

Critical Success Factors of Tech-Based Disruptive Startup Ecosystem in Bangladesh

Iftekhhar Ul Karim*, Imran Newaz Khurshid**, Sadia Naureen Huq***

Abstract

Purpose: The aim of this paper is to explore the startup ecosystem values which critically underpin and formulate the success factors of the young tech-based disruptive startups, leading to the overall success and sustainability of the entrepreneurship ecosystem for urban youth governing the development of the country.

Background: Although Bangladesh has the potential for tech-based business opportunities, there are lots of challenges in its existing entrepreneurship ecosystem which is devoid of the right blend of values of the stakeholders. In the context of Isenberg (2012) model of entrepreneurship ecosystem, the interconnected domains, e.g., markets, finance, human capital, policy, culture, and education set their own values to scope out their own success through their respective roles and responsibilities in the ecosystem. The values for which these domains of entrepreneurship ecosystem coexist, and based on that the success narratives for which more and more tech-based disruptive startup entrepreneurs enter the ecosystem with new ideas and spirits, are critically and symbiotically bonded together for a matching scenario of overall success and sustainability of the entrepreneurship ecosystem.

Approach: We have designed the framework of our study based on the relevant value creation concept of Stam (2015) through entrepreneurial activities that depend upon overall entrepreneurship ecosystem and other relevant factors. Our approach for this study is inductive, followed by the grounded theory and theoretical sampling process. For this, we are underpinning the research with the Human-Centered Design (HCD) technique by taking into account the narratives of the various stakeholders of the startup ecosystem in Bangladesh including the tech-based disruptive startup entrepreneurs. This means that our research is qualitative, and done using both the primary

and secondary sources, where we have applied laddering technique (n=10, I=30) and content analysis method (n=15), respectively, for data triangulation.

Findings: Through this research, it has been found out that, the personal values of the startup entrepreneurs are not only linked to the ventures that they have co-created, but are also driven by the startup stakeholder values prevailing in the startup ecosystem. This value-venture nexus constitutes the Critical Success Factors (CSFs) of tech-based disruptive startup ecosystem in urban Bangladesh, and thus delinking the “value” from the “venture” is not the path of overall success of the ecosystem. In this context, “survival” connected to technology-centric innovations and revolutions, “optimism” connected to recognizing and working on the areas of passion, and “legacy” connected to contribution to the society – altogether define the CSFs. It should be made sure that this “value-venture” orientation is kept connected to ensure the sustainability of the tech-based disruptive startup ecosystem in Bangladesh.

Value: This research adds to the knowledge about the importance of “value-based entrepreneurs” that can lead towards the overall success of the ecosystem. It will contribute to a deeper degree of knowledge for stakeholders and policy makers in the development of supporting infrastructures and resources, both at public and private domains. If this is done holistically, it will ensure sustainable development of urban youth and the economy.

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Keywords: Critical Success Factors, Disruptive Innovation, Entrepreneurship Ecosystem, Human-Centered Design, Laddering, Startups, Technology, Value-Based Entrepreneurship, Value-Venture

* ULAB School of Business, University of Liberal Arts Bangladesh (ULAB), Dhaka, Bangladesh.
Email: iftekhhar.karim@ulab.edu.bd

** Mind Mechanics [part of Build Better Bangladesh (B-cube) Foundation], Dhaka, Bangladesh.

*** Shabab Murshid Development Foundation (SMDF), Dhaka, Bangladesh.

Introduction

Background

Researchers have shown particular entrepreneurial interest in the emerging markets, especially the subsistence markets comprising of more than four billion people who dwell in or near to a subsistence level (Ingenbleek, et.al., 2013; Viswanathan and Rosa, 2010; Prahalad and Hart, 2002). Bangladesh, belonging to this part of the world, still faces the challenge of understanding the ecosystem of entrepreneurship and what core impact it can successfully bring to its development, and also to what extent helpful for new start-ups and young entrepreneurs. The traditional education system of Bangladesh is such that it refrains the youth to be more creative and undermines the values of various entrepreneurial skills. For instance, entrepreneurship requires critical thinking, emotional intelligence, and resilience along with many other skills such as communication skills and cultural intelligence. So as the element of soft skills is insufficient in our traditional education system - both in terms of pedagogy and content of the national and international curricula, the potential entrepreneurs cannot utilize their potential to their fullest; hence, their technical know-how are under-utilized. As the learners in our traditional classroom do not get the scope of learning collaboration, resilience, and creativity, they cannot engage themselves fully as entrepreneurs later on even after detecting an issue in the society that they want to work with. That being said, the room for reeducating the young startup entrepreneurs through several channels and components of entrepreneurship ecosystem remains immense.

Problem Contextualization and Research Gap

Contemporary findings suggest that startup culture is corrupting our youth and killing real entrepreneurship to a greater extent (Telegraph, 2015). This is a big challenge more in developing and underdeveloped economies where the process is comparatively new and to some extent still seems a fashionable hype or an urban catchphrase. However, the recent study conducted by the Fletcher School positioned Bangladesh as one of the interesting point of references in terms of digital progress, hence as a rising digital tech-based platform for the growing entrepreneurial world (Tufts, 2017). Further, in terms of

having the most active Facebook users globally, according to the Global Digital Statshot, Dhaka has 22 million active internet users, which again poses a great potential for e-shops (FS, 2017). Considering such changing and adapting entrepreneurial needs (Puri and Robinson, 2013), startup entrepreneurs face the utmost challenge for their business startups right at the very early stage. A proper guidance of these newly born startup entrepreneurs with intensely different startup needs, wants, and desires along with an up-to-date incubation of their brainchild business ideas become another challenge from the perspective of supporting entrepreneurship and creating more and more economic scopes (Lee et al., 2013).

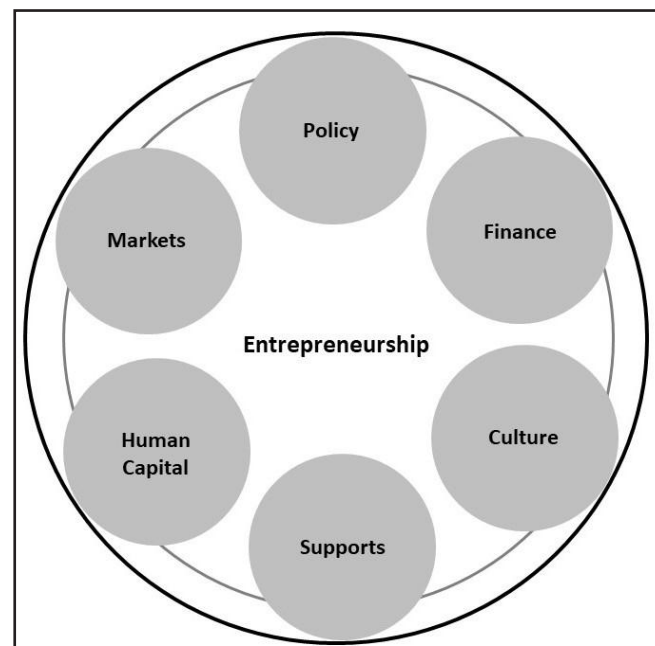


Fig. 1: Entrepreneurship Ecosystem (Isenberg, 2012)

In this context, entrepreneurs not only create values for the society through their innovations, but also meet up their own values which define their own success (Ntseane, 2004). In line with this, the support system and stakeholders of entrepreneurship ecosystem, be it entrepreneurs themselves or people from other affiliated and interconnected domains, e.g., markets, finance, human capital, policy, culture, education - which all constitute the entrepreneurship ecosystem (Isenberg, 2012), set their own values to scope out their own success through their respective roles and responsibilities in the ecosystem. Both the process of entrepreneurship and interconnectedness of the domains in entrepreneurship ecosystem are dynamic in nature and comprise of several angles of multifaceted

values and related perceptions of success, especially for radical technological innovations in developing countries (Abetti, 2000). The values for which these domains of entrepreneurship ecosystem exist, and based on that the success stories for which more and more tech-based disruptive startup entrepreneurs enter the ecosystem with new ideas and spirits, are bonded together for a matching scenario of overall success (Johnson, 2004; Cable & Shane, 1997). Depending on several stakes and interests of manifold layers and stakeholders, this journey is usually a complex one which requires adequate attention, studies, and research.

Aim of the Study

The entrepreneurship ecosystem in line with stakeholders' value-system for potential entrepreneurs is critical for their success and the development of the economy. In view of the rationale of the study, therefore, the objective of the study is to explore the valuable factors contributing to a better ecosystem for the success of the tech-based disruptive entrepreneurs and the fast-track development of the country. In this context, the research focuses on the startup ecosystem values which critically lay the foundation of the success factors of the young tech-based disruptive startups, giving rise to the following central research question and underlying sub-research questions:

What are the Critical Success Factors (CSFs) of tech-based disruptive startup ecosystem in Bangladesh?

- A. What values emerge from the perceptions of startup ecosystem stakeholders?
- B. What critical points of success emerge from the narratives of young startup entrepreneurs?
- C. How do the values and success critically formulate the CSFs for startup ecosystem?
- D. How do these CSFs impact the tech-based disruptive startup ecosystem for urban youth?

Scope and Delimitation of the Research

We aimed at delimiting this research to HCD approach by focusing on the “experiences” of the stakeholders of the startup ecosystem. We practiced empathy on these stakeholders by understanding their stories and journey

- both articulated and unarticulated, and tried to make sense of those relevantly through different means. As Design Thinking (DT) is an essential tool for simplifying and humanizing, we put on our observational DT lens to empathize with the stakeholders to get the internal flavour of the startup ecosystem. As to this, we have a core focus on the area of disruptive entrepreneurship which is mostly technology-based and part of urban Bangladesh from where we tend to gather most of the data for the research having specific impacts relevant for the study.

Theoretical Perspectives and Conceptualizations

According to Christensen et al. (2015), “disruption” describes a process where a smaller company with fewer resources is able to successfully challenge the existing businesses which are trying to meet the needs of the most demanding customers through their products and services. The new business targets the overlooked area and provides affordable solution to the needs through accessible, affordable, and structural services. In this context, technology can play an important role in the startup ecosystem threatening power structures when the positions of powerful managers are based on obsolete expertise. There can be many factors and actors (Isenberg, 2012) playing in favour or against the technology-based startups in different countries determining the degree to better embrace an entrepreneurial mentality.

Malik and Bing (2016) argued for proactive policy for digital entrepreneurs through a “Digital Entrepreneurship Barometer” model which was used to evaluate the digital ecosystem across G20 countries. This model has taken the drivers of “digital disruption” and their impact on the young entrepreneurs' venture into account. In this context, understanding how digital space disrupts young entrepreneurs globally is crucial to developing policy that can help empower them, including Digital Business Environment, Digital Skills and Entrepreneurial Education, Digital Knowledge Base, and ICT Markets (Malik & Bing, 2016). The arguments proposed by Malik and Bing (2016) are better related in the context of Bangladesh when thinking about empowering young entrepreneurs for digital innovation and developing entrepreneurial culture, e.g., through early-stage financing, access into venture capital and other alternative

sources, tax incentives for investors, catalyzing angel networks, deflating investment barriers for access to foreign capital, integrating entrepreneurship in higher education, engaging industry in training youths, protecting young entrepreneurs through intellectual property rights guidelines, and fostering the practice of partnership between large and small firms in Bangladesh.

Relevantly enough, Abetti (2000) underpinned the uniqueness of a given technological innovation, which is quite dependent on the uniqueness of the entrepreneur and the company following a particular mode of corporate strategy. Here, an innovation can be catalytic if the new player provides a lower-cost sustainable and scalable solution to an existing customer segment, satisfactorily meeting the need that has not been met before (Christensen et al., 2006). However, large firms often fail to develop disruptive innovations as some innovators trap themselves in incremental innovation as others go past them through disruptive innovation; whereas, challenging the status quo is not often valued in large firms (Assink, 2006). Assink (2006) furthermore argued on the mindset of the entrepreneurs where inability to give up the mental models and beliefs at an individual level and organizational level is considered an obstacle in the path of disruptive innovations. Having said that, the underlying conflict between the efficient processes and the inability to cope up with high risks with technological innovation give rise to the avoidance behaviour for disruptive tech-based innovations (Assink, 2006).

Contrary to the large firms, understanding why small high technology startups are increasingly international in nature is also interestingly supportive in this context (Johnson, 2004). Studies conducted by Johnson (2004) revealed interesting patterns based on the US and the UK small high technology international startups. According to the research findings, the number one factor that influences the UK firms into early internationalization is the international nature of product or industry. Likewise, the most influential factors affecting the US firms into early internationalization are foreign prospective customers and the opportunities of international markets that existed inherently (Johnson, 2004). According to Seborá et al. (2009), particularly for the e-commerce entrepreneurs the role of government's support is also crucial here. The research findings from Thailand (Seborá et al., 2009) critically underline the role of government

in promoting the e-commerce entrepreneurs by letting them take the benefit of low interest loans for their startup expenses, and orientating them with government regulations and accounting systems needed for new people in the field of entrepreneurship. The relevant hypothesis for the e-commerce success which was supported by this research was the reliability of the new venture's e-service in alignment with the governmental values (Seborá et al., 2009).

According to the research findings of Sandström et al. (2014), firms that have developed new value propositions are better at introducing innovations. In this context, the surrounding value network of the firm or startup is critically vital to understand the disruptive innovation and underlying heterogeneity (Sandström et al., 2014). On this note, dependency on surrounding value network compared with unidirectional resource dependence becomes way interesting for the disruptive entrepreneurs (Sandström et al., 2014). Bailetti (2012), on the other hand, focused on the value for the firm through technology entrepreneurship and heterogeneous assets. Retaining the rights of the firm's asset ownership, technological entrepreneurship becomes the medium that empowers individuals, firms, regions, and nations through specialized individuals, collaborative experimentation, and production of new products, and their attributes, which are valued for scientific and technological knowledge as well (Bailetti, 2012).

With regards to the classical determinants of success in high-tech ventures, the nature of the founders' relevant experience is instrumental, in line with the degree in which the founders have worked together in the same organization for at least six months (Roure & Maidique, 1986). For instance, Roure and Maidique (1986) have pointed out that groups of founders were found to be more successful than individual founders due to the power of collective values compared to individual values. However, established firms can encounter problems during disruptive innovations (Sandström et al., 2014), further the key challenge can be related to the innovator's dilemma to build and transform markets for its new products (Sandström et al., 2014). In this relation, mainstream studies (Dan & Hang, 2015) divide technological innovations into two types - Revolutionary (or discontinuous, breakthrough, etc.) and Incremental (or evolutionary, continuous, etc.). Underpinning this research with the Disruptive Innovation Theory by Christensen as

reflected by Dan and Hang (2015), it is postulated that the needs of the customers must be met through the disruptive innovation and the firm can face challenges in its human resources, organizational culture, resource allocation, and organizational structure depending on

what values it sets for its overall success. For instance, the mainstream technology could have highly met the needs of the mainstream customer base, whereas disruptive technology can under-serve compared to the performance of the established mainstream technology.

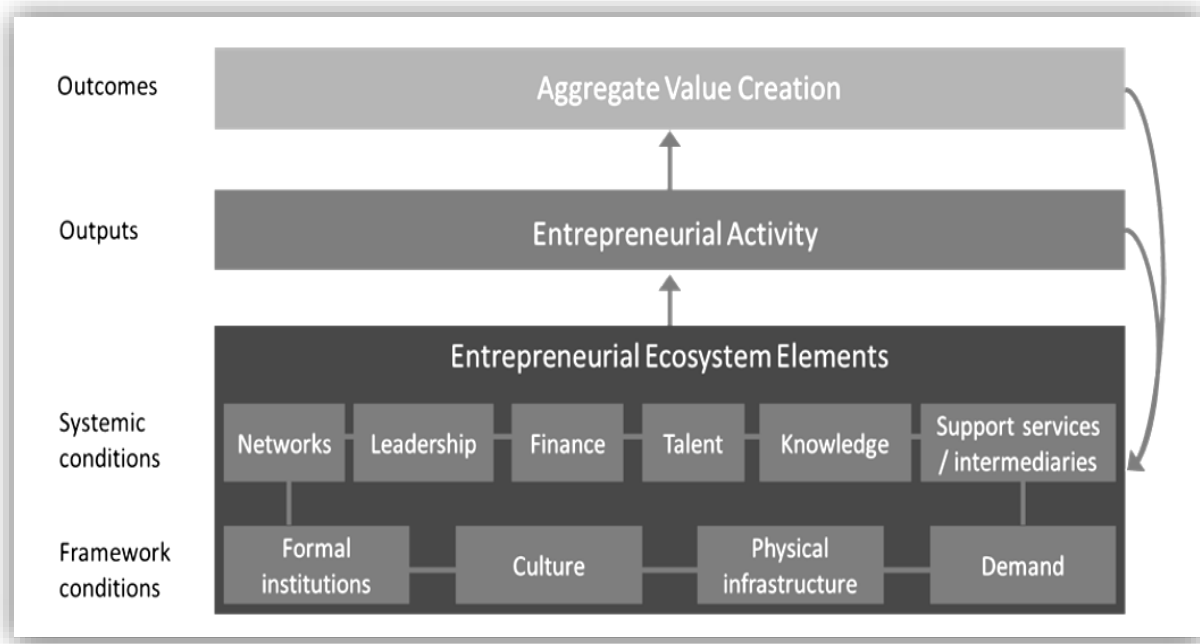


Fig. 2: Conceptual Framework (Derived from Stam, 2015)

In line with the aforementioned literature reviews and theoretical perspectives, the conceptual framework for this study has been derived from the relevant value creation concept of Stam (2015) through entrepreneurial activities supported by overall entrepreneurship ecosystem and conditions. Underpinned by this contemporary framework, the current research is augmented towards meeting up the aim of the study of exploring the critical success factors of tech-based disruptive startup ecosystem in Bangladesh.

Research Methodology

Philosophical Standpoints (Ontology and Epistemology)

In the context of ontological (view of reality) and epistemological (view of knowledge) standpoints, this research is approached from a social constructionist (relativist) perspective wherein the entrepreneurship stakeholders and young entrepreneurs develop their sense-making depending on their own contexts in relation to the prevailing entrepreneurial ecosystem.

Role of Theory

This research is based on a theory-building inductive approach where we have followed the grounded theory rule and theoretical sampling process. Therefore, the study is utilizing the Isenberg Model of Entrepreneurship Ecosystem and Christensen's Theory of Disruptive Innovation to pre-understand the context of the research without pre-conceived theoretical framework. Likewise, the conceptual framework is positioned to follow-up on the new thought process of the contextual understanding in Bangladesh for generating relevant theory as it emerges.

Level of Analysis and Inference

In the context of macro-level of analysis, this research explores and analyzes the critical success factors of tech-based disruptive startup ecosystem in Bangladesh. The inference for this research is therefore exploratory and interpretative, where the researchers interpret the narratives critically and contextually.

	V	S1	C1	U	M	S2	C2	R	S	A	G	S3	S4	S5	S6	O	J	L
Achievement											1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1
Give back to Society												0,0	0,0	0,0	0,0	0,0	0,0	1,0
Survival													0,0	0,0	0,0	0,0	0,0	0,0
Safety & Security														0,0	0,0	0,0	0,0	0,0
Satisfaction															1,0	0,0	0,0	0,0
Self-actualization																0,0	0,0	0,0
Optimism																	1,0	0,0
Justice & fairness																		0,0
Legacy																		

Hierarchical Value Map

Formula: $y = \{1, 0\}$; [cut off level 1]

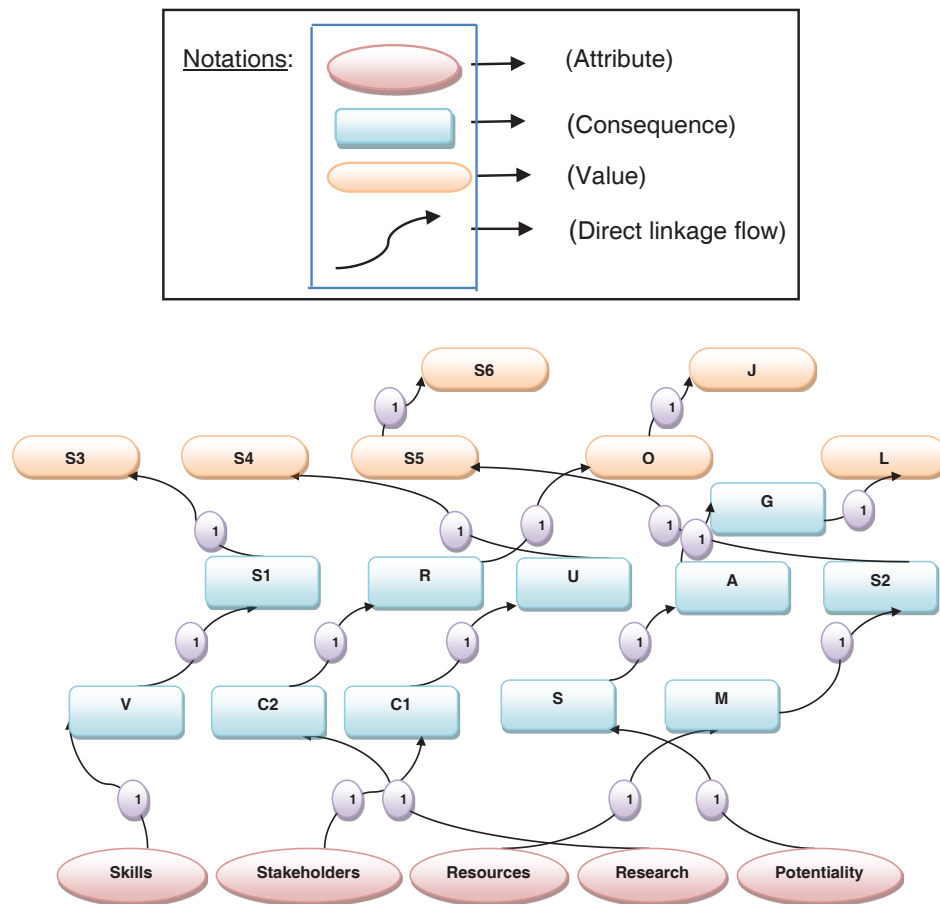


Fig. 4. Value-Mapping of the Direct Linkages

Results from Content Analysis

Referring to the detailed content analysis tables under Annex-2, the colour-coded themes and the frequency

of the occurrence of the relevant codes (with number of tech-based start-up entrepreneurs who spoke about it) are presented and analysed below:

Generated themes with colour-codes		Content Analysis	
1. Creating Impact in Society			
2. Learning experiences while developing the idea			
3. Technical Aspects of the Service or Product			
4. Challenges faced while implementing their idea/project			
5. Overcoming the challenges in implementing their idea/project			
6. Passion and Interest of the Founder in connection to the idea			
7. Future Interest and Prospects about the idea			
8. Others			

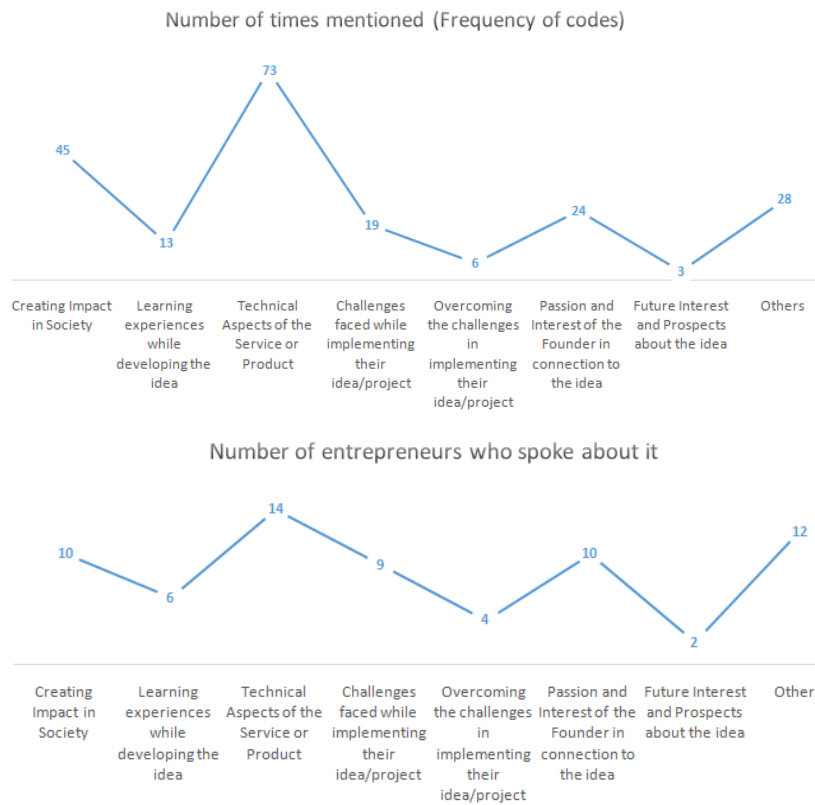


Fig. 5: Conceptual Themes Emerging from Content Analysis

The salient features which were highlighted in the selected interviews were their passion and interest about the idea, thoughts on how their project or idea would create impact in the society, what they learned while developing their ideas, the relationship of technology with their service or product, the challenges they faced while implementing the idea/project, how they overcome them, and the future prospects about them. As it is implied by doing content analysis, in the context of Bangladesh the technical aspects of a service or product highly reinforces the chances of a startup being successful. 14 out of 15 of the key stakeholders mentioned about the technical

aspects of their product and service idea in relation to the success of the venture. This shows that product or service ideas that have technological aspects are more viable to be established in the long run. Therefore, it can be inferred that technology plays an important role in the entrepreneurship ecosystem.

On the contrary, the impact the idea creates on the society also plays a significant role in governing the success of this ecosystem. As it came out from the interviews, creating real results and changing lives are in the heart of success of many of the products or services. However, there are other factors that can ensure the critical success

such as the passion of the founder alone. 10 out of the 15 entrepreneurs talked about their strong passion. In our entrepreneurship ecosystem in Bangladesh and also within the idea of the venture, there are lots of challenges that can hinder the success of the start-up. In many cases, the passion helped to overcome these, which is an interesting fact. This is because stories related to overcoming the challenges were not considered to be significant as only about a quarter of the interviews showed that they talked about overcoming the challenges in ways like coming up with more sustainable plan or working more closely with the target groups. Mostly, it was the passion that helped in ensuring the sustainability of the idea. Learning came along when trying to work on the sustainability. More than a quarter of the people talked about learning through the process, which gives an important perspective of the success of their startups.

Discussions and Conclusions

Summary of Core Findings in Light of HCD

Taking into account the laddering process and outcomes, the CSFs of the tech-based disruptive startup ecosystem in

urban Bangladesh are much interlinked to utilizing various components of the digital entrepreneurship landscape as per the Isenberg model. Delinking the “value” from the “venture” is not the path of overall success of the ecosystem, given the layers of success at different levels. Again, from the content analysis of the tech-based startup entrepreneurs we can infer that the CSFs at the personal level of entrepreneurship ecosystem are the utilization of technology, impact of the idea or project in the society, passion of the entrepreneurs, and the ability to learn from failure. In this context, as the human-centered design process is more of a system of three overlapping spaces: inspiration, ideation, and implementation (Brown, 2009), where synthesis of the insights gained during the field research is a key; therefore, bringing the multiple layers of success based on multi-stakeholder interests in the startup ecosystem works relevantly. In this design-centered perspective, understanding what the stakeholders want, need, and desire for logically culminates into their values. Thus, the following construction of personal values of “start-up stakeholders” linking with the “start-up ecosystem” values overall constitute the CSFs of tech-based disruptive startup ecosystem in urban Bangladesh:

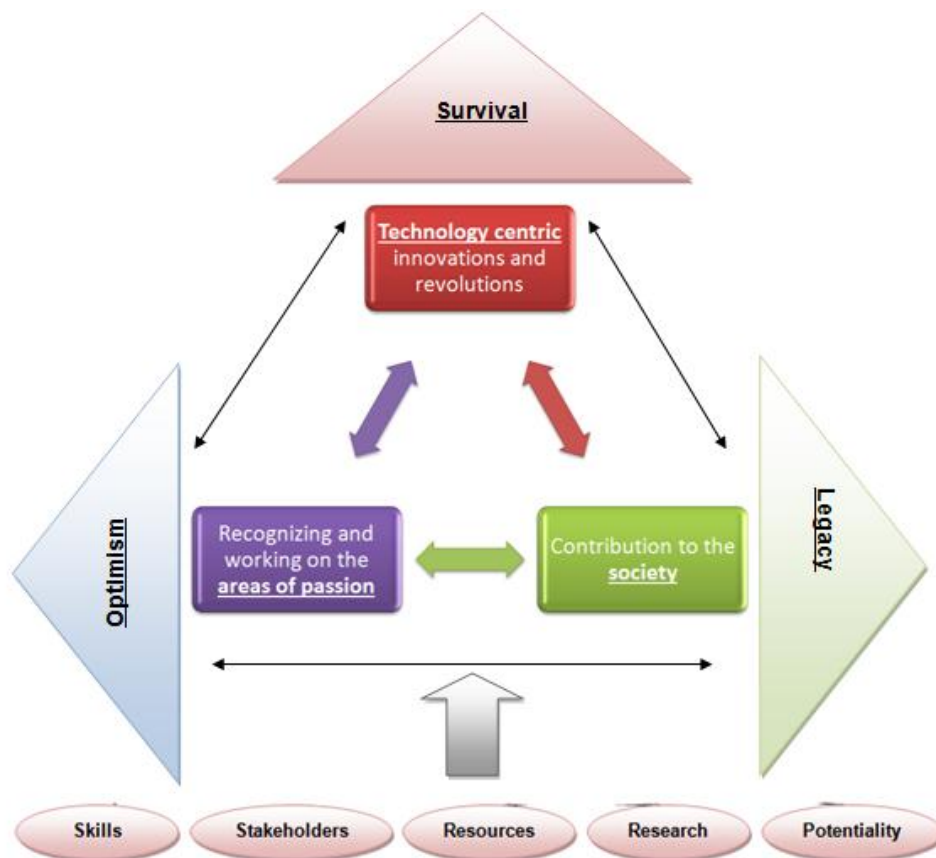


Fig. 6: Construction of CSFs

From the recoded chain analysis of the laddering outputs, we find that skills development, stakeholder collaborations, resources utilization, research-intensive environments or research-based frameworks, and potentiality of start-up entrepreneurs are the key success factors of the ecosystem which are shown in the first layer of the diagram (Fig. 6). The first layer gradually develops and gels with startup entrepreneurial “value-venture” domain to establish critical linkages in the ecosystem for the sustainable development of all the inter-linked components. The technical aspects of the service or product (leading towards and coinciding with survival), creating impact in society (leading towards and coinciding with legacy), and the passion or interest of the founder (leading towards and coinciding with optimism) are highlighted as personal core values of the entrepreneurs based on the content analysis. Based on the outcomes of the laddering process, thus the three most relevant ecosystem values which coincide with the personal values of the startup entrepreneurs are survival, optimism, and legacy. Upon grouping them together, the most meaningful pairs for CSFs are as follows, also shown in the second and third layers of the diagram:

- i. Survival connected to technology-centric innovations and revolutions
- ii. Optimism connected to recognizing and working on the areas of passion
- iii. Legacy connected to contribution to the society

Finally, the critical success factors are these combinations of the entrepreneurship ecosystem values and the personal values on which a sustainable entrepreneurship practice can thrive. For the urban youth, this would mean that they have the potential to develop tech-based disruptive startups by combining personal values with ecosystem values. In other words, they would have good opportunity if they pursue value-venture linkages. The impact of this research outcome could mean that the urban youth would be more aware about being optimistic and pursue their own passions. They would also work on innovation related to technology-centered businesses and ensure survival of their businesses. At the same time, they would be able to leave a legacy by contributing to the society. Such value-driven spirit, when combined with the core factors that determine the progression of the entrepreneurship ecosystem, would ensure sustainable

economic development of the country. Hence, they would be more proactive in establishing connections between the entrepreneurship ecosystem and personal values. The youth would be more empowered to go through skills development and utilize resources more efficiently. If the policy makers make a significant development of the various infrastructures, both private and public, connected to the entrepreneurship ecosystem, they would enjoy a better atmosphere of thriving through their own entrepreneurial ventures.

Critical Insights and Implications for Startup Ecosystem Stakeholders

It is interesting how the critical success factors are evident in the different cases of successful businesses. If we look at the secondary source from Future Startup that we used for the content analysis, we observe that all of them had some of the things common. They had the personal values like technology-centric innovation, optimism and working on the areas of passion, or the tendency to leave a legacy to the world.

Waseem Alim of Chaldaal, in his interview in Future Startup has talked about factors which are some key takeaways according to the critical success factors that we have found. He has highly stressed on technology — one of the key factors of a tech-based successful ecosystem that he uses in his ventures. Similarly, when it comes to the story of Ovick Alam of Webable, he mentions both about the impact on society and the technological aspects of his service. He also touches on the idea of working on the areas of passion and interest. Tausif Ahmed, the co-founder of HungryNaki, talks about technology, making an impact on the community, and working in the areas of passion were some of the core areas he focused on along with other personal factors. Mohammad Fahad Ifaz of Edge Consulting also talked about the three factors which are the key areas behind the success of their business. Bijon Islam, the director of Lightcastle and Shah Paran, who runs Handymama mentioned about the use of technology in their venture. Ivy Huq Russel who runs Maya has also mentioned strongly about the use of technology that has ensured the success of her business. Namira Hossain, the co-founder of Cookups, have stressed largely on

technological aspects of their innovation. She has also touched on creating impact on the society. Amarpay's Istiaque Sarwar has the impact on society, working on the areas of passion, and technological aspects in their areas of strength. Mohammad of Doctorola has mentioned about technology, social impact, and working on areas of passion that have led to the success of his venture. Habib Ullah of Field Buzz has talked about all these three aspects that have led to the success of his venture. Hussain Elius of Pathao has also mentioned about the importance of passion and how sticking to the convictions were important. Dr. Shahadat Khan of SureCash also talked about the passion and connected what he loved in his early life which what he does now. He has also discussed in detail about the technological aspects and the impact on society. Md Atiqur Rahman also talked about technology, passion, and impact on society. Osama Bin Noor of Youth Opportunities talked about areas of interest, social impact, and the technology.

It is noteworthy that all of these startups that we have taken into account for our secondary sources of data have at least one key personal value. There might have been other personal values in certain cases but at least one of the key factors were there that has made their ventures successful. This means that for new startups in this tech-based disruptive startup ecosystem in Bangladesh, the entrepreneur must possess at least one of the personal values from our findings along with critical factors connected to the ecosystem to make the venture successful.

Let us also look at the flip side of the coin by considering a case of a failed startup. For this, we are taking into account the venture ekhanei.com which was a subsidiary of Telenor Bangladesh. According to the official website of Telenor, the owners of ekhanei.com - Telenor, Schibsted, and Naspers - decided to close the operations of the company on the 17th of May 2017. We can find that there have been alterations in the team over the last few years before it closed down, which created doubts in having enough passion in the team. This shows weakness in the factor "Optimism - Recognizing and working on the Areas of Passion" of the set of personal values that we found out from our research. Also, ekhanei.com did

not stress enough to get feedback from the customers due to which they could not ensure sufficient contribution to the society, hence not meeting the second value we found which was "Legacy - Contributing to the Society". In terms of the third factor in the set of personal values - "Survival - Technology Centric Innovation and Revolutions", ekhanei.com did not meet this criterion. This is because all they had was an e-commerce website where the products were showcased, which was clearly not an innovation or a revolution.

Hence, this proves that at least one of the personal values must be met for the venture to be successful. The startups that have been successful so far have at least one personal value out of the three. If anyone wants to start a venture in this ecosystem in Bangladesh, they must make sure that the critical success factors of the ecosystem are met. Along with them, they must ensure that at least one of the personal values is there. Avoiding the value-venture delinking where there is at least one personal value, the venture can be made successful.

Contribution to the Theory and Practice of Entrepreneurship

In light of the aforementioned construction of CSFs of tech-based disruptive startup ecosystem in urban Bangladesh, in the first layer the core factors determining the progression of the ecosystem are located, e.g., skills development, stakeholder collaborations, resources utilization, research-based frameworks, and potentiality of startup entrepreneurs. In the second and third layers, the personal values of startup stakeholders are linking with the startup ecosystem values to confirm the prevention of "value-venture" delinking for the sustainable development and overall success of tech-based disruptive startup ecosystem in urban Bangladesh. Theoretically, this contributes to the development of value-based entrepreneur-centered design for the success of startup entrepreneurs and survival of the overall ecosystem - which are all thematically and conceptually linked together and underpinned by prior contemporary literatures. Practically, the research findings cater to several insights for ecosystem stakeholders and policy

makers in formation of their core services, frameworks, support, and resources to the startup entrepreneurs based on interlinking values together for overall progression of Bangladesh.

This research can furthermore pave the path of future studies on understanding the perspective of national values of entrepreneurship surpassing the ecosystem values and translating from the personal to national levels. The national infrastructure that is connected to entrepreneurship and youth development - both at the private and government sector that currently exists in Bangladesh should be examined more closely. The policy makers would need to realign the different factors - the critical success factors of the ecosystem so that it reinforces the entrepreneurial ecosystem. Moreover, the education system should be observed more closely in order to work out what would better serve to develop an entrepreneurial mindset of the young people and help them capitalize on CSFs of the entrepreneurship ecosystem and internalize the personal values that were important constituents of the CSFs.

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Annexure

Annex 1: Interview protocol – Laddering sheet

Laddering with the respondent from Entre-ecosystem

- Isenberg Model of Entrepreneurship Ecosystem
 - Six core domains:**
 - Policy
 - Corporations/Markets
 - Finance
 - Support organizations
 - Education and Human Capital
 - Culture
- Kelly's Triad Sorting Method (Focus: HCD)
 - Three most important issues for entrepreneurship building in the selected domain
 - 1.
 - 2.
 - 3.

Construct-Contrast

Sets	Combinations	Construct	Contrast
123	12-3		
	13-2		
	23-1		

- Laddering
Why structure

Attribute → Consequence → Value

- 1.
- 2.
- 3.

Annex 2: Content analysis tables

<u>Waseem Alim (Chaldaal)</u>	<u>Ovick Alam (Webable)</u>
<p>We have software to monitor wastage.</p> <p>We have software to predict how many vegetables we will sell the next day.</p> <p>We have software to mark things that are delivered.</p> <p>We have algorithms written to detect fraud on credit card transaction.</p> <p>We have algorithms to lock phones if phones get stolen.</p> <p>We have software to monitor how much fuel is taken.</p> <p>We have software to plan delivery routes.</p> <p>need to master the process</p> <p>scaling up certain things</p> <p>We have regulatory challenges like government policies and what the future of e-commerce is going to be like</p> <p>e-commerce is the same as the mobile phone</p> <p>with e-commerce, it suddenly becomes like a cellular network tower and everyone gets everything no matter where they live.</p> <p>the future of e-commerce is bright</p> <p>e-commerce is the best option you have</p>	<p>Taking initiative</p> <p>Started BridgeWee online at a very small scale</p> <p>Unconventional approach of teaching and marketing, BridgeWee took over the education scenario</p> <p>more groundbreaking ideas for our venture</p> <p>prospects of online marketing</p> <p>help small start-ups to use unconventional, creative and data-driven marketing strategy to take their business to the next level</p> <p>freelancer</p> <p>how to market business online</p> <p>how e-commerce works</p> <p>how different online marketing tools work</p> <p>paychecks and perks are important, but that's not why we go to work every day</p> <p>evangelist of the internet as a key to human development</p> <p>power of youth and creativity to change the world</p> <p>cutting edge design, technology, and analytics</p> <p>entrepreneurship is not only about profit, but also about making meaningful contributions to the society</p>

<p style="text-align: center;"><u>Tausif Ahmad (HungryNaki)</u></p> <p>at a startup, things are often not organized or defined</p> <p>navigate the ambiguity and chaos</p> <p>A startup demands a lot more passion, commitment, and sense of responsibility than a big organization.</p> <p>It was a small organization and that helped because I could see and experience things more closely which is often not the case in a larger organization.</p> <p>I had the chance to see the inner workings of a small but growing organization.</p> <p>hired three software developers and two business development executives</p> <p>The dynamics of online delivery and other aspects of the technology</p> <p>Digital payment is an important aspect for us.</p>	<p style="text-align: center;"><u>Mohammad Fahadlfaz (Edge Consulting)</u></p> <p>Develop business strategies for reaching the bottom of the pyramid effectively.</p> <p>I had set up an online CV writing and curating platform called amarCV.com</p> <p>I feel like contributing to my maximum potential.</p> <p>Stop being scared and follow your heart.</p> <p>Focus on doing on a few things really well.</p> <p>Since our fathers and grandfathers have built the foundation and given us a country, it's our duty to take it forward.</p> <p>One of the most important way the young generation can contribute to the future of the country is by being HONEST.</p>
<p>almost 20% of our payments are made through online which is way higher than the industry average</p> <p>trust with our customers</p> <p>digital marketing campaigns and events</p> <p>All the initial investment came from the founders</p> <p>As a part of the strategy we are focusing on technology and automation</p>	
<p style="text-align: center;"><u>Bijon Islam (Lightcastle)</u></p> <p>Being less wasteful</p> <p>Uncertain environment</p> <p>Interactive websites, big data architectures, automated response algorithm, social media frontend and what not!</p> <p>Test out the hypotheses viability prototype</p> <p>Truly disruptive innovation</p> <p>The customer is always right</p> <p>You will have a product which the customers desire</p>	<p style="text-align: center;"><u>A M Ishtiaque Sarwar (Amarpay)</u></p> <p>Market was changing every passing day and demand for such type of mobile content was eroding.</p> <p>Not getting enough attention and finding right niche to focus.</p> <p>Startup is a unique kind of journey.</p> <p>There are too many problems to pay attention.</p> <p>Running out of money.</p> <p>Your growth is drying out.</p> <p>Mobile is the future.</p> <p>People will be more reliant on mobile to receive services</p> <p>Unique position to experiment</p> <p>Grow and span their services</p> <p>I love innovation and technology</p> <p>He also is aware of the quality of service he should ensure</p> <p>Have the passion and be persistent</p> <p>We should enjoy and love the journey regardless of outcome</p>

<p style="text-align: center;"><u>Namira Hossain (Cookups)</u></p> <p>Proposed that before we develop an app we should test the idea to see whether there is a demand for this product in the market Trying to make some money out of their passion We maintain a strict screening process Quality is incredibly important to us The challenge I anticipate will be around migrating our Facebook users to the app We constantly take feedback from our users and try to improve accordingly. No matter how great your idea is if there are not enough buyers for it, there is no business. A Facebook group is not really that scalable because there are many limitations. In order to make an impact, we have to serve more people Food tech is a largely untapped market in Bangladesh.</p>	<p style="text-align: center;"><u>Mohammad Abdul Matin Emon (Doctorola)</u></p> <p>Technology professional Started pretty early Very new in the market at that time We started career differently Doing business should not be for commercial success or earning more money only; it should also have some impact that could benefit the society and the country. We definitely learned a lot from that experience Why not utilize the lessons gained from Oployee into our second idea. Were able to create positive impact in the society We found out that there is a real problem to work on. We decided to work on how we can contribute and solve this. So we came to conclusion that, if we want to build something successful, we have to build something very engaging, keep things updated and make sure that people use our information. Enhance net value for the patients. We could very well take a slice of the whole problem at a time, which is solvable immediately, and then go for another once done with the earlier. Multiple channels We also take questions and offer services through social media platforms. We maintain a relationship with the patients and with the doctors and working hard to build an ecosystem that connects both making healthcare delivery more effective and valuable. We are here not only to make money but to make some impact as well. We got to make money to survive as a business. We have real-time appointment management with these doctors. Although our platform looks very simple on the front-end but it is pretty robust on the back-end. It is a very intense system This is a separate revenue stream for us. We have received very good feedback from our users.</p>
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	<p>We started with our own money and continued until the point where we validated our idea and decided that this idea is worth pursuing and we could make this happen.</p> <p>Overcome the challenge by working closely and persistently with the doctors and hospitals.</p> <p>Next challenges we are facing is, building a solid relationship with doctors and hospitals to make sure that we stay on the same page all the time and have access to information and knowledge of each other in order to put together an active collaboration.</p> <p>Reaching out to people and building trust is another challenge</p> <p>Passion</p> <p>I started my first business because I was passionate about that.</p> <p>Also from passion and it is the same for all of my partners.</p> <p>Make the impact I wanted to make.</p> <p>By the time I started IBA, I also started a business.</p> <p>From my first business, I learned that it is important to have product-market fit.</p> <p>One thing I learned is that after a failure the very first thing you need to do is getting out of frustration.</p> <p>Never let anything to stop you</p> <p>I have always loved to jump into uncertainties believing that everything is possible and I can learn it and I can achieve it.</p> <p>We still need a smoother procedure for venture funding the startups.</p>
<p><u>Habib Ullah (Field Buzz)</u></p> <p>Solve problems</p> <p>Family</p> <p>I remained hopeful</p> <p>Struggled big time</p> <p>Filed Buzz is a software system that uses smartphones to help organizations manage their remote or dispersed operations.</p> <p>We have built a software platform</p>	<p><u>Hussain Elius (Pathao)</u></p> <p>Coding</p> <p>Never stop growing-and never settle.</p> <p>Done is better than perfect</p> <p>If you stop you lose momentum.</p> <p>Taking initiatives</p> <p>Stick to their convictions</p>

<p>Our system uses smartphone apps and mobile internet to keep the field workers in touch with the headquarters.</p> <p>The Smartphone apps are connected to a web-based management and reporting platform.</p> <p>We also do the hard work of understanding what they need, designing the right system for them</p> <p>I was already focused on mobile and web-based applications for enterprises.</p> <p>We made a big effort of trying to understand our customers and their problems</p> <p>Spending a lot of time “in the field” in rural areas</p> <p>We changed our product and business model radically during those first few months in response to what we were hearing from our customers and experiencing in the field.</p> <p>Listen and adapt to what people tell you about your ideas</p> <p>Make sure you stay flexible and that you can pivot before you get to that point of exhaustion and depression!</p> <p>Just go out there into the real world and test a prototype with some real customers</p> <p>Can achieve a positive social impact</p> <p>A positive social impact</p> <p>Focus on the real needs and potential solutions that are all around you.</p> <p>Find a real, serious problem that you know and understand, try to solve it</p>	
<p style="text-align: center;"><u>Dr. Shahadat Khan (SureCash)</u></p> <p>I loved math</p> <p>EEE was a lot of fun</p> <p>Knack for math</p> <p>Person who influenced shaping my life was my mother</p> <p>Guided us towards education and helped us thinking simple and big</p> <p>I became a faculty member</p> <p>Very much became a software person</p> <p>Many of my friends started at big companies whereas I started at a small startup</p> <p>Our country has a great development potential and is already recognized as a role model around the globe.</p>	<p style="text-align: center;"><u>Ivy Hug Russel (Maya)</u></p> <p>We have tried many different things</p> <p>We failed in some and some of those things have stuck with us and are helping us to grow.</p> <p>We are working with technologies like natural language processing</p> <p>Data scientist</p> <p>Automate the process</p> <p>Algorithms</p> <p>Efficiency</p> <p>As a company, we are very data driven</p> <p>Maya is an anonymous messaging platform</p> <p>Our engagement rate is 86% which is quite extraordinary for an app like us</p> <p>Technology and online data</p>

Our vision of the Digital Bangladesh has been appreciated globally and has gained many opportunities locally and internationally for us to work on.

I always wanted to start a technology company in Bangladesh.

SureCash is a mobile payment platform involving people, businesses, and government in Bangladesh.

Customers can make and receive government payments, pay school and college fees, pay utility bills, pay for goods and services, and make person-to-person (P2P) transfers and we are deepening current verticals and expanding into new channels.

We have developed our own proprietary technology initially focused on connecting schools, colleges, government education programs reaching the last mile and utilities that touch most lives.

We are a common, shared mobile banking and payment platform.

We are expanding significantly every year.

I think it will become the default mode of payment in the near future.

I think the payment industry will go digital and mostly mobile.

I think future of payment is cashless.

We believe a safe and easy payment platform will be able to drive ecommerce business and expedite our journey towards a cash-less society.

We are not sacrificing security.

Our app download number is not that great.

One challenge would be to build awareness

They can have multiple options

Open communication, exchange of best ideas and less bureaucracy are a couple of values we practice.

We experiment quite a bit.

Our plan is to be the leading mobile payment platform in the country.

Use Asana a lot for collaboration.

<p><u>Shah Paran (Handymama)</u></p> <p>We do also receive leads from Google and social media platforms. Those also have been largely organic Our services meet the highest quality standard The market is relatively big</p>	<p><u>Md. Atiqur Rahman (Filament Engineering Ltd.)</u></p> <p>Electrical Engineer I love to take challenges Passionate about technology and energy I always try to find and solve a problem of my own locality. Never give up Technology Apply technology to solve more critical problems of our society Contribute to areas like agriculture and all instead of only doing things that are common</p>
<p><u>Osama Bin Noor (Youth Opportunities)</u></p> <p>Very good opportunity Changed my life I learned tons of things Access to opportunities can change a person's life Received huge response from young people across the world It was not incremental growth It sort of exploded Validation for the team YO We started to think about a more sustainable plan Of a web platform generated There are more important and pressing issues to tackle Stayed with the idea We planned a lot but failed to do anything Free website The website went down for few times right after the launch because of excessive traffic load Team YO had no money to invest for a dedicated server and all. Problem due to traffic overload Now YO can run by itself from the money it earns Majority of our readers come from abroad A global platform Now the platform is recognized by most organizations that work with youth. People now submit opportunities to the platform We plan to work with young people more closely.</p>	<p>We believe it is all about opportunities and chances we come across in life that change our life for better or worse.</p>