THE REPUBLIC OF TURKEY

BAHCESEHIR UNIVERSITY

THE ROLE OF FOUNDERS' PREVIOUS WORK EXPERIENCE IN THE SUCCESS OF TECHNOLOGY STARTUPS IN TURKEY

Master's Thesis

Ali Can Erk

ISTANBUL, 2018

THE REPUBLIC OF TURKEY
BAHCESEHIR UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES
MASTER OF BUSINESS ADMINISTRATION

THE ROLE OF FOUNDERS' PREVIOUS WORK EXPERIENCE IN THE SUCCESS OF TECHNOLOGY STARTUPS IN TURKEY

Master's Thesis

ALİ CAN ERK

Thesis Supervisor: ASSISTANT PROF. ADNAN VEYSEL ERTEMEL

İSTANBUL, 2018

THE REPUBLIC OF TURKEY
BAHCESEHIR UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES
MASTER OF BUSSINESS ADMINSTRATION

Name of the thesis: The Role of Founders' Previous Work Experience in the Success of Technology Startups in Turkey
Name/Last Name of the Student: ALİ CAN ERK
Date of the Defense of Thesis:

The thesis has been approved by the Graduate School of Social Sciences.

Graduate School Director
Signature

I certify that this thesis meets all the requirements as a thesis for the degree of Master of Arts.

Program Coordinator
Signature

This is to certify that we have read this thesis and we find it fully adequate in scope, quality and content, as a thesis for the degree of Master of Arts.

Examining Committee Members	Signature
Thesis Supervisor	----------
Member	----------
Member	----------

ABSTRACT

THE ROLE OF FOUNDERS' PREVIOUS WORK EXPERIENCE IN THE SUCCESS OF TECHNOLOGY STARTUPS IN TURKEY

Ali Can Erk

Master of Business Administration

Thesis Supervisor: Assistant Professor Adnan Veysel Ertemel

May 2018, 46 pages

This study deals with the role of entrepreneurs' earlier work experience in the success of technology startups in Turkey. Entrepreneurs establish and run the startups. Since technology startups take high risk with limited time and resources, founders' skills and capabilities are one of the key parts for startups in order to achieve the goals. Since skills and capabilities can be improved by hands-on practices such as previous professional work experience, this study measures whether founders' earlier work experience affects success of technology startups positively or not. This study is examined due to increasing importance of technology startups for the economies of nations. Due to results obtained from this research, success rate of technology startups established in Turkey can be increased.

Keywords: Technology, Startups, Entrepreneurs, and Work Experience

ÖZET

TEKNOLOJİ GİRİŞİMLERİNİN BAŞARISINDA KURUCULARIN ÖNCEKİ İŞ TECRÜBESİNİN ROLÜ

Ali Can Erk

İşletme Yüksek Lisans Programı

Tez Danışmanı: Yrd. Doç. Dr. Adnan Veysel Ertemel

Mayıs 2018, 46 sayfa

Bu çalışma, Türkiye'deki girişimcilerin önceki iş tecrübelerinin teknoloji girişimlerin başarısındaki rolüne odaklanmıştır. Girişimciler şirketleri kurur ve yönetir. Teknoloji girişimleri kısıtlı zaman ve kaynakla büyük risk aldığından, kurucuların yetenek ve kabiliyetleri girişimin hedefe ulaşmasında oldukça anahtar role sahiptir. Yetenek ve kabiliyetler ise önceki profesyonel iş tecrübesi gibi uygulamalı aktivitelerle gelişebildiğinden, bu çalışma kurucuların önceki iş tecrübelerinin girişimlerin başarısında olumlu etkisi olup olmadığını araştırmaktadır. Bu çalışmanın teknoloji girişimlerinin ülkeler için giderek öneminin artmasından dolayı gerçekleştirilmiştir. Bu çalışmadan elde edilen sonuçlar ile Türkiye'deki teknoloji girişimlerinin başarı oranı arttırılabilir.

Anahtar Kelimeler: Teknoloji, Girişim, Girişimci, ve İş Tecrübesi

CONTENTS

TABLES vii

FIGURES viii

ABBREVIATIONS ix

1. INTRODUCTION 1

1.1 WHAT IS STARTUP? 4

1.2 WHO IS ENTREPRENEUR? 6

1.3 IMPORTANCE OF ENTREPRENEURS AND STARTUPS FOR THE ECONOMY 7

2. LITERATURE REVIEW 9

2.1 FOUNDERS' EARLIER STARTUP EXPERIENCE 10

2.2 INDUSTRY EXPERIENCE 13

2.3 EXPERIENCES IN THE SAME INDUSTRY 14

2.4 EXPERIENCES AND INDUSTRY TECHNOLOGY 14

2.5 HYPOTHESES DEVELOPMENT 15

3. METHODS 18

3.1 FOUNDERS IN INVESTMENT BACKED TURKISH TECH STARTUPS 18

3.2 FOUNDERS IN EXITED TURKISH TECH STARTUPS 20

3.3 FOUNDERS IN STARTUP100 LIST 21

4. RESULTS 23

4.1 INVESTMENT BACKED STARTUP FOUNDERS 23

4.2 EXITED FOUNDERS 29

4.3 STARTUP100 LIST FOUNDERS 31

5. DISCUSSIONS AND CONCLUSION 33

6. LIMITATIONS 38

REFERENCES.....39

TABLES

Table 1.1: The Top 20 Reasons Startups Fail 3
Table 3.1: Life Cycle of Innovation 20
Table 4.11: Investment Raised Tech Startups Between 04.2008 – 03.2018 25
Table 4.12: The Total Pre-Work Experience of the Investment Raised Startups' Founders (months) 28
Table 4.13: Investment Raised Startups' Founders with/without Pre-work Experience 29
Table 4.14: The Total Pre-Work Experience Distribution of the Investment Raised Startup Founders 29
Table 4.21: Exited Tech Startups Between 04.2008 – 03.2018 30
Table 4.22: Exited Startups' Founders with/without Pre-work Experience 31
Table 4.23: The Total Pre-Work Experience Distribution of the Exited Startups' Founders 31
Table 4.31: Startup100 List Published In 2017 32
Table 4.32: Startup100 List's Founders with/without Pre-work Experience 32
Table 4.33: The Total Pre-Work Experience Distribution of the Startup100 List's Founders 32

FIGURES

Figure 1.1: Startup Development Phases 5
Figure 3.1 Startup Financing Cycle 19
Figure 5.1: Founders with/without Pre-work Experience 33
Figure 5.2: Average Earlier Work Experience 34
Figure 5.3: Previous Work Experience Distribution of Investment Backed Startups' Founders 36
Figure 5.4: Previous Work Experience Distribution of Exited Startups' Founders 36
Figure 5.5: Previous Work Experience Distribution of Startup100 List Startups' Founders 37

ABBREVIATIONS

VC	:	Venture Capital
MVP	:	Minimum Viable Product
ROI	:	Return on Investment
M&A	:	Merger and Acquisition
ROI	:	Initial Public Offering
SME	:	Small and Medium Sized

1. INTRODUCTION

The importance of technology startups is increasing day by day in all around the world due to their positive affect on economy, competition and development. Due to most of technology startups fail within several years after the establishment, success of startups are very crucial for both entrepreneurs and ecosystem. Since entrepreneurs found and execute startups, they play critical role in creating a successful business. In order to establish successful technology startups, entrepreneurs must have some specifications. These requirements can be listed such as network of the entrepreneurs, financial power of the founders, leadership skills of the founding team and etc. When these requirements are considered, it is very obvious to see that previous professional work experience of the entrepreneurs might be a very significant necessity for building a prominent business.

This research is examined because technology startups have potential to make millions of dollars for the economy. It also means that they will create new job opportunities for the ecosystem. And it is very important to see that technology startups do this without huge assets such as machinery or land. For example, Facebook had acquired WhatsApp, which is established in 2009, in deal worth 19 billion US dollars in 2014. At that time, WhatsApp only had 35 employees and 450 million users. On the other hand, Turkish Airlines, which is named Best Airline in Europe in 2014, is established in 1933 and has 15,978 employees in 2014. Market value of Turkish Airlines was 4.3 Billion US dollars in 2014. Turk Telekom, which is one of the biggest telecom companies of Turkey, is established in 1995 and has 34.440 employees in 2014. Market cap of Turk Telecom was 10 Billion USD in 2014. Furthermore, Tupras which is Turkey's only oil refiner, operating four refiners to handle an annual 28.1 million tons of crude is founded in 1983 and has 4.130 employees in 2014. Tupras' market cap was 5.6 Billion US dollars in 2014.

Total employees of Turkish Airlines, Turk Telekom and Tupras are 53,548 employees in 2014, which is almost 1530 times bigger than WhatsApp. Total operating years of these three companies are 131 years, which is 26 times bigger than WhatsApp. In contrast, total market capitalization of Turkish Airlines, Turk Telekom and Tupras are 19.9 Billion US

dollars in 2014, which is only 900 million US dollars bigger than WhatsApp. This example proves the importance of technology startups for the economy. Technology startups have potential to grow exponentially and can reach gigantic market capitalization in short time period comparing with traditional businesses. And they can do this with few team members and very few assets as we can see in the example.

As a developing economy, Turkey's decision makers should pay more attention for the technology startups. Besides this, success criteria of the technology startups should researched as well. Because, big part of technology startups fail after several years of establishment. According to US Bureau for Labor Statistics, 50 percent of all new business can only see their 5^{th} year and one third can celebrate their 10^{th} year only. Harvard Business School states that 75 percent of venture-backed technology startups failed overall. The Small Business Administration also says that two out of every three businesses make it to two years. Besides, a Silicon Valley cliché states that nine out of 10 startups fail.

There are numerous reasons for the failure of technology startups. A research made by CB Insights in 2018 states top 20 reasons for startups failures. In this study, CB Insights interviewed with 156 startup founders and asked them the reasons behind the failure. Since many startups fail more than one reason, the sum of the percentages exceeds 100%. The reasons are listed below respectively:

This list also demonstrates that many of these reasons listed above can be eliminated by the previous work experience of founding team. For example, "not the right team" listed in third place and "no business model" listed in seventh place and "ignore customer" listed in 9^{th} place can be excluded by the pre-work experience of entrepreneurs.

This study will focus on the pre-work experience of founding team members of successful startups. By doing this, the role of founders' previous work experience in the success of technology startups will be examined. Consequently, the results will help us to decrease startups failure rate and increase the success rare. So, impact of technology startups on Turkish economy will positively affected by doing this.

Table 1.1: The Top 20 Reasons Startups Fail

#	Reason	Percent
1	No Market Need	42%
2	Run Out of Cash	29%
3	Not the Right Team	23%
4	Get Outcompeted	19%
5	Pricing/Cost Issues	18%
6	Poor Product	17%
7	No Business Model	17%
8	Poor Marketing	14%
9	Ignore Customer	14%
10	Product Mistimed	13%
11	Lose Focus	13%
12	Disharmony on Team/Investors	13%
13	Pivot Gone Bad	10%
14	Lack of Passion	9%
15	Bad Location	9%
16	No Financing or Investor Interest	8%
17	Legal Challenges	8%
18	Don't Use Network/Investors	8%
19	Burnout	8%
20	Failure to Pivot	7%

Source: CB Insights, 2018

Since raising investment plays very crucial role in the success of technology startups, in order to carry out this research, technology startups, which have raised investment in last 10 years, are firstly listed. Then, previous work experiences of the entrepreneurs before establishing these startups are computed based on their LinkedIn profiles of the entrepreneurs or entrepreneurs' declarations.

Secondly, since the ultimate goal of the entrepreneurs is exit, technology startups, which have exited by merger or acquisition in last 10 years, are categorized. And again their founders' pre-work experiences before founding exited companies are also computed by applying the same methodology above.

Lastly, we applied the same steps to Startup100 List, which ranks the most outstanding a hundred technology startups in Turkey and is published in February 2017. Since this list is created by view of many authorities, the outcomes will tell us overall tendency.

In this thesis, detailed information about startups and entrepreneurs is firstly covered. Then importance of the startups for the economy is handled. Afterwards, previous researches made by scholars from different parts of the world on the role of previous work experience of the founders of the technology startups is looked over. Then we assess the case in Turkey by applying our methodology. Lastly, the thesis is ended up with covering final results by discussion and conclusion.

1.1 WHAT IS STARTUP?

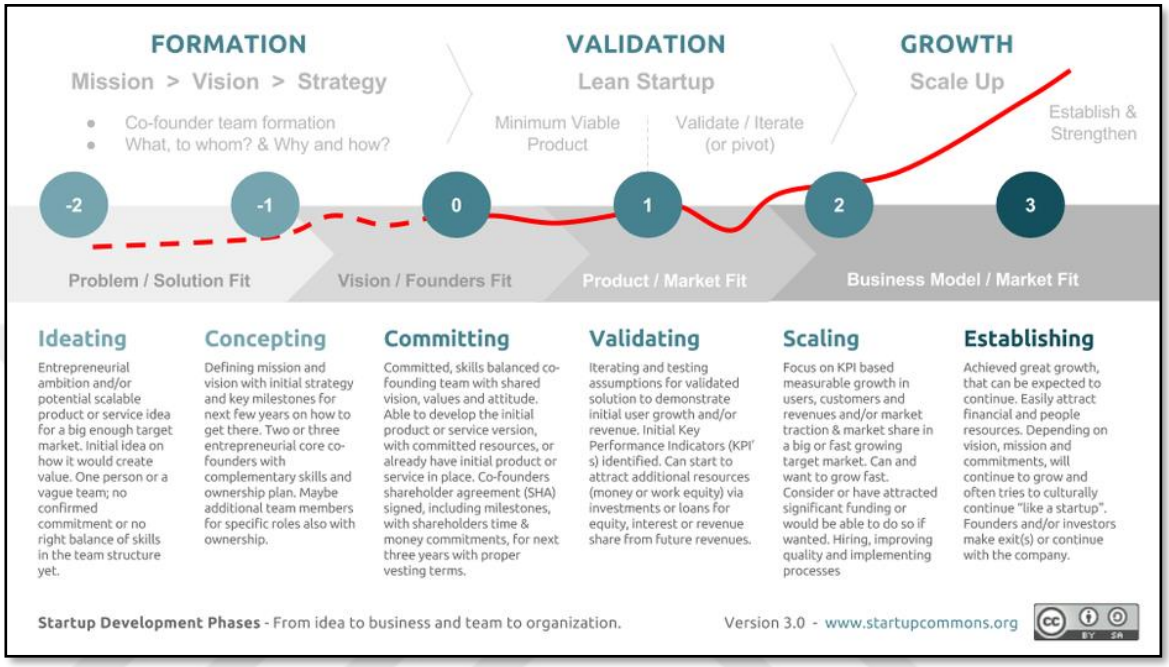
Although there are many definitions made by scholars for many years, one of the most outstanding explanations for startups or start-ups is that startup is an entrepreneurial company which is a generally newly established, growing fast venture which focuses to develop a feasible business model in order to meet a market demand around an innovative solution, product, service, process or a platform. Startups are typically ventures founded for scalable business models and aim to effective growth. Startups have high failure rates because of many reasons. However, successful startups can become influential and large. (Griffith 2014).

Startup ventures can become in all sizes and types. Founding team is one of the most significant factors of to establish a successful startup in order to secure key abilities, have network, resources, know how and target market. Generally, a startup firstly begins by creating a minimum viable product (MVP), a prototype in order to validate, examine and improve further venture concepts and ideas. (Figure 1.1) Moreover, founders of the startups examine detailed researches in order to understand business concepts, technologies, ideas and their commercial potential in the market.

A startup company passes several milestones such as becoming publicly traded on the stock market by a Initial Public Offering (IPO) or raising investments by a Venture Capital (VC) or Angel Investor or ceasing as an independent entity via a merger or acquisition (M&A). Startups may fail for various reasons such as developed disruptive innovation by the startups may not be market demand even when the product or service

is ready for the market. Since startups run in highly risk markets, attracting investment might be very tough for the founders.

Figure 1.1: Startup Development Phases



Source: Startup Commons, 2018

Success and volume of startup companies are also related with the size and maturity of the startup ecosystem where it is launched and grown. The ecosystem includes various individuals such as entrepreneurs, venture capitals, angel investors, mentors and organizations such as accelerators, incubators, government entrepreneurship programs, universities, research institutes, business schools and etc. "Strong ecosystem" terminology consists of all these elements. For example, Silicon Valley in San Francisco, Boston and Berlin are outstanding startup ecosystems, which hosts many influential startups and entrepreneurs.

Strong founding team, a balanced risk/reward profile (unexamined disruptive innovation balanced with high potential) and scalability (capacity to deal and perform under and expanding and increased work load for more and more customers) are typically appealing profiles for attracting investors. Low bootstrapping costs, high returns on investment

(ROI) potential and high risk are also generally characteristics of successful startups. Startups are generally more scalable than existent ventures in terms of limited access to capital, labor and land and aims to grow rapidly. (Ghosh 2014). One of the significant factors for largest successful startups is frequently being in a right place at the right time. And timing is also one of the sharpest factors to master by founders and investors. (Gross 2015)

There are various funding options for startups. Angel investors can assist startup ventures to begin operations by exchanging seed money for a share in the firm. Venture capital can help startups to scale their operations. Venture capitalists and angel investors provide capital for wide range of startups and create a portfolio. They expect small number of their portfolio will make money and become feasible. And these successful startups will amortize the unsuccessful startups in the portfolio. Another option for bootstrapping the startups is a loan or monetary given by family or friends. Furthermore, one of the most popular funding options in last several years is a crowdfunding; in which startup raises money from individuals by presenting their idea, product or service on the Internet.

1.2 WHO IS ENTREPRENEUR?

Since there is no any consistent definition of "entrepreneur", the word entrepreneur comes from the French verb *entreprendre,* which means, "to undertake". Entrepreneurs are individuals involves in the establishment of a startup venture. Entrepreneurs are mostly engineers, hackers, web developers, designers and other involved in the ground level of a new, although anyone can be a founder. Entrepreneurs operate a small business rather than working as an employee. Entrepreneurs are generally accepted as innovators who create innovative goods, services, process or businesses.

For centuries, although the term of entrepreneur is existed, economists left entrepreneurs out of their formal models. Until mid 20th century, economists assumed that innovation would be made by rational players and left no room for risk-taking and discovery. After 1950s, economists took step to understand incorporate entrepreneurship issue. Three thinkers (Joseph Schumpeter, Frank Knight and Israel Kirzner) were in the center of bringing to light of entrepreneurs. They suggested that entrepreneurs are responsible for creating new businesses with aiming to profit. Since entrepreneurs aim to bring new ideas

to market, they play a crucial role in an economy. Entrepreneurs take risks to launch a startup and are rewarded with profits in the case of establishing successful venture.

Economists categorize entrepreneurship as integral to production, the other three being land/natural resources, labor and capital. There of these factors are combined by an entrepreneur in order to manufacture goods or provide services. Entrepreneur frequently attracts investment, acquires resources, hires labors and sets a business plan with providing leadership and managing the venture. Entrepreneurs typically have to overcome many difficulties such as attracting investment, catch product-market fit, hiring talent and cope with bureaucracy.

1.3 IMPORTANCE OF ENTREPRENEURS AND STARTUPS FOR THE ECONOMY

Although startups are taken consideration as small companies, they play a key role in economic growth of the countries. Startups create more employment, which means a developed economy. Not only startups can improve the economic dynamism by sparking innovation and increasing competition but also entrepreneurs can create new ideas, products or services and bring them to the table.

Startups have a direct affect on the countries in where they launched. It is very obviously observed by the cities in where they established. For example, Alibaba.com affected Hangzhou, Google transformed Mountain View, and Microsoft developed Redmond. All of these startups were very small once upon a time. However, they create new employment opportunities for both experienced and not experienced individuals while they were developing. Moreover, these startups improved the economy with groundbreaking innovation and created new industries over time. Especially, when these startups went initial public offering (IPO), they became engines for making money not only for the entrepreneurs but also for the shareholders and employees. For example, thousands of Google employees gained more than five million dollars. Furthermore, Alibaba.com transformed small and medium sized (SMEs) companies, which are infamous in China into manufacturing center of the world. Over time, these new millionaires made money from these startups and invest in new business ideas and trigger this iterative vicious circle and create strong ecosystem around them.

The characteristics of new startup growth have been an ultimate research objective in entrepreneurship field. (Aldrich 1999; Brush, Manolova, & Edelman 2008; Low & Abrahamson 1997; Stearns & Hills 1996) Hence, the destiny of a vast majority of newly established or existing startups is to fail for many years. (Kirchhoff 1994) These startups need to develop strategies to overcome challenges such as business model renovation, improving organizational structure, strong legal agreements. (Aldrich 1999; Stinchcombe 1965) Entrepreneurs' skills (Baron & Markman 2003) and startups' resources (Davidsson & Honig 2003; Ruef, Aldrich, & Carter 2003), market opportunities and environmental limitations have also been played critical role in the success of startups. The tasks required for successful startups must be accomplished in a very short period of time as well. (Brush, Greene, & Hart 2001; Lichtenstein & Brush, 2001)

Entrepreneurs' expectation for their new startups can be exceeded. However, entrepreneurs who establish new venture that exceeds their expectations will be better off than entrepreneurs who meet their expectations, who will be better off than entrepreneurs who start new startups which fail to meet their expectations in both financially and non-pecuniary outcomes. Most startups fail to meet the growth expectations of the founders who create them. There are several reasons for that. Definition for why founders' expectations of future outcomes are more favorable than what ultimately arises consist of extreme self-confidence (Busenitz and Barney 1997), dispositional optimism (Puri and Robinson 2009), the planning delusion and use of scenario repetition (Kahneman and Lovallo 1993), and entrepreneurs who are presumably to establish new startup after screening affirmative but incorrect signals of startup success (Harrison and March 1984). If delusive expectations of those establishing new ventures are so common, there is a question shows up: Can entrepreneurs do anything to increase their new business performances?

2. LITERATURE REVIEW

Many authorities claim that founders gain significant insights from industry and entrepreneurial activates that can be applied to entrepreneurial practices, thereby developing entrepreneurial judgment (Baron and Ensley 2006; Wiklund and Shepherd 2003). Moreover, many studies demonstrate that experience is related with greater task performance consisting of foreseeing ability (Mikhail et al. 1997). However, other scholars argue the advantage of experience on taking decision and foreseeing for several causes including the restrictions of transforming gained knowledge (Jacob et al. 1999) into the organizational assets, the lack of skills to obtain learning by doing (Camerer and Lovallo 1999) and prejudices that prevent influential learning (Cassar and Craig 2009).

Previous research also demonstrated that entrepreneurs' former industry or startup experience is a prominent fact in creating successful and accelerating new venture. Because, such an experience guides founders' to overcome emerging problems, (Beckman, Burton, & O'Reilly 2007) and comprehensive knowledge of thriving launches. In a study carried by Korean researchers in 1996, 48 Korean startups prove more profitable performance when the founders have experience in related business areas (Jo and Lee 1996). In contrast, some researches reveal that there is no direct relation between sales or profitability and founders' managerial, work or founding experiences (Davidsson and Honig 2003). Additionally, except of some high-tech startups, results demonstrate that experiences do not positively affect startups' revenue (Newbert 2005). Moreover, both negative or positive impacts might be occur on startups' performance based on founders' experiences in terms of entrepreneurial and managerial (Tornikoski and Newbert 2007).

The nonoccurrence of results in former researches requires scholars' to pay close attention to determine whether founders' previous experience is advantageous or not. Furthermore, there is no related research conducted locally in Turkey. The purpose of this study is to fill this gap by conducting a research in order to examine a relation between Turkish startups' performance and founders' business experience. This study claims that there is an affirmative correlation between startups growth and founders' previous personal

experience, which becomes organizational assets without any effort.

Newly established startups have a greater risk of failure for several reasons of failure in terms of setup a organizational identity, creating operating procedures and building healthy relation with suppliers. In order to minimize those risks, founders' previous entrepreneurial and professional experiences might help startups in order to establish a successful launch and growth. In addition, startups need expertise on areas of human resource management, gaining competitive advantage and development of procedures. However, startups are mostly created by teams, which include small number of members. Thus, founders' earlier professional experiences can avail for newly established startups. The literature suggests four types of experience:

i. Founders' earlier startup experience
ii. Industry experience
iii. Experience in the same industry
iv. Experiences and Industry Technology

2.1 FOUNDERS' EARLIER STARTUP EXPERIENCE

Scholars claim that founders achieve knowledge about business launching by learning through experimentation. (Delmar and Shane 2006). One of the most outstanding advantages of involving in a new venture creation whether it is successful or not, is the learning and knowledge obtained by these experiences (Baron and Ensley 2006), and entrepreneurial judgment and evaluation are developed by learning by doing (Colombo and Grilli 2005). Gained experience eases greater understanding of the task at hand (Dimov 2010; Kolb 1984) eliminating the unknowns when foreseeing coming outcomes of the task. Entrepreneurs obtain expertise with the help of recurrent exposure and performance of a task, such as the assessment and execution of new startup opportunities (Choo and Trotman 1991). Entrepreneurial experience output permits improvement of strong cognitive frameworks that develop the assessment and choose of entrepreneurial opportunities and the formulation of more sophisticated judgments (Baron and Ensley 2006). Founders can refine their new venture assessment process with greater startups

foreseeing experience through experience in recurrent tasks; achieve greater competence and expertise in that task (Haleblian et al. 2006) just as firms.

Individuals can develop their future forecast by taking consideration their past foreseeing mistakes (Jacob et al. 1999). Individuals also can revise their ideas regarding their skills to examine new venture opportunities certainly through the experience and reflection on past startup operations (Shane 2000), just as firms pick up from their own misconception of new markets and revise their assumptions about possible entrance through new markets in the future (King and Tucci 2002). Related with this argument, a study focused on security analysts infers that they become more certain in foreseeing as they achieve experience (Mikhail et al. 1997).

Experience can also diminish the impact of cognitive bias on entrepreneurial forecasting. Experience with errors in judgment, where the entrepreneur is being aware of the inexactness of his knowledge and beliefs about new venture business opportunities should reduces in his opinions. Risks related with new venture creation and the base rates of new business success and failure are became more conscious by the funders who have practiced new venture creation (Hayward et al. 2006). Moreover, the entrepreneurial experience creates an impact of sobering. Also experience restricts over entrepreneur's tendency for optimism in forecasting (Hmieleski and Baron 2009). As a consequence of this, predictions performance is improved by pre-entrepreneurial activities for new firms.

In entrepreneurship, learning is not an automatic process (McGrath 1999) and, mostly learning by experiences in not easy (Russo and Schoemaker 1992). The advantages obtaining from experiences in foreseeing may be restricted in entrepreneurship for three causes. First, limited transfer of obtained knowledge is not accurately possible because of variability across entrepreneurial opportunities (Bonner and Lewis 1990). Exposure to new venture activities does not automatically cause in knowledge that can be applied again to other new ventures (Reuber and Fischer 1994). The environment and its circumstances is unique for that business exploits and much of the knowledge of an entrepreneurial opportunity. Studies claim that circumstances where knowledge gained in one context is transformed into to other contexts are truly limited while knowledge obtained from one setting can be applied to others (Singley and Anderson 1989). It could

be crucially restricted when the skills to transfer form earlier experiences in the case of a task is not similar and not regularly faced. As a result of this, earlier foreseeing experiences may not beneficial unless these forecasting tasks at hand are significantly similar to these particular experiences. Each business has unique approach. So, it is not certainly true to say that previous experience can be transferred to the evaluation of other new business opportunities.

Secondly, effective learning from experiences might be inhibited by the nature of entrepreneurial activities. Judgments can be developed in the case of tasks are well explained, reapplied regularly, and feedback is provided in a timely and correct manner (Hayward et al. 2006). It is unclear that the iteration and cycle of each new venture experience supply enough feedback to apply leaning about new venture evaluation while entrepreneurs may have been taken place in several new ventures. For instance, studies show that due to the nature of a security analyst's tasks is focused on predictions, analysts become better forecasters with repetitive experience. On contrary, entrepreneurs deal with many various tasks during business growth (Reuber and Fischer 1994). Furthermore, Forecasting is regulary made by security analysts and accuracy of theire predictions also are observed by themselves in a timely and correct manner. In comprasion, founders need enough time to observe the results of their fore castings, only observe the results of those new ventures they sustain, and have equivocalness in relation to the precision of their predictions. Moreover, startup experience from one new business causes in only one evaluation of an entrepreneurial opportunity related with one result of that forecasting, caused in restricted learning by doing particularly connected to foreseeing. Thus, it is not clear that entrepreneurial experience that results effective learning in forecasting can't be gained by entrepreneurs enough timely and correct manner.

Third, emotion and cognitive biases of entrepreneurs is possibly restricted by learning from experience. Influential experimental learning necessitates a substantive evaluation of entrepreneurs' performance of earlier events (Madsen and Desai 2010). Due to positive or negative emotional responses, entrepreneurs may find it to difficult to objectively evaluate or not precise evaluation of their new ventures or unlikable to revisit the poor performance. Generally, feedback, a frequent task and certain record of beliefs and results are required by reduction in cognitive bias (Hogarth 1987). However, during the new

venture creation by entrepreneurs, these features are probably missing. Related with these arguments, research demonstrates that performance feedback is not only noisy but also systemically biased when reminded by new entrepreneurs (Cassar and Craig 2009). If entrepreneurs cannot remind without bias the experiences, environment, and conditions from earlier entrepreneurial performance, their skill or perceived requirement to depurate their abilities in new venture opportunity evaluation is reduced.

In conclusion, learning restricted by lack of timely and regular feedback, and cognitive biases cause in startup experience not developing entrepreneurial foreseeing performance. These are the arguments associated by some researches that we cover above.

2.2 INDUSTRY EXPERIENCE

Entrepreneurship involves evaluation and action in an environment of risk and insecurity Entrepreneurial activities, such as the creation and operation of new businesses, can be described as a fact-finding process (Kirzner 1997). Through the discovery process and the knowledge obtained, new venture opportunities can be identified and exploited by entrepreneurs . Uncertainty, which includes conditions and results that can't be simply quantified because of incomplete knowledge, can be diminished to a certain extent by better informing and understanding the environment, technology, and available actions and potential outcomes.

The number of unknowns and assumptions an entrepreneur needs to make when assessing their prospects is reduced by experience in similar contexts. Those with mastery in a specific industry are possibly to obtain relevant and more certain information about their new performance in the same field. Entrepreneurs working in a sector can gain insights into the prices, cost structure, value chain, or profitability of various market segments and products (Dimov 2010). In addition, industry experience may raise the entrepreneur's awareness of market trends and supply exposure to current improvements in production or service delivery processes, diminishing technological uncertainty (Delmar and Shane 2006). As a result, entrepreneurs with industry experience achieve insight into new venture opportunities and processes, which lower the uncertainty of business evaluation (Dimov 2010).

Experiences in similar contexts permit entrepreneurs to better assess and understand the environment in which their new business will compete (Chandler 1996). For instance, industry experience may improve the understanding of the impact of macroeconomic circumstances on industry growth and performance (Mikhail et al. 1997). In addition, employment in an industry provides substantial and non-codified knowledge to assess opportunities that can't be gained from other sources (Delmar and Shane 2006). The industry experience enables the entrepreneur to better assess opportunities in the industry (Ronstadt 1988).

2.3 EXPERIENCES IN THE SAME INDUSTRY

The applicability of the experience to future companies depends on its similarity to specific future activities (Gruber et al., 2008). The closer the experience is to the task, the more the entrepreneur can utilize the knowledge gained from this experience to evaluate and operate the new enterprise (Stuart and Abetti, 1990). In the industry, the start-up experience can lead to less heterogeneity between experienced and valued companies, increase the similarity of forecasting tasks and diminish the specificity and novelty of risk assessment. Diminished variability between the foreseeing tasks raises the stock of relevant insights that can be transferred from past experience to the current opportunity assessment.

Given the closer relationship between the experience and the forecasting task, the industry-specific start-up experience in which the new venture runs may therefore be more advantageous to entrepreneurs in predictions than the experience of a general beginning.

2.4 EXPERIENCES AND INDUSTRY TECHNOLOGY

The advantage of experience in predictions and business decision-making can generally be greater in high uncertainty contexts such as business opportunities in new technologies or high-tech industries. New technology startups are inherently unpredictable and are often evaluated with restricted information on technical feasibility and market circumstances (Shane and Stuart 2002). Distortions in the prediction and influence of cognitive biases, such as over-consistency, are more likely to occur in contexts of high

uncertainty or complexity. For example, when the forecasting event is new and uncertain, it has been observed that entrepreneurs use limited evaluation criteria and are more likely to be over-confident in their prediction (Lowe and Ziedonis 2006). Understanding of the industry and business processes that can reduce uncertainty in evaluating business opportunities are more possible for experienced entrepreneurs. Experience raises the likelihood that the entrepreneur becomes aware of significant actions or dangers of feasibility that could be ignored in assessing the startup if the decision maker does not know them. Given the greater uncertainty faced by high-tech companies, the forecasting experience may be more beneficial for entrepreneurs who start businesses in the high-tech industries.

Startups must have detailed knowledge on bureaucracies such as administrative registrations, tax declarations, and social security. Founders must deal with these mandatory procedures, which do not create any competitive advantage but requires time and efforts. Founders with previous experience on these issues might focus on strategy and allocate time for significant subjects such as sales, supply chain management and business model in order to gain competitive advantage. (Lerner & Haber 2001) Researches also prove that earlier experience cause to develop new business opportunities and strength forethought of future customer needs and market trends (Helfat & Lieberman 2002). Founding experience of founders is also advantageous in boost growth of startups. (Rubenson & Gupta 1992) Work experience in areas such as finance and marketing develops their operational knowledge and alleviates experimental learning. Since, there is a crucial overlaps in regulations and standard practices, prior founding experience knowledge can be transferred to launch new spin-offs for founders with ease.

Because the support for impacts of previous work experience on launching a successful startup has been a controversial topic, this study aims to examine Turkish startup ecosystem. This is because international researches might not be suitable for local ecosystem because of unequal regional dynamics.

2.5 HYPOTHESES DEVELOPMENT

In order to examine the hypotheses, control lists listed below are evaluated. Experience

of the founders of the startups listed in these list below are analyzed.

Control Lists:

i. Founders in Investment Backed Turkish Tech Startups
ii. Founders in Exited Turkish Tech Startups
iii. Founders in Startup100 List

Previous researches show that correlation between earlier experience and startups success assumes that founders' knowledge is automatically transferred to organizational asset (Huber 1991). Founders experience is appropriately assimilated, encoded, distributed, and interpreted in the case of founders' previous work experience become a collective asset for the organization. The pre-work experience can be transmitted and shared among organizational members as well. (Huber 1991)

Founders' earlier work experience is not assimilated unless the experience is transmitted through knowledge sharing opportunities. These experiences can be either explicit and codified or implicit and shared only through direct interactions. Founders also can't transfer all of their experiences to organizational assets due to their limited capabilities. Founders' experiences are leached in timely and efficient manners for distribution and interpretation. Because, knowledge remained from previous entrepreneurial and professional experiences may include errors, which are not related to current startup needs.

Founders' previous experience can be transformed not only formal manners such as standard operating procedures but also collective behavior and thinking. However, founders' experience has a bounded affect in the case of inadequate organizational effort to transfer the earlier experience into an asset. These assertions provide clue for the common impact of interpretation and information distribution, which minimize the affirmative link between growth of startup and earlier experience of the founders.

Impact of previous founding experience may differ based on the type of experiences. Actually, previous researches have categorized pre-founding experiences into several sorts that relate varying levels relevance. For instance, a study demonstrates that if the members of founding team have greater experience in the same industry, which improves

their competitive advantage, high-tech startups grow faster (Kor 2003). Due to strong relation of same industry experience, this research foresees that of the three kinds of experiences, founders' same industry experience is most influential in quickening venture growth when resources are portioned to information distribution and interpretation. The patterns by which interpretation and information distribution minimize positive impact on organizational growth are most obvious for earlier founding experience in the same industry.

H. Previous startup, work or same industry experiences of founders affect the success of the technology startups that they established positively

3. METHODS

Since the hypothesis posits success rate of startups with entrepreneurs who have previous work experience are better than entrepreneurs without any experience, meaning of success for the technology startups should have been defined first. Success is relative concept. The meaning of success might vary from person to person. However, in this research we have defined the meaning of success based on several criteria.

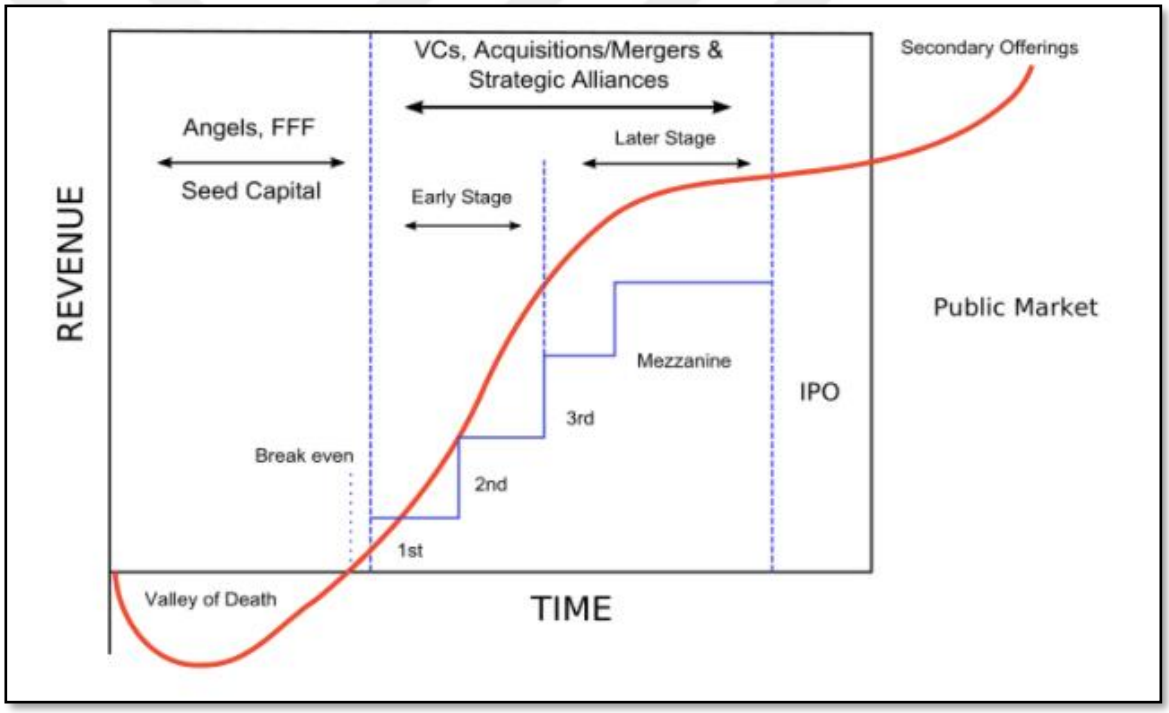
3.1 FOUNDERS IN INVESTMENT BACKED TURKISH TECH STARTUPS

The first criterion that we check is whether a technology startup has raised investment or not. Fundraising is very crucial milestone for technology startups. Because technology startups –by definition- aim to grow exponentially and fast. This kind of growth might require huge cash injection due to expanding into new markets, increasing the scope of costumers, enlarging the team and etc. A startup without a fundraising may flounder the weight of its own debt. So, the funding can be considered as a fuel on which runs business. Additionally, cost of materials, office supplies, equipment, salaries, other utilities may not be covered owners' savings for startups which are in idea-stage Besides, technology startups might have a great idea and only have minimum viable product (MVP). Developing the product may require cash investment to improve the quality and specifications of the product. Expansion may also require new location, new goods or services, product and marketing research, additional staff, facilities, hiring of necessary talents, business licenses, marketing activities. So when it comes to expanding the startup, funding is necessary. Figure and Table 3.1 demonstrates the stages of financing in technology startups, which have various characteristics in terms of the objectives of the startups.

Moreover, investors such as Venture Capitals (VC) or Angel Investors are looking for high return on investment (ROI) for technology startups as compared to traditional industries. Because technology startups are relatively capital efficient to scale and can grow quickly by developing technology and can set entry barriers for competitors and have chance to build valuable business models. However, high return also includes high

risk. So, investing in technology startups is risky. Thus, investors especially VCs, which are professional entities, governed by professional investors examine startups carefully before fundraising and pick the investment candidate startups cautiously. In addition, investors also assist startups to build-up business models and strategy again and again. VC is focused for financing different types of startups, which give the possibility of above-average chances of success and profits, considering a huge risk (Gompers, Lerner 2001) This raises startups chance to become successful. So, investment-raised startups can be considered as successful startups since they convinced investors to fundraise after painstaking investment process.

Figure 3.1 Startup Financing Cycle



Source: Cardullo, 1999

Table 3.1: Life Cycle of Innovation

Stages of development of the entity	Objectives of funding	The specificity of funding
Sowing stage	**Feasibility Study Financing** – Creation of the project idea and its continuous improvement – Analysis of market potential – Analysis of legal conditions – Final stages of research activity – Test production / technology – Activities related to the certification and admission to trading	– The most difficult to secure financing – High technical risks associated with new or upgraded technology – High market risk associated with lack of market experience with a new product – High risks associated with management and those relating to the management team – The need for funding is relatively small
Start stage (start-up)	**Financing activities related to the entering the market** – Launching the production and presentation of the product /service to the market – Intensive marketing activities – Creation of an initial organizational structure – Key areas of business	– The need for significant funding – Moment of verification of business model – acceptance or rejection of the project by the market – High level of risk of project financing
Early stage of expansion	**Financing activities focused on building a market position** – Intensive marketing activities – Increasing production capacity – Effective distribution strategy – Team building workers	– Expenditures for financial development still considerable high – Financing risk is much lower (moderate) – achieving operating profitability
Step growth / expansion	**Financing activities related to expansion of the business:** – Expanding the product range – Expansion into new markets (including foreign ones) – Implementation of the new technologies – The inputs are normally directed to market measures - promotion, brand and distribution channels building	– Financial position of the company is stable – Funding with relatively minimal risk

Source: Matusiak, 2013

3.2 FOUNDERS IN EXITED TURKISH TECH STARTUPS

The second criterion that we control is the previous work experience of entrepreneurs in technology startups, which have exited. The meaning of business exit is the strategic plan of entrepreneurs in order to sell his or her ownership in the startups to another company by M&A (Merger and Acquisition) or selling his/her shares to an investor or IPO (Initial Public Offering). By doing this, entrepreneurs make a considerable profit. They reduce or liquidate their stakes in the business.

Entrepreneurs might think that their startups are their dream. If the business makes money, they do not need to think about the exit strategy. Wrong. Entrepreneurs should plan their business exit strategy from very early days of the startups. Exit is very crucial strategy for startups because of several reasons. First exit strategy protects the values of the business entrepreneurs have built. Second, exit creates a smooth transition for other stakeholders and management team. Additionally, it generates a potential income for entrepreneurs for retirement or disability. Exit also enhances the future worth of your business. Moreover, exit creates direction for your business's growth. Lastly, investors who have raised money for your startup would like entrepreneurs to exit. Hence, investors put their money into risky startups. And they would like to have their money back. So, exit is the clearest way of doing this.

Why exit is considered as a success for entrepreneurs? The first reason is that startups might raise several investments respectively such as Seed-round, Series-A, Series-B, and Series-C until exit stage. In the exit, the technology startups might have passed through at least one of these stages. So, startups have evaluated detailed by several investors and succeed to raise investment. At the end of all of these, entrepreneurs have exited by selling their companies or shares to thousands dollars and make money for both entrepreneurs and its' previous investors. All these efforts can be considered as a success.

3.3 FOUNDERS IN STARTUP100 LIST

The last criterion that we check is the previous work experience of entrepreneurs, which have taken place in startup100 List in Turkey. Startup100 ranks newly established technology companies. Its consultative committee consists of major players such as venture capitals such as 212, 3TS, angel investors such as Sina Afra, Nevzat Aydın, incubation and accelerations centers such as Yıldız Teknopark, Keiretsu, academicians such as Erhan Erkut, and successful entrepreneurs such as Sina Afra, Emre Kurttepeli in Turkey.

The required criteria for startups to take place in Startup100 list that they should have been founded at least one year at most 5 years ago in Turkey. Financials are obtained from the startups' founders. Large companies corporations can't also take place in the list. Based n these criteria, each consultative committee choses 10 startups and they lists

these startups from 10 to 1. First startup takes 10 points. Last startup takes 1 point. Since all consultative committee members completed grading, and grades summed up cumulatively. So, Startup100 List is completed based on these criteria.

4. RESULTS

The lists of startups, which have raised money or have exited, are obtained from Startups.Watch database, which is founded in 2015 by Serkan Ünsal. Startups.Watch is a technology startup-analyzing platform focused on Turkey and MENA (Middle East and North Africa). Startups.Watch has following more than 5500 startups, 275 investors, 47 techno parks and 36 accelerators so far. Although Startups.Watch is founded in 2015, it follows companies founded in very early 2000s as well.

4.1 INVESTMENT BACKED STARTUP FOUNDERS

Based on Startups.Watch database, there are 652 investment is occurred for technology startups in Turkey. The first investment, which is raised for Yemeksepeti is occurred in April 2008. The last investment that I consider is raised for Coiny in March 2018. So in this thesis we have looked over approximately 10 years in technology startup eco-system in Turkey.

652 investments are raised for 421 technology startups, which are listed on the Table 4.11. Firstly, the entrepreneurial teams of these startups are founded. In order to do that, I have looked over the websites of the startups, news, interviews or etc. related with those startups to found the name of the founding team. Afterwards, we have looked over the founding teams' earlier work experience by using LinkedIn profiles of the entrepreneurs. Since some of them have no LinkedIn profile or no enough information on their profiles, I could only evaluate 221 startups, which are listed in Table 4.12. Since a startup may contain more than one founder, the total work experiences of the founders have considered. For example; if startup A has two founders and let's say these founders respectively have 13 and 21 months of previous work experience, I have evaluated as the total work experience of startup A's founding team is 34 months.

According to Table 4.13, only 64 startups' founders have no previous work experience. On the other hand, 71% of technology startups have pre-work experience. When I examined pre-work experienced startups, I have found out that average work experience

of these startups are 87.2 months. So, it means that the average total work experiences of the entrepreneurial teams of technology startups, which are raised investment, are approximately 7 years.

Total work experiences of founders, which are less than 12 months are only 31.2% of all technology startups according to Table 4.14. On the other hand, %53.4 of technology startups has founding teams, which have more than 36 months previous experience.

Table 4.11: Investment Raised Tech Startups Between 04.2008 – 03.2018

	Startups		Startups		Startups
1	315 Stüdyo	**141**	Gardrops (Neo)	**281**	Pavo
2	8digits - Epigraf	**142**	GastroClub	**282**	Paym.es
3	abonesepeti	**143**	Geen	**283**	PayPad
4	ACLteslim	**144**	Genz (Umut) Biotech	**284**	PEAK
5	Acrome	**145**	Getir	**285**	Peak Games
6	Adgager	**146**	GFER Technology	**286**	Peoplise
7	Adphorus	**147**	Gimora	**287**	Pera Games
8	Ahtapot App	**148**	Giriüim Finans	**288**	Picus
9	Akakce	**149**	Glakolens	**289**	Piralev
10	alwaysfashion	**150**	Goano	**290**	Pisano
11	Ambeent	**151**	Gordion Teknoloji	**291**	PlatoNYX
12	Anatolian Technologies	**152**	Gram Games	**292**	Playnex
13	AngelFish	**153**	Greenoscope - VerimliBinalar	**293**	PlusOneMinusOne
14	Anlatsın (tellbout - Sinaps)	**154**	grupanya	**294**	Polizom
15	AnneLutfen	**155**	Gulyabani Game Studio	**295**	Poltio
16	Anneysen	**156**	Guvenrehberi	**296**	Pondr
17	Antropi	**157**	Habita	**297**	Porima
18	Apiheal (SBS Bilimsel Bio)	**158**	Hagelson	**298**	Positive Energy
19	App Samurai	**159**	hangiuniversite	**299**	PratiXRM
20	Appsilon Diamond Work	**160**	Hayriya	**300**	PriSync
21	Apsiyon	**161**	Hazinem Pırlanta	**301**	Projepedia
22	AR Pandora	**162**	Hediyemo (mobilhediyem)	**302**	PunchBoom
23	ArcadeMonk	**163**	Hello7	**303**	Qumpara (Nobium)
24	ARDIC	**164**	HemenKiralik (Flat4Day)	**304**	Qweep
25	Armut	**165**	Hepfly (Ucakbileti com)	**305**	Radmule
26	ATAR Labs	**166**	hepsiburada	**306**	Radore
27	Atölye15	**167**	HesapNo	**307**	Reality Arts
28	Auto Train Brain (HMS)	**168**	Hidroturbin	**308**	Recontact
29	AxolotlBio	**169**	Hızlıçeviri	**309**	Reengen
30	Balerin	**170**	HotelRunner (Cloud Arena)	**310**	RePG Energy
31	Banamama	**171**	Iamnotbasic	**311**	Restroid
32	Banqo	**172**	iCaked	**312**	Reztoran
33	Banttan Canlı	**173**	idemama	**313**	rezztoran
34	Bardabas	**174**	incir.com	**314**	Ringpara
35	Basefy	**175**	Infodif	**315**	Rofoods
36	Bashla	**176**	Infonomi	**316**	RS Research
37	BeCool	**177**	ininal	**317**	ruup
38	BeyazPano	**178**	Inovatink	**318**	SadeceON
39	Bilemezsin	**179**	inploid	**319**	Saülam Tapu
40	Biletall.com	**180**	Insprea	**320**	sciRobot
41	Biliüim Inovasyon	**181**	Integreen	**321**	Scorp
42	Bimser Yazılım	**182**	Invidyo (Mobilus)	**322**	Scotty
43	BioCapSOL Kimya	**183**	isteOyun	**323**	Scoutium
44	BioGuy (Bak-Tek)	**184**	iugo	**324**	Sebastian App
45	Biolive	**185**	Iven	**325**	Segmentify
46	Bionluk	**186**	iyi sahne	**326**	Sepeti com
47	BioPipe (GreenAgeTech)	**187**	iyzico	**327**	Servo Kiosk
48	Bir Cüzdan (SetSec)	**188**	Jestiniyap	**328**	Seyisco
49	BirBileneSor	**189**	Jetract	**329**	Silence of the Bees
50	BiSigortacı	**190**	Joyfoodz	**330**	Sinemia

51	BiSu	**191**	kaft	**331**	Sınava Doüru
52	BiTaksi	**192**	KapGel	**332**	Skyatlas
53	blesh	**193**	Kargoweb	**333**	Skysens
54	BlindID	**194**	KariyerGenc	**334**	Smart Mimic
55	BMT-BAPS	**195**	Katı Hal	**335**	Smart Moderation
56	Boni	**196**	Keyground	**336**	Smartiks
57	Botanalytics	**197**	Kimola	**337**	Snapbuy
58	Botego	**198**	Kobay	**338**	Socialeyes
59	Bracehealth	**199**	Kodris	**339**	SociaPlus - Insider
60	buldumbuldum	**200**	Kolay Randevu	**340**	Solvoyo
61	BuradanGönder	**201**	kolayIK	**341**	somedya
62	Burgeon	**202**	KolayOto	**342**	Sorun
63	Butigo	**203**	Kredico	**343**	sosyologger
64	ButikGez	**204**	Lala	**344**	Spirohome
65	Buy Buddy	**205**	LCD Hospital	**345**	Sporcum
66	Cardtek	**206**	LeadTime	**346**	Sports&Merits
67	Centriot	**207**	Ledbox	**347**	Stardust Project
68	Ceotudent	**208**	Letz	**348**	Startsub
69	Cepfix	**209**	Lidyana	**349**	Startup
70	cepstop	**210**	LilaKutu	**350**	StayNote
71	CepteTamir	**211**	Line Do	**351**	stilsos
72	Çevrimiçi	**212**	Local Guddy	**352**	Supplementler
73	çiçekSepeti	**213**	Logiwa - LA Software	**353**	Surgitate
74	Civic Solar	**214**	Lojika	**354**	Sweaters
75	Clover Game Studio	**215**	LojiPlatform	**355**	T-HOS
76	Coin-Turk	**216**	LOKI	**356**	TabletSeminerler
77	Coiny	**217**	Lumos Laser	**357**	Tag2sense
78	COMIND AI	**218**	MadByte Games	**358**	Taglette
79	Connect-ION	**219**	MagSpin	**359**	TagPay
80	Connected2.me	**220**	manibux	**360**	Tapu.com
81	Cosa	**221**	Mapplico	**361**	Tarabios
82	CreatorDen	**222**	Mapps	**362**	Tarfin
83	Crushmania	**223**	Markafoni	**363**	Tart Games
84	cubic fm	**224**	Marketyo	**364**	tasit.com (arabalan)
85	Dakick	**225**	Maüinga	**365**	TatilSepeti
86	DAPGenomics	**226**	mavikep	**366**	Tazi.io
87	Datapare	**227**	Mavilab Yazılım	**367**	TDSmaker
88	Daydream Interactive	**228**	MD Research Development	**368**	TeamSQL
89	Dçüyeri	**229**	Meal Box	**369**	Tedaline
90	Degerleme Takip - DTS	**230**	Medicraft	**370**	Tekkredi
91	DekoPasaj	**231**	Meditation App	**371**	Teklif Borsası
92	Delphi Sonic (Masuta Robotic)	**232**	Medrics	**372**	Teknoban
93	Deriva Labs	**233**	mekan com	**373**	Telefonkilifim
94	Digiform	**234**	mekanist	**374**	Telegrapher Labs
95	Digitouch	**235**	mentornity	**375**	Teleporter
96	Doktor Sitesi	**236**	metrekare	**376**	Temiz
97	Doktorburada	**237**	Mikro Biyosistemler	**377**	Temizlik Devi
98	Doktorderki	**238**	Mikro Yazılım	**378**	Temizlikyolda
99	Doktortakvimi (Eniyihekim)	**239**	Mikro-çdeme	**379**	Thread In Motion (Slothes)
100	Dolap	**240**	Mikro-p	**380**	Tinkfabrik

101	DriveYoyo	**241**	miks	**381**	Trendbox
102	Düüün.com	**242**	Mobil Oto Servis	**382**	Trendonline
103	E Sport Akademi	**243**	Mobilike	**383**	trendyol
104	eCift	**244**	Mobiliz	**384**	Trio Mobil
105	eDefter	**245**	MobiRoller	**385**	Turera
106	Egitimonline (iyibilir)	**246**	ModaCruz	**386**	Turshoe
107	Ehil	**247**	modanisa	**387**	Turtela
108	Ekmob	**248**	Moka	**388**	Twentify (Bounty)
109	Eksperin	**249**	Mompery	**389**	UltraWorks
110	Elektrosens	**250**	Monument	**390**	Unnado
111	English Ninjas	**251**	mutlubiev	**391**	Uplifers
112	Entekno - MicNo	**252**	Muvizi	**392**	UrbanStat (Mekansal üüler)
113	Enwair	**253**	Mysu	**393**	ustaeli
114	Epik işler	**254**	Nanomik	**394**	V-Count
115	Episome Biotech	**255**	NasılKolay	**395**	Veriban
116	Etkinlikcim	**256**	Nerde.co	**396**	Verisun
117	Evde Mimar	**257**	Netcad	**397**	Vettarge Mekatronik
118	EvdekiBakıcım	**258**	Networkdry	**398**	vipdukkan
119	evidea (malzemem)	**259**	Next Horizons	**399**	Vipme
120	EvimNet	**260**	Noffix - NKolayofis	**400**	ViraSoft
121	Evreka	**261**	Noktacom Medya	**401**	Vircon Group
122	Evtiko	**262**	Noluyo	**402**	Visionteractive
123	Expertera	**263**	Nowhere Studios	**403**	Vispera
124	Eyedius	**264**	Nubigon	**404**	Vivense
125	FalconAI	**265**	oBilet	**405**	VizeraLabs
126	Far East Movement	**266**	Octovan	**406**	Volt
127	Fazla Gıda	**267**	Olev	**407**	Voscreen
128	Ferge	**268**	Onedio	**408**	Walk-in
129	FineDine	**269**	Onlock	**409**	WalkOVR
130	Fitandcolor	**270**	Orthero (Seffaf Aparey)	**410**	WeBeYou
131	Fitwell	**271**	Osteoid	**411**	WebGazer
132	Flank Esports	**272**	Otelz com	**412**	Whispto
133	FonZip	**273**	Ototrink	**413**	XO Panel
134	Footballium	**274**	Otsimo	**414**	yemeksepeti
135	Foriba (Fit Solutions)	**275**	Ottoo	**415**	Yolo
136	Fundungo	**276**	Pakolino	**416**	Youthall (Stajim.net)
137	Future Fart	**277**	Papara	**417**	yumag (ComicSpoon)
138	Ganipara	**278**	parcadeposu	**418**	Zaxe (Zone 3Dprinter)
139	Garaj Sepeti	**279**	Parkkolay	**419**	Zebramo
140	Garajyeri	**280**	ParlakBirGelecek	**420**	Zet/Sopsy
				421	Zirve Yazılım

Source: Startups.Watch, 2018

Table 4.12: The Total Pre-Work Experience of the Investment Raised Startups' Founders (months)

#	Startup	Total Work Experience of the Founders	#	Startup	Total Work Experience of the Founders	#	Startup	Total Work Experience of the Founders
1	Paym.es	153	74	Positive Energy	153	147	Osteoid	114
2	Nanomik	43	75	Iven	12	148	blesh	244
3	Garaj Sepeti	256	76	EvdekiBakıcım	12	149	MobiRoller	171
4	Meal Box	249	77	Sinemia	93	150	BioPipe (GreenAgeTech)	6
5	Foriba (Fit Solutions)	509	78	abonesepeti	0	151	Trendbox	119
6	Expertera	128	79	Nubigon	78	152	cubic fm	19
7	Temizlik Devi	31	80	Eksperin	0	153	Connected2.me	0
8	Scoutium	25	81	Vettarge Mekatronik	0	154	Radore	0
9	Apsiyon	239	82	Connect-ION	0	155	Bashla	0
10	ARDIC	246	83	Netcad	0	156	Surgitate	28
11	Pakolino	164	84	Zaxe (Zone 3Dprinter)	19	157	trendyol	0
12	TeamSQL	179	85	Doktorderki	0	158	Pera Games	156
13	Spirohome	0	86	Otsimo	25	159	Pisano	0
14	Skysens	84	87	mutlubiev	0	160	parcadeposu(OtoWorks)	174
15	App Samurai	165	88	Mobil Oto Servis	89	161	PriSync	10
16	Monument	108	89	Lala	0	162	Socialeyes	72
17	Octovan	50	90	Smart Mimic	21	163	Pondr	20
18	English Ninjas	80	91	Teleporter	20	164	Banttan Canlı	212
19	Eyedius	41	92	WalkOVR	55	165	sosyologger	95
20	Sports&Merits	298	93	Nowhere Studios	94	166	Projepedia	42
21	Porima	0	94	Insprea	0	167	Voscreen	0
22	Evde Mimar	0	95	Mikro-p	0	168	Pavo(Agrotics)	191
23	Botanalytics	16	96	miks	0	169	metrekare	82
24	Biletall.com	44	97	Adgager	203	170	Turtela	104
25	Reengen	0	98	Next Horizons	0	171	Crushmania	16
26	Vispera	140	99	Bracehealth	0	172	Infodif	0
27	Hello7	0	100	modanisa	400	173	Mobilike	128
28	Temizlikyolda	0	101	iyi sahne	42	174	idemama	132
29	kolayIK	25	102	Elektrosens	28	175	Fitandcolor	18
30	Dolap	302	103	Uplifers	10	176	Mompery	114
31	Orthero (Şeffaf Aparey)	84	104	Kolay Randevu	111	177	mekan com	50
32	Vivense	65	105	Volt	97	178	TatilSepeti	0
33	Otelz com	203	106	PayPad	109	179	Akakce	36
34	CreatorDen	0	107	BiSu	255	180	DriveYoyo	593
35	LeadTime	22	108	Reality Arts	64	181	mekanist	0
36	Acrome	29	109	Geen	0	182	Tart Games	25
37	FineDine	218	110	Smart Moderation	356	183	Muvizi	106
38	manibux	72	111	Gardrops (Neo)	86	184	Telefonkilifim(Kabuk Aş.)	12
39	Poltio	225	112	LojiPlatform	132	185	Goano	63
40	Ferge	0	113	Botego	0	186	ustaeli	29
41	Seyisco	0	114	PlusOneMinusOne	29	187	ArcadeMonk	0
42	PratiXRM	200	115	BirBileneSor	125	188	Keyground	0
43	ModaCruz	53	116	Anatolian Technologies	0	189	Butigo	135
44	oBilet	12	117	Parkkolay	8	190	Antropi	126
45	ACLteslim	0	118	Papara	0	191	Teklif Borsası	131
46	Local Guddy	86	119	Snapbuy	73	192	somedya	300
47	LOKI	231	120	StayNote	54	193	rezztoran	83
48	Taglette	0	121	Footballium	120	194	Noktacom Medya	0
49	UrbanStat (Mekansal İşler)	68	122	Digiform	0	195	Hediyemo (mobilhediyem)	0
50	Letz	26	123	Cepfix	0	196	Doktortakvimi (Eniyihekim)	22
51	Mikro Yazılım	0	124	TDSmaker	195	197	Markafoni	140
52	Biolive	0	125	Mysu	0	198	Civic Solar	126
53	Tapu.com	208	126	Vircon Group	0	199	Digitouch	0
54	Yolo	0	127	Visionteractive	0	200	Doktor Sitesi	179
55	Scotty	130	128	KapGel	168	201	Insider	177
56	Ekmob	54	129	DekoPasaj	29	202	Paraşüt	183
57	Olev	0	130	RePG Energy	94	203	Onedio	120
58	Kimola	56	131	Habita	255	204	iyzico	260
59	Servo Kiosk	291	132	Polizom	0	205	Scorp	0
60	Ottoo	0	133	Youthall (Stajim.net)	0	206	FitWell	216
61	TagPay	0	134	Armut	277	207	Segmentify	248
62	Banamama	12	135	ininal	280	208	BiTaksi	166
63	Enwair	0	136	Smartiks	358	209	Getir	204
64	buldumbuldum	0	137	Katı Hal	29	210	evidea (malzemem)	16
65	Evreka	61	138	Silence of the Bees	0	211	Invidyo (Mobilus)	176
66	Trio Mobil	23	139	Cardtek	103	212	V-Count	0
67	Zebramo	184	140	Basefy	111	213	Peoplise	371
68	Qumpara (Nobium)	125	141	Noluyo	133	214	Twentify (Bounty)	35
69	CepteTamir	0	142	Garajyeri	192	215	Peak Games	174
70	Reztoran	24	143	Bardabas	114	216	Pubinno	156
71	Jetract	0	144	FonZip	6	217	Iconic	156
72	Ototrink	88	145	Sorun	30	218	tasit.com (arabalan)	72
73	Jestiniyap	0	146	Delphi Sonic (Masuta Robotic)	0	219	Adphorus	108
						220	Anneysen	215
						221	yemeksepeti	25

Table 4.13: Investment Raised Startups' Founders with/without Pre-work Experience

	Startups' Founders with Pre-Work Experience	Startups' Founders without any Pre-Work Experience
#	157	64
Percent	71%	29%

Table 4.14: The Total Pre-Work Experience Distribution of the Investment Raised Startup Founders

	Startups' Founders Less Than 12 Months Pre-Work Experience	Startups' Founders Less Than 24 Months Pre-Work Experience	Startups' Founders Less Than 36 Months Pre-Work Experience
#	69	86	103
Percent	31,2%	38,9%	46,6%

4.2 EXITED FOUNDERS

Again based on Startups.watch database, there are 109 exits, which are listed on Table 4.21 is occurred by technology startups in Turkey. According to LinkedIn profiles of the startups' entrepreneurs, we have again looked over the founding teams' earlier work experiences. I could take 68 of 109 startups into consideration because of lack of information about the founders of 41 technology startups. Based on these 68 startups, I have seen that 88% of the founding teams of exited startups have previous work experience. In contrast, only 12% of them have no earlier work experience before establishing their startups. (Table 4.22)

When I examine the distribution of the pre-work experience, I have seen that only 11.8% of the total earlier work experience of the founding team of these has less than 12 months. 14.7% of them have less than 24 months and 17.6% of them have less than 36 months. (Table 4.23) In other words, 82.4% of exited technology startups' founding team members' total previous work experience is more than 3 years. And the average total work experience of these 68 startups is 104.6 months, which is almost 9 years.

Table 4.21: Exited Tech Startups Between 04.2008 – 03.2018

#	Startup	The Total Pre-Work Experience of the Startups' Fonders (months)	#	Startup	The Total Pre-Work Experience of the Startups' Fonders (months)	#	Startup	The Total Pre-Work Experience of the Startups' Fonders (months)
1	Insider	177	**37**	Mekanist	0	**73**	Lidyana	78
2	Local Guddy	86	**38**	Webrazzi	56	**74**	Solvoyo	103
3	BTC Türk	#REF!	**39**	Visilabs	Not Found	**75**	Interlad	Not Found
4	tasit.com (arabalan)	72	**40**	Sendloop	0	**76**	Netsis	67
5	HesapKurdu	84	**41**	VanilyaClub	54	**77**	HediyeDenizi	49
6	Adphorus	108	**42**	Bavul	Not Found	**78**	Hediyeciniz	Not Found
7	Zingat	240	**43**	MyPat	75	**79**	SadeceHosting	Not Found
8	Markafoni	140	**44**	Petbox	61	**80**	Cicek	Not Found
9	Panteon	51	**45**	Promoqube	143	**81**	Finecus	Not Found
10	Siyonet	Not Found	**46**	Mikro-ödeme	156	**82**	Idefix	Not Found
11	Futbolist	250	**47**	Paybyme	72	**83**	Logo	Not Found
12	Babil	Not Found	**48**	Balerin	52	**84**	Paytogo	72
13	TazeDirekt	278	**49**	Ehil	89	**85**	Game Sultan	72
14	May Cyber (Natek)	Not Found	**50**	Doktortakvimi	22	**86**	Beyazkutu	111
15	Gittigidiyor	234	**51**	Sosyalmedya	0	**87**	Previewmyemail	Not Found
16	Anneysen	215	**52**	Bikafalar	32	**88**	Bulucak	Not Found
17	iPara	271	**53**	dakick	128	**89**	Unisbul	0
18	Digitouch	0	**54**	Emlakjet	Not Found	**90**	Evmanya	Not Found
19	Tisho	Not Found	**55**	Otoredi	129	**91**	Euro.message	13
20	Mackolik	305	**56**	Boğaz Taksi	Not Found	**92**	E-bebek	134
21	ininal	280	**57**	Teklif Borsası	131	**93**	41!29?	37
22	TurkiyeF1	Not Found	**58**	Coverzz	Not Found	**94**	ReklamZ	37
23	PanaromaBilisim	Not Found	**59**	Botego	0	**95**	SEM	97
24	Rekmob	90	**60**	Pozitron	98	**96**	LinkZ	97
25	Semanticum	320	**61**	Exclusice Networks	Not Found	**97**	Coretech	65
26	Networkdry	80	**62**	Unnado	226	**98**	444cicek	Not Found
27	Arabam	113	**63**	Viste Isra Vision	Not Found	**99**	Emlakofisim	Not Found
28	tatilbudur.com	Not Found	**64**	cardGusto	37	**100**	Probil	Not Found
29	Joygame	Not Found	**65**	59saniye	Not Found	**101**	Alkışlarla Yaşıyorum	Not Found
30	Bukombin	Not Found	**66**	Grupfoni	Not Found	**102**	ITD - Asseco SEE	Not Found
31	Radore	0	**67**	Sanalreyonum	Not Found	**103**	Sobee	212
32	Mobilike	128	**68**	8digits	61	**104**	Yonja	53
33	Yemeksepeti	25	**69**	Superkarga	Not Found	**105**	Innova	71
34	Envision	Not Found	**70**	Medyasoft	Not Found	**106**	Sebit	Not Found
35	Öde.al	205	**71**	Provus	Not Found	**107**	Argela	157
36	Arvento	Not Found	**72**	Vidobu	36	**108**	Biletix	180
						109	İtiraf	Not Found

Source: Startups.Watch, 2018

Table 4.22: Exited Startups' Founders with/without Pre-work Experience

	Startups' Founders with Pre-Work Experience	Startups' Founders without any Pre-Work Experience
#	60	8
Percent	88%	12%

Table 4.23: The Total Pre-Work Experience Distribution of the Exited Startups' Founders

	Startups' Founders Less Than 12 Months Pre-Work Experience	Startups' Founders Less Than 24 Months Pre-Work Experience	Startups' Founders Less Than 36 Months Pre-Work Experience
#	8	10	12
Percent	11,8%	14,7%	17,6%

4.3 STARTUP100 LIST FOUNDERS

Startups100 List is lastly published in 2017. In the thesis, I considered that list which takes place on Table 4.31. There are a hundred technology startups on that list. In order to find out founding team earlier work experience, we have looked over the entrepreneurs' LinkedIn profiles. I could only examined 61 startups because of the lack of information about remaining 39 startups' founders.

According to these 61 startups, I've seen that only 13.1% of them has no previous work experience. On contrary, 86.9% of these startups' founders have earlier professional work experience. (Table 4.32) And the average total work experience of these startups founding teams are 121.3 months, which equals approximately 10 years of total previous work experience of the founding team members.

According to Table 4.33, only 14.8% of startups' founding team members total work experience is less than 12 months. 21.3% of startups' entrepreneurial team members total work experience is less than 24 months. On the other hand, 69.9% of Starup100 List startups' founding teams total work experience is more than 36 months.

Table 4.31: Startup100 List Published In 2017

#	Startup	The Total Pre-Work Experience of the Startups' Fonders (months)	#	Startup	The Total Pre-Work Experience of the Startups' Fonders (months)	#	Startup	The Total Pre-Work Experience of the Startups' Fonders (months)
1	Insider	177	**34**	Gardrops	86	**67**	Mobil Oto Servis	89
2	Paraşüt	183	**35**	Modacruz	53	**68**	Smart Moderation	356
3	Onedio	120	**36**	Gram Games	28	**69**	Positive Enerji	153
4	Iyzico	260	**37**	Twentify	35	**70**	Çaycı	120
5	Sinemia	93	**38**	Obilet	12	**71**	Borda Teknoloji	Not Found
6	Connected2me	0	**39**	Rentnconnect	84	**72**	Bunsar	Not Found
7	Scorp	0	**40**	Veloxity	336	**73**	Papiroom	Not Found
8	Fitwell	216	**41**	Peakgames	174	**74**	PHI Tech	Not Found
9	Segmentify	248	**42**	Mutlubiev	0	**75**	Expertera	128
10	Kolay İK	25	**43**	Elektra IC	Not Found	**76**	Anlatsin.com	Not Found
11	Vispera	140	**44**	ISD	Not Found	**77**	Indoora	Not Found
12	Getir	204	**45**	Supplementler	Not Found	**78**	Kolektif House	Not Found
13	BiTaksi	166	**46**	Oto.net	Not Found	**79**	Gpay	Not Found
14	Tapu.com	208	**47**	Mall IQ	Not Found	**80**	Meal Box	249
15	Evreka	61	**48**	Reztoran	24	**81**	Kartonoyuncak.com	Not Found
16	Iven.io	12	**49**	Unite.ad	Not Found	**82**	Digiform	0
17	SuKolay	41	**50**	Rotorbit	Not Found	**83**	SnapBuy	73
18	Kapgel	168	**51**	Lastoda.com	Not Found	**84**	İninal	280
19	Armut	277	**52**	Katı Hal Arge	29	**85**	OtoWorks	174
20	Bisu	255	**53**	Ambent Wireless	Not Found	**86**	Voscreen	0
21	Birbilenesor	125	**54**	Bionluk.com	Not Found	**87**	Uplifers	10
22	Evidea	16	**55**	Monument	108	**88**	Hızlıçeviri	Not Found
23	Elba	Not Found	**56**	Nuvia	Not Found	**89**	Longi	Not Found
24	Vivense	65	**57**	Stajim.net	0	**90**	Radarsan	Not Found
25	Englishninjas.com	80	**58**	Modanisa	400	**91**	YongaTech	Not Found
26	Invidyo	176	**59**	Bama Teknoloji	Not Found	**92**	EvdekiBakıcım	12
27	VNot Foundcount	0	**60**	Raklet	Not Found	**93**	Bulutistan	Not Found
28	Livecast.com	Not Found	**61**	IUGO Teknoloji	Not Found	**94**	SC3.io	Not Found
29	Etkinlikcim.com	Not Found	**62**	Pubinno	174	**95**	Apsiyon.com	239
30	Buldumbuldum	0	**63**	Iconic	156	**96**	Reality Arts Studio	64
31	Peoplise	371	**64**	Deeper	Not Found	**97**	Yolluyo.com	Not Found
32	Bikutumutluluk	30	**65**	Onlab	Not Found	**98**	Amelos Interactive	Not Found
33	Optiyol	38	**66**	AR Pandora	Not Found	**99**	Socialcube	Not Found
						100	Esarj	Not Found

Source: Startups.Watch & LinkedIn, 2018

Table 4.32: Startup100 List's Founders with/without Pre-work Experience

	Startups' Founders with Pre-Work Experience	Startups' Founders without any Pre-Work Experience
#	53	8
Percent	86,9%	13,1%

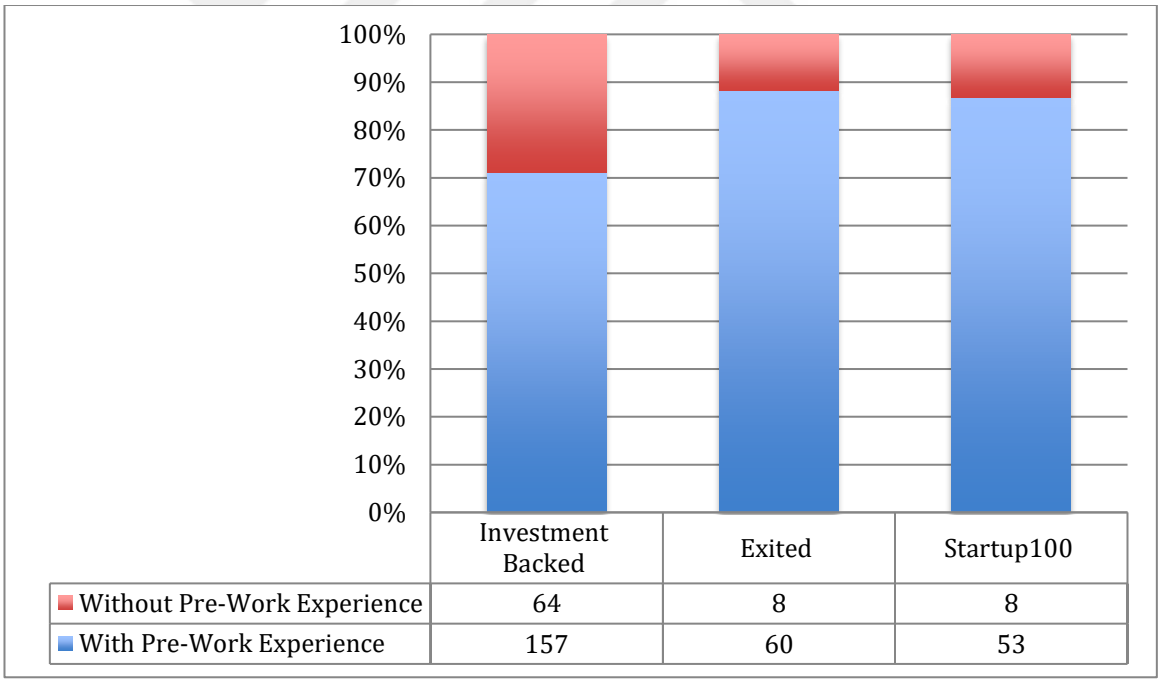
Table 4.33: The Total Pre-Work Experience Distribution of the Startup100 List's Founders

	Startups' Founders Less Than 12 Months Pre-Work Experience	Startups' Founders Less Than 24 Months Pre-Work Experience	Startups' Founders More Than 36 Months Pre-Work Experience
#	9	13	19
Percent	14,8%	21,3%	31,1%

5. DISCUSSIONS AND CONCLUSION

The aim of this thesis is to find out whether there is a direct relation between earlier work experience of founders and the success of their technology startups or not. In order to examine that founders of investment raised startups, exited startups and startups took place in Startup100 List are evaluated. As it shown on Figure 5.1, startups' founders with pre-work experience are bigger than all three control lists, which are respectively 71% in investment backed startups, %88,2 in exited startups, and %86,9 in Startup100 List startups. These results prove that there is an affirmative correlation between previous work experience and the success.

Figure 5.1: Founders with/without Pre-work Experience



	Investment Backed	Exited	Startup100
Without Pre-Work Experience	64	8	8
With Pre-Work Experience	157	60	53

When we compare three lists with each other, pre-work experience rate of exited startup' founders and Startup100 List' founders are more than investment backed startup founders. Since exit, which can be seen, as IPO, M&A or selling shares requires a successful growing company and outstanding know-how in business, experience might be a very significant requirement. Furthermore, since authorities, which investigate

technology startups deeply and detailed, comprise Startup100 List rate of former experienced founders in Starup100 List is also bigger than investment raised startups. This is also proven by the Figure 5.2, which demonstrates the average total earlier work experience of the founders. On this table Startup100 List founders are more experienced (121.3 months) than two other control lists.

Figure 5.2: Average Earlier Work Experience

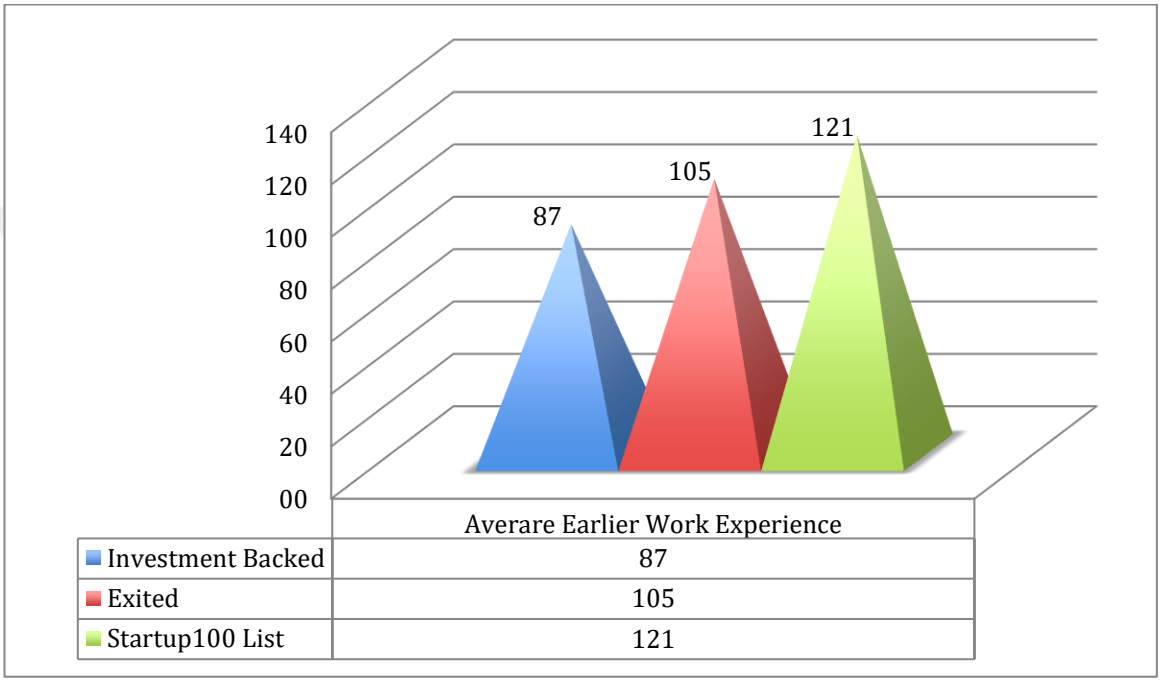


Figure 5.3, 5.4 and 5.5 demonstrates the distribution of previous work experience of the founders of technology startups in Turkey. These charts also assert the importance of earlier work experience in the success of the technology startups. Although there are few startups with inexperienced founders, most of the startups' founders are earlier professional experience. Hence, startup companies operates with high risk which causes a failure because of several reasons such as setup an organizational identity, creating operating procedure and building healthy relation with suppliers. All of these factors require deep know-how knowledge in business field and by doing these startups can minimize those risks. Furthermore, startups require expertise on areas such as human resource management, developing a competitive strategy and positioning product based on market needs. These tasks can be managed successfully by the abilities and skills of founding team members of the technology startups.

Furthermore, as it previously stated in Table 1.1, most of the reasons about why startups fail, can easily eliminated by the help of previous work experience of founding team members. For instances, “no market need” reason, which is measured as 42% of why startups fail can excluded by entrepreneurs if they have developed skills in order to understand the demands of the market and develop the product based on this. Otherwise, startups can have a product, which serves no one. Again “run out of cash” reasons, which is measured as 29% of why startups fail can be eliminated by deep understanding in finance. If the founding team members are experienced about cash flow management, they can manage and prepare the business financial requirements properly. Consequently, these results show us technology startups with experienced founding team members can decrease startups failure rate and increase their chance in order to build up a successful startup.

This study proves that there is a direct correlation between startups success and founders’ previous work experience, which becomes organizational assets without any effort. In order to establish successful technology startups, entrepreneurs must have some skills and abilities. These characteristics can be listed such as network, financial power, leadership skills of the founding team and etc. When these requirements take into consideration, it is very obvious to see that previous entrepreneurs’ professional work experience might be a very crucial necessity for building an outstanding business.

Figure 5.3: Previous Work Experience Distribution of Investment Backed Startups' Founders

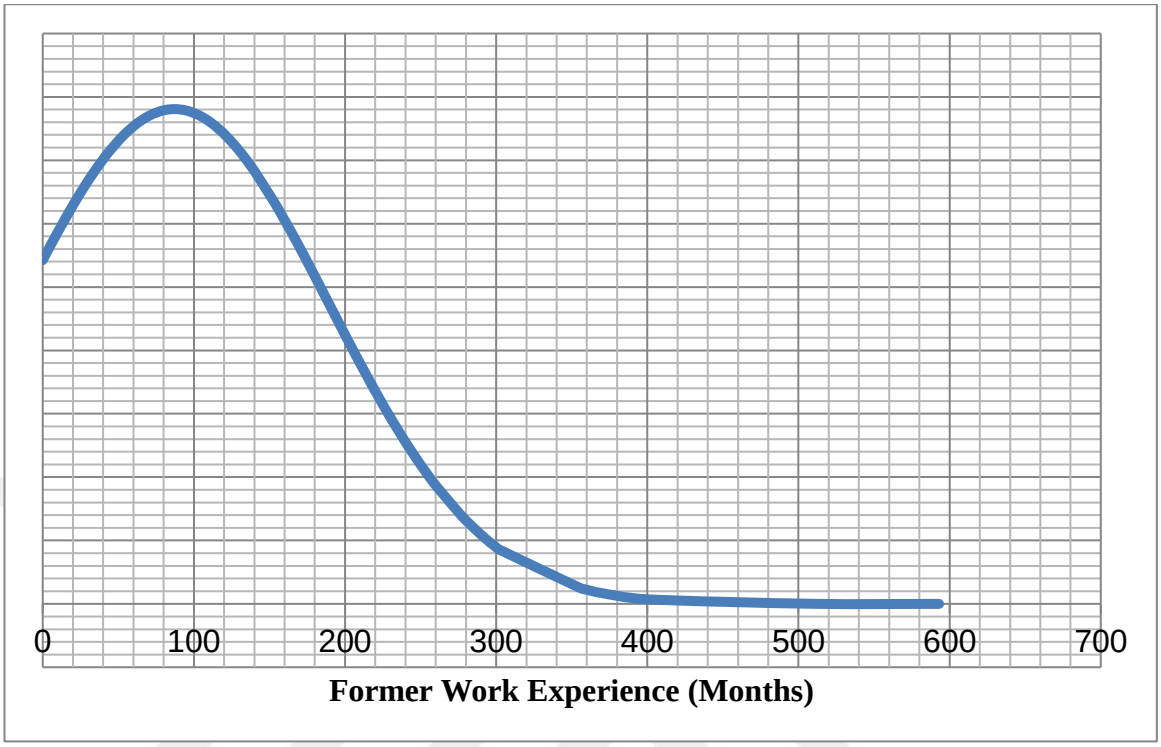


Figure 5.4: Previous Work Experience Distribution of Exited Startups' Founders

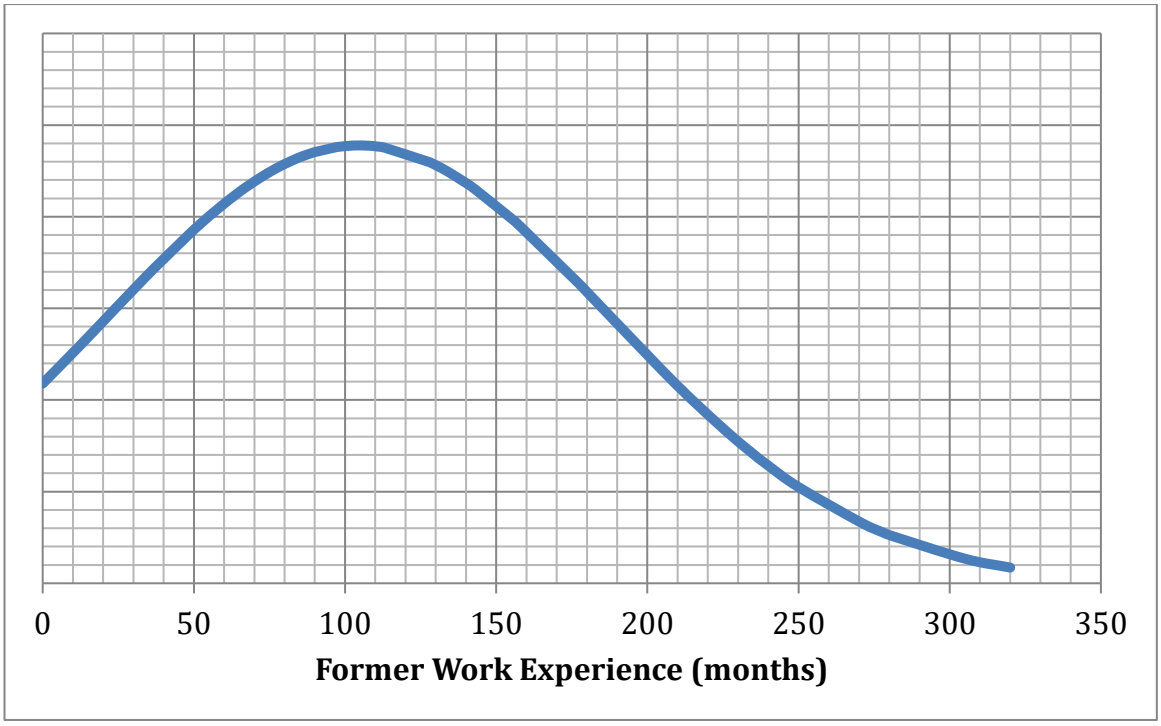
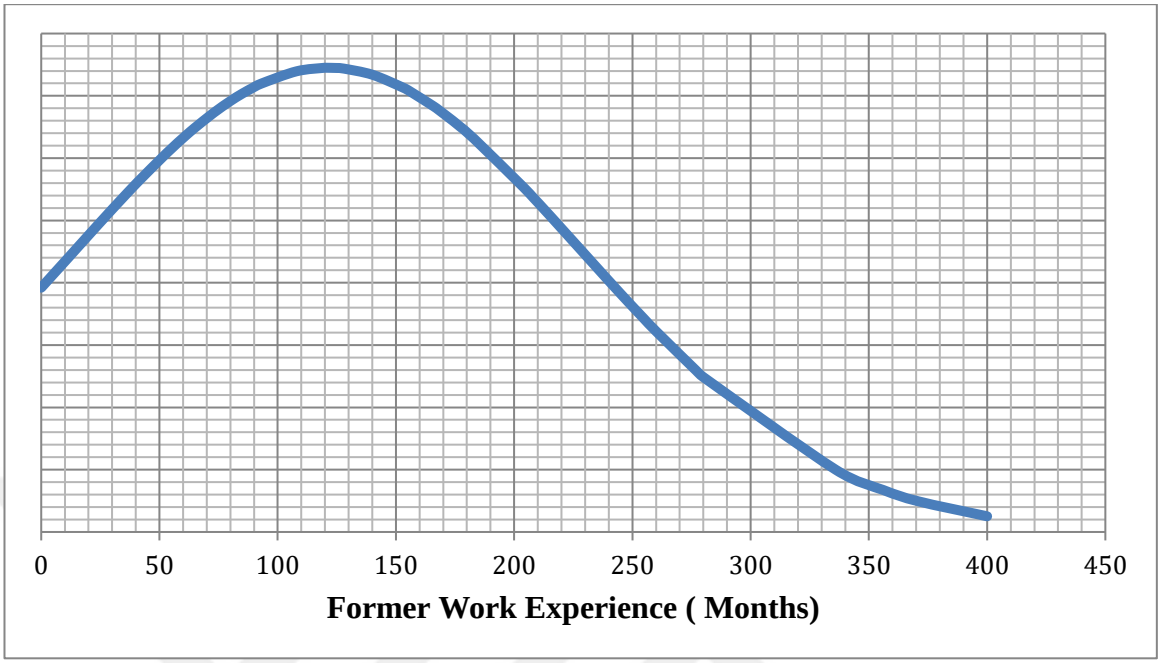


Figure 5.5: Previous Work Experience Distribution of Startup100 List Startups' Founders



Since startups have high risk of failure (Erin Griffith, 2014), founding team is one of the most significant factors of to establish a successful startup. Hence, founders of the startups examine detailed researches in order to understand business concepts, technologies, ideas and their commercial potential in the market. It is also proven with previous researches, which state that founders' earlier industry or startup experience is a outstanding fact in creating successful and growing new business. Because, such an experience of entrepreneurs guides founders' to overcome emerging problems, and comprehensive knowledge of thriving launches. As it already stated in Literature Review part scholars claim that entrepreneurs achieve knowledge about the company by learning through experimentation. Gained experience simplifies understanding of the tasks at the hand, eliminating the risks.

6. LIMITATIONS

This study can be enlarged by categorizing the earlier work experience of the founders in subheadings such as earlier startup experience, earlier same industry experience, earlier different industry experience. By doing this, we can have deep understanding about which of experience is most predominant about the success of the startups.

Besides, in order to better understand the effect of earlier work experience in the success of technology startups, unsuccessful startups' founders' earlier experience can be examined as well. With this research, we can find out that whether earlier work experience also affects the success of technology startups negatively or not. In this study, we conducted our research by evaluating successful startups which are investment raised, exited or took place in Startup100 List. On contrary, as some scholars stated, former work experience might affect the startups' success negatively. We can only understand this by examining unsuccessful startups' founders.

Consequently, this study is examined because technology startups are very important for the economies. They can be growth engines for the countries. Technology startups reach huge market capitalizations without large asset needs. Thus, for growing economies such as Turkey, these entities can be the one of the key entities to provide economic development. So, if we pay more attention to technology startups and understand the dynamics behind the scenes, we can raise the success rates of these companies. This research is also conducted in order to create more and more successful Turkish startup ecosystem.

REFERENCES

Books

Kirchhoff, B.A., 1994. *Entrepreneurship and dynamic capitalism: The economics of business firm formation and growth*. ABC-CLIO.

Aldrich, H., 1999. *Organizations evolving*. Sage.

Periodical Publications

Griffith, E., 2014. Why startups fail, according to their founders. *Retrieved September*, *20*, p.2016.

Ghosh, A., 2014. How to choose the best business structure to choose for a start-up. *The Start-Up Journal*.

Oe, A. and Mitsuhashi, H., 2013. Founders' experiences for startups' fast break-even. *Journal of Business Research*, *66*(11), pp.2193-2201.

Edelman, L.F., Manolova, T.S. and Brush, C.G., 2008. Entrepreneurship education: Correspondence between practices of nascent entrepreneurs and textbook prescriptions for success. *Academy of Management Learning & Education*, *7*(1), pp.56-70.

Low, M.B. and Abrahamson, E., 1997. Movements, bandwagons, and clones: Industry evolution and the entrepreneurial process. *Journal of business venturing*, *12*(6), pp.435-457.

Stearns, T.M. and Hills, G.E., 1996. Entrepreneurship and new firm development: A definitional introduction. *Journal of business research*, *36*(1), pp.1-4.

Stinchcombe, A.L. and March, J.G., 1965. Social structure and organizations. *Handbook of organizations*, *7*, pp.142-193.

Markman, G.D. and Baron, R.A., 2003. Person–entrepreneurship fit: why some people are more successful as entrepreneurs than others. *Human resource management review*, *13*(2), pp.281-301.

Davidsson, P. and Honig, B., 2003. The role of social and human capital among nascent entrepreneurs. *Journal of business venturing*, *18*(3), pp.301-331.

Ruef, M., Aldrich, H.E. and Carter, N.M., 2003. The structure of founding teams: Homophily, strong ties, and isolation among US entrepreneurs. *American sociological review*, pp.195-222.

Brush, C.G., Greene, P.G. and Hart, M.M., 2001. From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base. *The academy of management executive*, *15*(1), pp.64-78.

Lichtenstein, B.M.B. and Brush, C.G., 2001. How do "resource bundles" develop and change in new ventures? A dynamic model and longitudinal exploration. *Entrepreneurship theory and practice*, *25*(3), pp.37-58.

Busenitz, L.W. and Barney, J.B., 1997. Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of business venturing*, *12*(1), pp.9-30.

Puri, M. and Robinson, D.T., 2009. The economic psychology of entrepreneurship and family business.

Kahneman, D. and Lovallo, D., 1993. Timid choices and bold forecasts: A cognitive perspective on risk taking. *Management science*, *39*(1), pp.17-31.

Harrison, J.R. and March, J.G., 1984. Decision making and postdecision surprises. *Administrative Science Quarterly*, pp.26-42.

Baron, R.A. and Ensley, M.D., 2006. Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management science*, *52*(9), pp.1331-1344.

Wiklund, J. and Shepherd, D., 2003. Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic management journal*, *24*(13), pp.1307-1314.

Mikhail, M.B., Walther, B.R. and Willis, R.H., 1997. Do security analysts improve their performance with experience?. *Journal of Accounting Research*, *35*, pp.131-157.

Jacob, J., Lys, T.Z. and Neale, M.A., 1999. Expertise in forecasting performance of security analysts. *Journal of Accounting and Economics*, *28*(1), pp.51-82.

Camerer, C. and Lovallo, D., 1999. Overconfidence and excess entry: An experimental approach. *American economic review*, *89*(1), pp.306-318.

Beckman, C.M., Burton, M.D. and O'Reilly, C., 2007. Early teams: The impact of team demography on VC financing and going public. *Journal of Business Venturing*, *22*(2), pp.147-173.

Jo, H. and Lee, J., 1996. The relationship between an entrepreneur's background and performance in a new venture. *Technovation*, *16*(4), pp.161-211.

Newbert, S.L., 2005. New firm formation: A dynamic capability perspective. *Journal of small business management*, *43*(1), pp.55-77.

Tornikoski, E.T. and Newbert, S.L., 2007. Exploring the determinants of organizational emergence: A legitimacy perspective. *Journal of Business Venturing*, *22*(2), pp.311-335.

Colombo, M.G. and Grilli, L., 2005. Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research policy*, *34*(6), pp.795-816.

Choo, F. and Trotman, K.T., 1991. The relationship between knowledge structure and judgments for experienced and inexperienced auditors. *Accounting Review*, pp.464-485.

Shane, S. and Venkataraman, S., 2000. The promise of entrepreneurship as a field of research. *Academy of management review*, *25*(1), pp.217-226.

King, A.A. and Tucci, C.L., 2002. Incumbent entry into new market niches: The role of experience and managerial choice in the creation of dynamic capabilities. *Management science*, *48*(2), pp.171-186.

Hmieleski, K.M. and Baron, R.A., 2009. Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of management Journal*, *52*(3), pp.473-488.

McGrath, R.G., 1999. Falling forward: Real options reasoning and entrepreneurial failure. *Academy of Management review*, *24*(1), pp.13-30.

Russo, J.E. and Schoemaker, P.J., 1992. Managing overconfidence. *Sloan management review*, *33*(2), p.7.

Reuber, A.R. and Fischer, E.M., 1994. Entrepreneurs' experience, expertise, and the performance of technology-based firms. *IEEE Transactions on engineering management*, *41*(4), pp.365-374.

Singley, M.K. and Anderson, J.R., 1989. *The transfer of cognitive skill* (No. 9). Harvard University Press.

Bonner, S.E. and Lewis, B.L., 1990. Determinants of auditor expertise. *Journal of accounting research*, pp.1-20.

Hayward, M.L., Shepherd, D.A. and Griffin, D., 2006. A hubris theory of entrepreneurship. *Management Science*, *52*(2), pp.160-172.

Haleblian, J., Kim, J.Y. and Rajagopalan, N., 2006. The influence of acquisition experience and performance on acquisition behavior: Evidence from the US commercial banking industry. *Academy of management journal*, *49*(2), pp.357-370.

Madsen, P.M. and Desai, V., 2010. Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. *Academy of management journal*, *53*(3), pp.451-476.

Cassar, G. and Craig, J., 2009. An investigation of hindsight bias in nascent venture activity. *Journal of Business Venturing*, *24*(2), pp.149-164.

Kirzner, I.M., 1997. Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of economic Literature*, *35*(1), pp.60-85.

Dimov, D., 2010. Nascent entrepreneurs and venture emergence: Opportunity confidence, human capital, and early planning. *Journal of Management Studies*, *47*(6), pp.1123-1153.

Delmar, F. and Shane, S., 2006. Does experience matter? The effect of founding team experience on the survival and sales of newly founded ventures. *Strategic Organization*, *4*(3), pp.215-247.

Ronstadt, R., Vesper, K.H. and McMullan, W.E., 1988. Entrepreneurship: Today courses, tomorrow degrees?. *Entrepreneurship theory and practice*, *13*(1), pp.7-13.

Stuart, R.W. and Abetti, P.A., 1990. Impact of entrepreneurial and management experience on early performance. *Journal of business venturing*, *5*(3), pp.151-162.

Lowe, R.A. and Ziedonis, A.A., 2006. Overoptimism and the performance of entrepreneurial firms. *Management science*, *52*(2), pp.173-186.

Lerner, M. and Haber, S., 2001. Performance factors of small tourism ventures: the interface of tourism, entrepreneurship and the environment. *Journal of business venturing*, *16*(1), pp.77-100.

Helfat, C.E. and Lieberman, M.B., 2002. The birth of capabilities: market entry and the importance of pre-history. *Industrial and corporate change*, *11*(4), pp.725-760.

Rubenson, G.C. and Gupta, A.K., 1992. Replacing the founder: Exploding the myth of the entrepreneur's disease. *Business Horizons*, *35*(6), pp.53-58.

Kor, Y.Y., 2003. Experience-based top management team competence and sustained growth. *Organization Science*, *14*(6), pp.707-719.

Gompers, P. and Lerner, J., 2001. The venture capital revolution. *Journal of economic perspectives*, *15*(2), pp.145-168.

Other Publications

Robehmed, N., 2013. What is a startup? https://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/#7dc7ec064044 [accessed 15 April 2018]

Griffith, E., 2013.Why startups fail, according to their founders. http://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/ [accessed 29 March 2018]

TED Talk, 2015 Bill Gross: The single biggest reason why startups succeed. [accessed 7 April 2018]