-made>

<sup>25</sup> See it at: <http://www.forbes.com/sites/martinzwilling/2013/03/06/10-more-creative-ways-to-finance-your-startup/>

<sup>26</sup> See it at: <http://www.onlinemba.com/blog/video-how-to-fund-a-startup/>

<sup>27</sup> See a summary of the book at <http://www.altfeldinc.com/pdfs/execution.pdf>

The statements are key points of the book as determined by James Altfeld and have been made available at no charge to the user.

<sup>28</sup> See an executive summary of the book at:

<http://krirm.tamuk.edu/text/Leadership%20Resources/The%204%20Disciplines%20of%20Execution.pdf>

<sup>29</sup> See the post of HBR titled Entrepreneurial Execution: The Future of Strategy at:

<https://hbr.org/2007/12/entrepreneurial-execution-the/>

<sup>30</sup> See it at the Book: Strategy Maps. Kaplan & Norton. Harvard Business School Press. 2004.

<sup>31</sup> See it at: [http://latienda.ie.edu/working\\_papers\\_economia/WP04-24.pdf](http://latienda.ie.edu/working_papers_economia/WP04-24.pdf)

<sup>32</sup> Leigh Buchanan, Editor at Inc. Magazine. Why the McDonald's Story of 'The Founder' Made the Perfect Entrepreneur Movie. 2017.

<sup>33</sup> Peter Aspdén, Financial Times, February 10<sup>th</sup>, 2017. McDonald's movie The Founder — a story of American greatness?