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Why Do Startups Fail? A Case Study Based Empirical Analysis in Bangalore

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Abstract In an entrepreneurial ecosystem, the failure rate of startups is extremely high at 90%, and every startup that fails becomes an orphan. This phenomenon leads to higher costs of failure for the entrepreneurs in the ecosystem. Failed startups have many lessons to offer to the ecosystem and offer guidance to the potential entrepreneur, and this area is not fully explored compared to the literature on successful startups. We use a case based method distinguishing a failed startup and a successful startup, studying the entrepreneurial characteristics and firm level factors which cause the failures, in the technology startup ecosystem of Bangalore. We study one of the modes of exit adopted by failed startup entrepreneurs and draw key lessons on causes that culminate in failures. We have identified that factors such as the time to minimum viable product cycle, time for revenue realization, founders' complementary skillsets, age of founders with their domain expertise, personality type of founders, attitude towards financial independence and willingness to avail mentorship at critical stages, will decisively differentiate failed startups from the successful ones. Accordingly, implications have been derived for potential entrepreneurs for reducing the cost of failures in the entrepreneurial ecosystem.

Keywords Startups, failure, causes, exit, entrepreneurship, characteristics, firms, factors, ecosystem, bangalore, India

I. Introduction

Prospective entrepreneurs come with innovative ideas and convert them into business opportunities by establishing their startups. Entrepreneurial startups generate new employment and provide avenues for creative potential utilization as they 'technovate' by blending the power of technology and innovation. Entrepreneurial intentions help the creation of firms and they become the prime mover in the economic growth of nations (Global Entrepreneurship Monitor, 2017).

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An economy needs more and more startups to prosper into larger corporations to fuel growth. When more entrepreneurial firms join the fray, growth of entrepreneurship, employment and economy follow. The entrepreneurial path of converting startups into established large firms poses numerous challenges. Only a few entrepreneurs can go against the tide and achieve success. In general, the survival rate of startups established by entrepreneurs is low (Pena, 2002), leaving many startups exposed to the hardship of failure. About “90% of startups fail in the first 5 years” as observed in the US context (Forbes magazine, 2015) and the phenomenon is the same in the Indian context as well (Business line, 2017). The situation may not be widely different in other economies.

The failure of startups impacts entrepreneurs as well as the firm established by them. The repercussions of entrepreneurial failure go beyond the firm and impact employment and economy. The entrepreneurs who meet with failures are high in number and the lessons they have learned when shared will help potential entrepreneurs in the ecosystem to craft their path to success. The ecosystem should ensure that the cost of failure is small and the founders should be allowed to innovate (Bala Subrahmanya, 2015). Entrepreneurial learning is a fundamental requirement for an entrepreneur as it drives the startup to success (Startup Genome Report, 2017) and it will benefit the ecosystem (Watson, 1998).

A successful startup will have sufficient revenue to cover its costs, but a failed startup will be unable to generate sufficient revenue likewise. It has cash flow issues and poor long-term prospects leading to discontinuance of its operations. At the macro level, minimizing the failure rate will help both firms and entrepreneurs to succeed in their startup efforts. At the micro level, identifying the causes of failure will help in establishing failure proof mechanisms, reducing the socio-economic cost of failure and the lessons learned known as epiphanies will help future entrepreneurs (Singh, 2015).

This paper, we will first cover the literature on entrepreneurial success and failure. We will examine entrepreneurial characteristics and firm level factors that differentiate failed startups from the successful ones during the startup evolution. We will identify research gaps and formulate our research objectives. We will analyze our research objectives with four case studies in detail comprising B2B and B2C sectors (one success and one failure from each sector). The study is confined to tech startups in Bangalore, the highest ranked startup ecosystem in India, globally (Startup Genome Report, 2017). We will delve into what propels to become an entrepreneur while trying to differentiate successful and failed startups. We will highlight the causes of success or failure, one of the modes of exit strategy opted by startup entrepreneurs, the outcome of startup failure, and explore on how they did resolve it resolutely and how they did continue to contribute back to the ecosystem. We will derive inferences from the case studies with our propositions, which will carve the path for future research.

II. Literature Review

We have examined the empirical literature focusing on different dimensions of startup entrepreneurship, including exploration of the factors contributing to firm success and causes of failure. Subsequently, we explored the issues relating to startup life cycle, its entrepreneurial characteristics and factors, causes of startup failure and the mode of entrepreneurial exit.

1. Startup Life Cycle

To examine the critical factors determining success or failure of startups, it is essential to understand the life cycle of startups in general, and technology startups in particular. The startup evolution has a life cycle and the tech startup evolution goes through a series of stages (Carter, 1996) requiring execution precision. Broadly, the life cycle of tech startups would comprise three stages, namely, emergence, survival and stability, and success and accelerated growth (Bala Subrahmanya, 2017). It is pertinent to understand the critical issues involving each of these three stages.

(1) Emergence: It involves establishing a POC (proof of concept) where the product focus is high. The entrepreneur himself funds the cost of POC, in most cases. Perceived opportunity versus viable business concept (Politis, 2009) gets ascertained with POC and provides the entrepreneur with an MVP (minimum viable product). The startup must intensify marketing efforts to identify the target market (either B2B or B2C) and earn revenue. A right marketing effort will be the biggest investment in building the brand in the market (Kakati, 2003) and should lead to early revenue realization.

(2) Survival and stability: The product market fit established helps the firm to move into the next orbit and the entrepreneur attempts to capture new market while retaining existing customers. Moving to external sources of funds and identifying the right funding partner are given focus here. At this stage, the financial requirements will be of a higher magnitude, while maintaining the focus on execution of operations (Gatewood, 1995).

(3) Success and accelerated growth: The product has attained the required maturity and the revenue stream is well established. Market exploration for

accelerated growth both nationally and internationally is attempted here (Bala Subrahmanya, 2017).

The challenges to be addressed by the entrepreneur vary in magnitude depending on the stage of the tech startup. Given the different stages in the life cycle of tech startups, it is pertinent to examine what are the plausible factors that differentiate success and failure of tech startups. The most important of them are the characteristics of the entrepreneurs themselves.

2. Entrepreneurial Characteristics and Factors

Entrepreneurs may have inherent characteristics (financial skill, business skill, technical skill, personality traits) that push them to pick challenges and execute them (Gartner, 1999). The acquired characteristics (skills and competency through the job, prior consulting career, sector experience) give them the confidence to explore new opportunities (Cope, 2000). A few entrepreneurs overcome the fear of failure (Morgan, 2014) and augment their inherent characteristics with their learning task and acquire additional skills and competency before they embark on the entrepreneurial journey (as described in Table 1).

When the acquired characteristics and inherent characteristics are high, the startup evolution is easier and the startup is formed. When the acquired characteristics and inherent characteristics are low, the startup will not take birth and it is a non-starter. When the acquired characteristics are high and inherent characteristics are low, fear of failure will dominate and the emergence of the startup will get delayed. When the acquired characteristics are low and inherent characteristics are high, the partnership will be required to get the startup moving.

Table 1 Learning task of entrepreneur

		Acquired Characteristics	
		High	Low
Inherent Characteristics	High	Entrepreneur	Partnership
	Low	Fear of Failure	Non-Starter

Source: Cope, 2000; modified by author

Entrepreneur in their efforts to establish the startup, should manage multiple challenges, while having limited resources at their disposal, and the proportion of factor requirements varies based on the stage in which the firm is operating (Chorev, 2006). They have a few variables under their control known as internal factors. Internal factors are within the reach of the entrepreneurs and they have command over them such as finance, market, product features, human resources and they can vary the same to get the desired outcome. They have a few variables beyond their control known as external factors such as government policy, quality of mentorship and these factors can influence the outcome (Khelil, 2016). The entrepreneurs have limited resources and they need to allocate the resources in a judicious manner to maximize the returns to meet their business plan. Any mismanagement of the factors can cause failure and we will focus on understanding the same.

3. Causes of Failure

The execution of a proposed business plan involves managing the factors efficiently at each stage to deliver the required product or service at the appropriate time. Uncertainty surrounding the decisions can lead to actions or inactions (Shepherd, 2003) and there are two possible scenarios such as failing to act when action is required and acting when inaction is required. A failure is the inability of an entrepreneur to achieve the desired results (Politis, 2009). A failure is an event characterized by a steady decline in revenue and a steady increase in the cost of a firm. An entrepreneur will have turbulent times in managing this difficult situation. At this stage, mobilizing additional funds through debt or equity will be a major challenge. This would call for additional personal investments leading to subsequent family pressure. One more option available to the entrepreneur is to initiate a management change and this may curtail his power in the startup (Shepherd, 2009). The entrepreneur has the emotional attachment to the startup and the product they have created and it restricts them to change the management from the founder team to a professional management team. The entrepreneur blocks the transition from the quality of idea to the quality of management, and it is one of the key reasons for the value of the firm going down due to emotional factors (Shepherd, 2011).

A failure as viewed by an entrepreneur is different from how other stakeholders view it. The view from venture capitalists, employees, customers, suppliers and the market can be completely different. In most of the cases, the internal stakeholders interpret the failure of the firm as a failure of the management pointing to the entrepreneur who is managing the firm (Mantere, 2013). However, most of the venture capitalists may be forgiving and do not associate the failure with the entrepreneur, but this failure tolerance varies across geography, being high in the US and low in the UK (Cope, 2004). However, in the western world, broadly speaking, failure is conceived as an "accepted way of life and a learning opportunity" while the eastern world sees it as a “death sentence” (Cotteril, 2012).

The lessons learned by the entrepreneur involve intense feelings as he or she is fully involved with the emotional event and the learning involves two components. First, entrepreneurial learning leads to personal development and the change taking place at the individual level. Second, firm learning leads to business development and the change taking place at the business level. It is the parallel process of personal development and business growth and involves proactive reflection (Cope, 2000) by the entrepreneur. The learning from failure is not instantaneous and automatic, and it requires coping techniques (Cope, 2011) to come out of the grief (Jenkins, 2015). The coping techniques should lead to complete recovery and it is marked by the absence of negative emotional response (Singh, 2007). A positive attitude towards failure and higher acceptance of failure should help the entrepreneur to gain more insights and enable them to explore the mode of exit.

4. Mode of Exit of Entrepreneur (Exit from Firm or Ecosystem)

Rational entrepreneurs should terminate failing investments as soon as possible, but they continue to commit resources to a failing course of action. Self-justification theory shows that people in charge of investment decisions have the tendency to justify a failing course rather than interrupt it when they realize the upcoming financial setback (Brundin, 2013). The entrepreneurial exit is not a sign of failure and it is a career choice and it is liquidation of an investment. The probability of exit and type of exit matter (Wennberg, 2010) and the same are depicted in Table 2.

Table 2 Taxonomy of exit routes

		Performance	
		High	Low
Exit Route	Sale	Harvest Sale	Distress Sale
	Liquidation	Liquidation	Distress Liquidation

Source: Wennberg, 2010

The entrepreneur should have an exit strategy and the quality of exit is important. The entrepreneurial exit is a liquidity event and not a failure event. They refer startup as their baby and exhibit psychological attachment to the startup they have created. Entrepreneurial exit can happen by relinquishing the responsibility, refraining from decision-making and can have an impact on the firm, industry, economy (DeTienne, 2010) and the summary of it can be found in Table 3.

Table 3 Entrepreneurial exit summary

Stages →	Emergence	Survival and Stability	Growth
Exit Strategy	Interested in Growth and Profit	Funded - Pressure from VC Non-Funded - Allows Focus	Instituting formalized structure
Reason for Exit	Alternative Opportunity	Alternative - Less resource and less commitment	Less Control over decision Willingly departed Had been replaced
Options for Exit	Abandonment of idea and Voluntary disbanding	Voluntary disbanding	Private Equity Bought Out Initial Public Offering Liquidate

Source: DeTienne, 2010; summary by author

5. Research Gap

A few key research gaps have been identified based on a review of the literature. We understand that there is no focused work on exploring successful and failed startups. There is no major literary work delving into the cause of failure and the lessons learned from failed startups. The mode of exit followed by entrepreneurs has not been studied in detail. While these gaps are largely true in the global context, we found that there has not been any significant work done in the Indian context covering these issues. To be specific, the issue of failure has not been comprehensively explored and analyzed in general and in the Indian context in particular. The present study has been undertaken against this backdrop.

III. Objectives, Scope and Methodology

1. Objectives

To address some of the identified research gaps, we have formulated the following research objectives.

- How do failed startups get differentiated from successful startups and what are the key lessons learned from startup failures?
- What is the mode of exit followed by a failed startup founder for winding up the firm?

2. Scope

The study is confined to tech startups in Bangalore, the highest ranked start-up ecosystem in India, globally (Startup Genome report, 2017). It is to be noted that the presence of vibrant and migrant talent was one of the key factors contributed to the Silicon Valley ecosystem success (Cotteril, 2012) and it is important to note that Bangalore has the similar feature of vibrant and migrant talent as that of Silicon Valley. It is considered one of the global startup capitals in the world (Anjum, 2014). To carry out the study, we have adopted the case study method and, accordingly, we interviewed four tech startup co-founders, two successful startups and two failed ones. Of the four, two represents the B2B sector whereas the other two falls under the B2C segment. The way a startup deploys factors vary from B2B and B2C and hence we drew samples. The startup co-founders were identified with the help of NASSCOM (National Association of Software and Services Companies), an industry association, (all the four were NASSCOM members), which has a fairly detailed registry of tech startups operating in India. The samples are drawn from the same technology sector (two each belonging to B2B and B2C, respectively) from Bangalore ecosystem and therefore we assume that all four are exposed to the same degree of risks for their emergence and operations.

3. Methodology

The case study methodology adopted for the study requires elaboration. “Case study research, through reports of past studies, allows the exploration and understanding of complex issues. It can be considered a robust research method particularly when a holistic, in-depth investigation is required. Although case study methods remain a controversial approach to data collection, they are widely recognized in many social science studies especially when in-depth explanations of a social behavior are sought after” (Zainal, 2007, p.1). Case study methodology will enable us to collect the information from a single unit, which is relevant to the problem area and will help us in formulating our proposition or hypothesis (Krishnaswamy et al, 2010).

We developed a case study protocol and approached each startup founder for an in-depth personal interview. The interview structure of personal profile, startup profile, the reason for startup and execution, lessons learned and exit strategy are outlined to the interviewee at the outset, to enable them to understand the context. The author met the interviewees (co-founders) in person and recorded their responses and the data were collected over a period of one week (23-30 June, 2017). The data were recorded in a spreadsheet, codified and stored for doing the analysis. At some points in time, explorative open-ended questions were used to understand the situations better. As cautioned by Cotteril (2012), based on his observation in the context of Silicon Valley, co-founders of failed startups might have experienced traumatic experience, and therefore it would call for careful handling of the situation while collecting the qualitative information. With this understanding of the sensitivity, utmost care was taken while interacting with the co-founders of failed startups while eliciting their experiences. Identities of the co-founders were codified so that the personal and confidential data are not revealed and sensitive information was handled appropriately.

In identifying the personality profile of the entrepreneur, the web link https://www.16personalities.com/ containing the test for MBTI (Myers-Briggs Personality Type Indicator) was used. The MBTI link was sent across to them asking them to take the personality type test and the responses were elicited. This will open avenues for us to understand the MBTI personality profile of the entrepreneur who has failed and the one who has succeeded. An attempt will be made to close the loop in creating more successful entrepreneur and prevent failure in providing direction to the aspiring entrepreneurs by understanding their current MBTI profile.

IV. Case Descriptions

At the outset, it is appropriate to describe the four case studies as observed, and based on information gathered. Accordingly, a failed startup and a successful startup case have been described under the B2C sector followed by the B2B sector, in this section.

1. Case 1: Failed Startup in B2C Sector

Mr. K chartered accountant by profession and technocrat by heart, has attempted to bridge the gap in eLearning space with his platform-based solution. The serial entrepreneur at the age of 43, with 20+ years of industrial experience and the expertise of founding three startups earlier, has embarked on the new journey with two more partners who are technically savvy.

1.1 Product

The startup chose to work on the emerging technology, Platform as a Service (PaaS), and planned for a grand product. It took 30 months for the startup to build the product resulting in additional cost leading to the realization that "Plan for MVP (minimum viable product) with product roadmap and do not plan for a grand product". The delay in product delivery was attributed to two factors. First, when the flash player moved to open source, Android and iPhone withdrew support forcing the startup to modify the product roadmap completely. Second, government policy to sue the platform provider and not the person who uploaded the content in the platform had introduced legal hurdles.

1.2 Finance

Getting funds was not a constraint and six friends who invested at the early stage with no formal agreements supplemented partners' fund. They could not get new investors as funds required were diminishing to keep the startup operating. When the return on investment was getting delayed, a few non-technical investors who could not understand the delay asked for the return of their investments from the anticipated revenue. But the long gestation period of the product did not result in any revenue generation and as a result, the founders were not able to return the investments made by their friends. This put psychological pressure on the founders to generate revenue for returning the investments, which they could not.

1.3 Market

With more and more open source platform coming up, time to market was the key and the platform model was early to the market leading to the realization of "Content is the king and invest on content than Platform". Mr. K voluntarily disbanded the startup and settled the dues for six investors. He returned to industry, leading India operations for a corporate. He asserts that this learning effort is a stepping stone for the next launch and the lessons learned are articulated as follows: "Plan your MVP (minimum viable product) with product roadmap, if you want to be the leader and realize revenue in the early stage. Smaller players should refrain from providing a platform. Choose your partner who is international and if they are non-technical, spend the time to educate them and enter into formal agreements".

2. Case 2: Successful Startup in B2C Sector

Mr. R who did his Bachelor of Engineering and Masters in Business Administration could not resist the desire to be on his own and had the aspiration to be financially independent. At the age of 27 with close to three years of industrial experience, he had the right blend of technical and business skills. He had a dream for the startup and partnered with his friend who is a pure technologist. They initiated the startup and offered multiple courses for about five years before embarking on his platform-based solution. The success of the platform has resulted in him exploring multiple startups and helped him to be an entrepreneur with a portfolio of investments.

2.1 Product

Platform as a Service (PaaS) was an emerging technology and this startup came up with MVP (minimum viable product) in about 4 months. The team had a blend of technical and business skills required in executing the business plan leading to revenue realization in about six months. The product features were enhanced subsequently with the product roadmap, iterative mode of product development with the sprint plans and it was executed successfully.

2.2 Finance

The funding requirement of the startup was supported by the parent-training arm, which provided it a steady flow of funds. Revenue influx from the product, which was sold in the first six months, has augmented the fund availability. Though funding was available from angel investors, the startup had not chosen that path and avoided the pressure on returns and volume growth driven by them. The apprehension of product roadmap diversion was handled by avoiding the external source of funds, despite the evaluation by a few VC groups. He confirms this by saying, “we did not have any external investor and we are fully boot-strapped. It had helped us to scale the product, eliminating unsolicited external interferences”.

2.3 Market

Growth was fueled by ads on social media. College students having access to the required courses helped them to catch the target market with ease. The target audience was given specific attention by segmenting them and providing them with the appropriate courses on what they needed and when they needed. It all started with hobby courses, followed by competitive test preparation, which helped them generating revenue. Mr. R has the aspiration to grow the firm and has identified a few more product segments fueling it. In his own words “staying away from investors has helped me to focus on the product and no pressure on acquiring users”. From the exit strategy perspective, he is ready to explore options in the merger & acquisition from a large firm, if they are attractive.

3. Case 3: Failed Startup in B2B Sector

Mr. A did his Bachelor of Engineering in India and Masters in Computer Science from the Florida Institute of Technology, USA. At the age of 47, with 21+ years of industrial experience, he started a B2B startup focusing on

“Reducing the interview process time”, along with a tech savvy partner.

3.1 Product

The uniqueness of the proposed product is that it reduced the interview process time taken by company HR recruiters, as follows. The product enabled HR recruiters to provide a pre-set questionnaire for prospective candidates for recording and uploading their video-based responses. This enabled the HR recruiters to review and shortlist the candidates for the next round of selection process. The whole process resulted in reducing the number of walk-ins of candidates to the office thereby saving the time of HR recruiters and improving their productivity.

The idea was successful with the buy-in from the management perspective. However, HR recruiters did not drive adoption, as they wanted to meet the candidate in person to assess the personality of the candidate, to understand and ensure candidate’s stability. The product suffered on one more count as the prospective candidates for mid-level positions did not have laptops and the camera required for recording the video when the product was initially introduced to the market (between 2012 and 2014).

3.2 Finance

Mr. A and his partner have invested their total accumulated savings in the development of the product. Investors were not forthcoming as they were looking for revenue and the POC (proof of concept) was not licensed nor did it result in earnings. The POC run with a few corporates was taking a longer period and it did not result in revenue realization.

3.3 Market

The partners had good connects with corporates and could drive the POC. However, the non-adoption by HR recruiters, as stated earlier, had an impact on the market development. Mr. A and his partner voluntarily disbanded the startup and the partners incurred losses at the individual level. He returned to the industry, leading a function at a corporate. He has placed the entire team of his startup employees. He is open to further exploration after a few years and has the following lessons to offer: “Funding availability must be exploited at the early stage of product development, do very quick POC and do not worry about dilution. For exploring favorable ecosystem stickiness is required”.

4. Case 4: Successful Startup in B2B Sector

Mr. S was enthusiastic and confident with the expertise he gained from his previous industrial experience of three years and established a product engineering services startup at the age of 27. Being a die-hard technocrat, he initiated his startup along with his partner and focused on the product engineering services for about five years before he went on to establish the B2B product.

4.1 Product

The B2B product offered “integration of Service desk, Asset Management and Monitoring in a single offering”. It was unique as it eliminated the need to have multiple products’ integration at a cheaper price. The MVP (minimum viable product) was built in six months and was ready for market with an impressive product roadmap. The product is catering to the needs of manufacturing, BFSI, pharma, retail, healthcare & ITES and can cater to all the verticals.

4.2 Finance

The product commercial license was sold in six months and the second license was sold within the 12 months of product development. Funding was adequate to carry out the subsequent operations and he was exploring VC support for funding his product enhancement. When VCs looked at cash availability for one month, they looked at it more as a survival fund than a product enhancement fund. Funding was dearer, with VCs looking for more and more revenue, excitement was coming down to use external funding. His lack of success in mobilizing external source of funding forced him to look at other options. The CGS (Credit Guarantee Scheme) for SMEs (Small and Medium Enterprises) by the government of India offered OD (Over Draft) facility up to Rs.10 million, which came in handy to him. He has leveraged the government policy in making sure that the fund is available for product enhancement and it is available at better terms than what an entrepreneur can expect from VC. This helped him to keep the investors away and allowed him to remain focused on the robust product roadmap, which was executed successfully.

4.3 Market

Market availability and acceptance of the product was generating the required revenue. The reference from the existing clientele was boosting the revenue significantly and customer satisfaction was driven by “customer WoW” focus. Mr. S was focused and reiterated the guiding force he adopted: “revenue focus, pay the salary & sustain growth”. Services business was viewed as a baggage by the investors while it was the feeder in delivering the product roadmap. He is not ready to exit but open to form alliances with other firms. He stated: “we will listen, understand the offer and analyze how it will help our growth. Currently, we are not ready to sell but ready to collaborate if it helps our growth".

Having described the four cases, we will proceed to analyze the cases in our next section with reference to our research objectives stated in Section III.

V. Analysis and Inferences from the Case Studies

The description of the four cases enabled us to examine and analyze the first research objective of differentiating successful startups from failed startups in terms of the similarities and differences. This is followed by deriving some key lessons out of startup failures. Finally, we analyzed the second research objective by throwing light on the modes of exit adopted by the failed startup co-founders to differentiate them from the successful ones.

1. Factors Differentiating Failed from Successful

We will first understand the common factors across all the co-founders. We will identify the factors that differentiate the failed startups from the successful ones. We will draw key lessons learned from startup failures.

2. Common Factors Across All the Co-Founders/Entrepreneurs

We will understand the similarities between the four tech startups and what characteristics propel them to initiate the startups. To explore the factors, we have examined startup characteristics under six different classifications, namely, personality (entrepreneurship specific features), product characteristics, revenue characteristics, human resource characteristics, market penetration and access to the ecosystem.

2.1 Personal Characteristics of Entrepreneurs

All the co-founders had the good pedigree with a minimum of one professional degree. They had the inclination for developing a technology-based product and attempted to provide a solution to an existing business problem, through their 'technovation.' They had varying industrial domain expertise and had acquired the required skills before setting up their startup. The awareness of risk was high amongst all the entrepreneurs turned co-founders as none of them had any family business background limiting them. The vibrant entrepreneurs exhibited the passion to be financially independent and their burning need to get a distinct identity based on what they are doing.

From the MBTI test results, we could infer that they are all extroverts and are supported by the characteristic of initiating, expressing their thoughts, being active and enthusiastic about what they are doing and draw their source of energy by being with people. From the decision-making component of personality type, they are all feelers and characterized by being empathetic, compassionate, accommodating, accepting and tender. All of them have chosen the partnership route to startup creation. A similar phenomenon of a partnership route to startup creation and ecosystem success was observed at Silicon Valley by Basu (2015).

2.2 Product Characteristics

All the entrepreneurs had started on a small scale with the product idea and most of them had gone with the MVP (minimum viable product) route and the domain expertise gained through their earlier job experience helped them to stay ahead of the product curve.

2.3 Finance Characteristics

All the entrepreneurs had multiple engagement sessions with the potential investors and have attempted to raise funds for product development or enhancement with a product roadmap.

2.4 Human Resource Characteristics

The staffing pattern confirmed that all are tech startups as technical staff strength in each of the four startups varied from 83% to 100% of the employees and the salary cost of staff as a percentage of total expenses varied between 53% and 90%. Attrition was not seen as a major concern as the key resources required for product or service delivery was in order and did not cause any disruption.

2.5 Market Penetration

Those who worked on B2C startups had good social connect through media compared to B2B entrepreneurs who were neither requiring nor seeking to gain a mass connect. Those who worked on B2B startups had influential connects at the senior level in the corporate sector and it had given them the product reach at the boardrooms. A similar phenomenon of social capital through network and partnership helping in unleashing the potential for product or services was observed in Silicon Valley by Basu (2015).

2.6 Ecosystem

All four entrepreneurs are non-natives of Karnataka and migrants to Bangalore (State capital of Karnataka) from other states and therefore did not have either schooling or college education in Bangalore earlier. The four migrant technopreneurs' choice of Bangalore for their startup was due to the availability of human resources, and because its vibrant ecosystem had the required elements to validate the POC (proof of concept), consume the output and support the scaling up of operations. It is important to note that vibrant and migrant Indian origin technopreneurs have contributed immensely to the success of startup ecosystem of Silicon Valley (Cotteril, 2012).

All the above facts prove the existence of a solid ecosystem availability for startup nurturing at Bangalore and that is why entrepreneurs thronged to it. Given this understanding, it is appropriate to examine the factors that differentiate failed start-ups from the successful ones.

3. Differences Between Failed Startups and Successful Startups

Given the similarities between the four tech startups, it is essential to examine what had caused the failure of two of the four startups and what led to the success of the other two. To explore the factors, we have examined startup characteristics under five different classifications, namely, personality (entrepreneurship specific features), product characteristics, finance characteristics, market penetration and access to the ecosystem. These are presented in Table 4.

3.1 Personal Characteristics of Entrepreneurs

The average years of experience and age of successful startup entrepreneurs are significantly lower than that of the failed entrepreneurs. The reason for setting up the startup as stated by failed startup co-founders was "great product idea", and they went on building the strength of the product features. The partners were tech savvy and were focused on the technological solution. The reason for setting up startups as stated by successful startup co-founders was "financial independence". The young technopreneurs created a formidable team with appropriate complementary skillsets and had the burning desire to succeed.

The MBTI profile of failed startup co-founders belonged to ENFP/J and N corresponding to "intuitive decision making" characterized by being logical, reasonable, questioning, critical and tough. The successful startup co-founders belonged to ESFJ and F corresponding to "feeling decision making", characterized by being empathetic, compassionate, accommodating, accepting and tender. The balance seems to be tilted towards the feeling-side rather than the intuition-side for being successful and marks the fine difference in the characteristics of the entrepreneur.

Table 4 Differences between failed startup and successful startup

Group	Result	Failed Startups		Successful Startups	
	Stage	Emer -gence	Emer -gence	Success & Growth	Success & Growth
	Business Type	B2C	B2B	B2C	B2B
Personal	Years of Experience	20	21	3	4
	Age at Inception	43	47	27	27
	Reason for startup	Great product idea	Great product idea	Financial independe nce	Financial independe nce
	Partners Skill leading to formidable team	No	No	Yes	Yes
	MBTI profile	ENFP	ENFJ	ESFJ	ESFJ
Product	Type of Service	Platform	Product	Platform	Product
	MVP Planned	No	Yes	Yes	Yes
	Roadmap	Grand Product	Roadmap	Roadmap	Roadmap
	Time for product development in months	30	3	4	6
Finance	Time to Realize Revenue in months from MVP	No	No	6	6
	Source of Funds	Savings, Friends and Relatives	Savings	Savings and Reinvestme nt	Savings and Reinvestme nt
	Investor availed	Revenue Required	Revenue Required	Investor Avoided	Investor Avoided
	Revenue Realization	No	No	Yes	Yes
Market	Market Growth	No	No	68 countries	3 countries
Eco -system	Government policy leverage	No	No	No	Yes
	Mentorship availed	No	No	Yes	Yes

3.2 Product Characteristics

One of the failed startup entrepreneurs had taken 30 months to build the product and he had planned for a grand product, which had resulted in cash burnout situation. They did not have any revenue realized in the initial stages of operations, unlike the successful ones. The other failed startup entrepreneur though had built the MVP in three months, he had not licensed the product and had to extend the free usage period several times to keep the product usage on-going. The poor product adoption did not result in revenue realization either.

The product focus helped the successful entrepreneur to build the MVP (minimum viable product) in a short duration of 4 to 6 months irrespective of B2B or B2C solution.

3.3 Finance Characteristics

Another factor that distinguishes the failed startups from the successful startups was the ability to monetize the idea through revenue realization. As a result, the successful entrepreneurs could realize revenue in the first six months from the time of MVP. They judiciously kept on reinvesting the proceeds on product feature enhancement and stayed away from the investors. The diffusion of information about the startup through word of mouth from the customers and the references they provided helped the entrepreneurs to sell more licenses and fuel growth. The failed startups suffered the major bottleneck on revenue realization as they could not monetize the idea, and either the MVP usage was extended several times or grand product approach followed which did not result in any revenue.

Startups were looking for investor funds and the investors wanted the business plan to result in revenue generation and growth, but the failure to raise revenue early made the investors elude them completely. Successful startups focused on product roadmap with their self-generated funds as they have established revenue stream and were adequately guided by their mentors. Failed startups struggled to generate revenue and their product roadmap suffered as they could not generate external funds as well, and they lacked guidance from the mentors.

3.4 Market Penetration

The successful entrepreneurs could extend their product footprints nationally and internationally, which gave them the stage for success and growth. The failed entrepreneurs could not grow the product and suffer on the product launch and product adoption issues, which resulted in them stagnating at the emergence stage itself. As a result, while the successful ones could penetrate the market gradually and steadily, the failed ones just could not capture the entry market itself.

3.5 Ecosystem

The successful startup entrepreneurs leveraged the ecosystem support mechanism as well as mentorship. The ability to sound the idea and discuss the concepts and execution plan helped them to be aware of the potential pitfalls and led them to success. The failed startup entrepreneurs did not avail the mentorship as they had the significant industrial expertise to their credit and felt they were self-capable to implement their ideas and take them to the market.

4. Mode of Exit of Failed Startup Founders

The failed startup founders, unlike the successful startup founders, do not have multiple exit options. The failed startup founders have to wind up their venture operations, and they need to manage a few emotionally painful events. It is the recognition of the imminent failure of startups that would force the founders to exit. It is appropriate to ascertain the mode of exit adopted by each of them. More precisely, it is interesting to examine how the mode of exit did impact the founders and those associated with the failed startup. The multiple challenges to be handled by failed startup entrepreneurs and their actions as understood from the case studies are listed in Table 5.

Table 5 Exit experience of failed startup founders

Parameter	Failed Startup
Stage	Emergence
Options for Exit	Voluntary disbanding
Family	Securing family and handling the emotions
Human Resources	Alternative placements
Product	Product not licensed and no support components required
Market	Dent in the brand building effort
Investors	Settling investors fund
Revenue	Requires license cost amortization schedule and returning to customer when revenue was recognized
Admin and legal compliance	Legal and regulatory compliance in documenting the closure
Entrepreneur	Returned to corporates

The failed startup founders have acquired deep domain knowledge with 20+ years of expertise and had their focus more on their technical domain area. When the MVP was taking longer time and revenue was not forthcoming, they realized that they are not making money. Once they realized that they are not making money, they were quick enough to understand the direction of startup and were bold enough to call it off rather than prolonging it and therefore voluntarily disbanded the startup. They were emotionally strong and prepared their family and secured them fully and the family support structure was instrumental in overcoming this adversity. They stood firm in ensuring proper alternative placement of human resources who worked for them and exhibited high ethics by settling the investments made by their friends and relatives once in for all. They have returned to the industry and joined the corporate sector at senior level positions, thereby contributing to the ecosystem with their expertise. It is important to note that they continued to have the burning desire to return whenever the right opportunity would knock at their door.

The successful startup founders revealed that they are ready to explore exit opportunities (through merger & acquisition) if they are attractive and are not willing to deny it blindly, and it exhibits their energy, enthusiasm and agility. The successful startup entrepreneurs need not have to undergo the complex challenges as experienced by the failed startup entrepreneurs.

5. Inferences and Key Lessons

The discussion and analysis of the four cases on similarities and dissimilarities between successful startups and failed startups have enabled us to derive some inferences and key lessons, which are as follows:

- The time to create the MVP should be minimal and it should be tested to ascertain the market fit early by avoiding grand product approach.
- Having ascertained the market fit, revenue realization must be done at the earliest. Doing free POC (proof of concept) at the early stage of the product should not be prolonged and the product must earn its revenue in every transaction to be viable.
- Partners should have the complementary skillset, i.e. concentrated partner skillset will be a major source of disadvantage. It must be a heterogeneous skill mix to propel the startup ahead.
- Startup creation at an early age with required domain expertise may help in a successful startup as the desire to have financial independence pushes the entrepreneur to perform at a higher level.
- The desire to be financially independent at a higher level with ESFJ personality type characterizes the successful entrepreneurs.
- Mentorship plays a decisive role in early startup nurturing.
- Successful co-founders continue to have their ideas and actions reviewed and validated by their mentors, which has helped them to be more prudent in taking the decisions whereas the failed ones kept themselves away from mentorship.

VI. Summary and Conclusions

It is appropriate to examine how do startups fail and this problem has been explored in the context of Bangalore, India, by means of case study methodology. The examinations of startup failure through these case studies offer valuable insights. In this paper, an attempt has been made to decode the success or failure of the startup with a systematic study using the lenses of entrepreneurial and firm specific factors. Four case studies (across B2B and B2C - one success and one failure each) have been conducted as part of this papers on startups that operated/are operating in Bangalore.

To begin with, we analyzed the similarities that exist among the subjects from the perspective of entrepreneurial and firm specific factors. It was observed that all founders had a minimum of one professional degree and had the passion for the technology-based product and service development. They had the burning desire to succeed and formed partnerships as they embarked on the startup effort. All the startups had high technical staff strength, their salary cost was higher and attritions were not impacting them. B2B founders had key connects at the corporate boardrooms while B2C founders had high social connects. One significant observation was that all the co-founders are migrants to Bangalore.

Later, we identified the differences between failed startups and successful startups. The determinants for a successful startup journey from these case studies are summarized here. Establishing the startup at an early age with required domain expertise, and the financial stability of the founders seem to help the entrepreneur to succeed. The second factor that was observed in common across the successful founders was that they focused on ascertaining the market fit of their offering early by avoiding grand product approach. These founders delivered a MVP (minimum viable product) in less than six months and after initial customer validation, embarked on executing a strong product roadmap. They realized revenue in less than six months from the time MVP was ready and formed partnerships with people who had the complementary skill set. Further, they sought regular and periodic mentoring from the right mentors and had their ideas and actions reviewed and validated. The MBTI personality type of ESFP appears to be dominant among the successful entrepreneurs. It is observed that the successful startup entrepreneurs are not emotionally attached to their startup, and they are ready to explore the exit options.

In contrast, the exit strategy adopted by failed startup entrepreneurs was complex and they had to make tough calls following high ethical standards. They have returned to the ecosystem with their learning curve and have joined corporates and at the right opportunity, they are willing to reinitiate one more startup effort. They continue to contribute to the ecosystem and have not exited from it.

Our study on the cause of failure and the mode of exit by startup founders will help the prospective entrepreneurs to take enough precautions to avoid failure. The reduction in failure rate will minimize the cost of failure and it can benefit the ecosystem. In particular, the learning obtained from failed experiences will enable the ecosystem to minimize the cost of failure, and it can offer guidance to potential entrepreneurs.

Limitations and Scope for Future Research

The findings are specific to high-tech startups at Bangalore, and the observations will vary based on sector and the region in which the startup is operating. The observations are based on the cases and cannot be generalized. The results must be ascertained based on a larger sample size.

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