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**THE CHARACTERISTICS OF THE START-UP
ENTREPRENEURIAL ECOSYSTEM IN THE E-COMMERCE
SECTOR IN BANGLADESH**

Master's thesis

International Business Administration

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Tallinn 2022

I hereby declare that I have compiled the thesis independently and all works, important standpoints and data by other authors have been properly referenced and the same paper has not been previously presented for grading.

The document length is 1447 words from the introduction to the end of conclusion.

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ABSTRACT

Entrepreneurship in Bangladesh is anticipated to be a major factor for the economy because of the opportunities afforded by increasing economic diversification and a corresponding rise in employment opportunities and other benefits. However, studies show that a lot of challenges are still plaguing both startups and governments. In the last few years, the entrepreneurial ecosystem has risen to prominence as a significant research topic. The entrepreneurial ecosystem consists of several interrelated factors in a specific geographic location.

The research problem of the current thesis is the lack of information about the characteristics of the startup entrepreneurial ecosystem in the e-commerce sector in Bangladesh. The research aim is to determine the strengths and weaknesses of the startup entrepreneurial ecosystem in the E-commerce sector in Bangladesh. To fulfil the research aim, a series of research questions has been developed.

Survey has been picked up as the research strategy. For data collection, online questionnaire has been sent to the respondents. The population size of this research is 1200-1300 and the sample size is 125, gathered by nonrandom sampling. After that the data has been interpreted by using descriptive statistics.

The results of the study show that the important elements of the entrepreneurial ecosystem for startups in the e-commerce sector in Bangladesh are markets, human capital, finance, R&D, policy, infrastructure. The e-commerce company has the opportunity to access a huge market of big population. The challenge that must be addressed by entrepreneurs are to understand the laws and legislation of Bangladesh, funding shortage, and shortage of skilled human capital. At the end of this research recommendations have been made on the startup entrepreneurial ecosystem in the e-commerce sector in Bangladesh so that start-ups can thrive even immensely.

Keywords: Entrepreneurial ecosystem, Bangladesh, Startup, E-commerce.

INTRODUCTION

The Entrepreneurial ecosystem has rapidly appeared as a significant area of research (Cavallo et al. 2018; Acs et al. 2017; Malecki 2018; Jacobides et al. 2018). The idea of an ecosystem isn't new, and its first acquaintance was found with Tansley (1935). However, it was Nelson and Winter (1982) that attracted more extensive interest to the subject by their work on evolutionary economic theory. In the most dynamic sense, the ecosystem is an abiotic local area incorporating the actual climate and every living entity, and all the complex interactions that work with its concurrence, codependence, and co-development (Acs et al. 2017).

The entrepreneurial ecosystem is a set of various factors that are dependent on each other. These factors have interacted with each other in a geographical area and grown or evolved. Entrepreneurship boasts economic development in different countries globally. The ecosystem of entrepreneurs is made up of many stakeholders who belong to the public and private domains. They also involve collective and individual stakeholders and measures of policy that are appropriately described and adopted for improving their action, development, and articulation. The main motive or purpose is to promote entrepreneurship, create economic growth, and enhance value creation (Kuckertz 2019). Entrepreneurial ecosystems include a variety of factors: high qualification of human capital, favorable environment and culture, the system of finance, open markets, policy measures, governance, etc. Some of the significant elements of the entrepreneurial ecosystem are entrepreneurs, talent, and knowledge (McKague et al. 2017).

The entrepreneurial ecosystem is significant because it realizes innovation and growth; it should function well for entrepreneurs. It is essential as it is taken as an interactive network of actors who can influence each other and increase the survival chances of a venture creator and the company in a country or a region (Akter, Iqbal 2019).

Entrepreneurs are the individuals who grow and incept the new start-ups with the people who support them. Entrepreneurs work continuously and tirelessly to develop their new ventures and to add value to the field. The other aspect is knowledge; entrepreneurs need resources, knowledge, and individuals who could help and consider assets.

Technological advancement eases every sphere of an individual's life. Electronic business is one of them. Electronic business implies business dependent on the web which is typically known as E-Commerce. The reception of Information Communication Technology (ICT) is an ideal interest to embrace nearly everybody in the general public, so it is important to foster a feasible web-based E-commerce ecosystem (Poorangi et al. 2013). Besides, there is one more challenge with expanding counterfeit items continuously which lessens the trust of online businesses. The two buyers and dealers are experiencing this issue which influences the internet business environment. Appropriately, the outsider of internet business plays a huge part in surviving the circumstance as a mediator (Chen 2015).

Nonetheless, in agricultural nations like Bangladesh poor admittance to address market data, poor foundation, in some cases missing framework hampers to take on online business innovation appropriately. Yet, the reception of the internet business approach might be a decent chance to foster a country. Since the producer addresses their products effectively to worldwide market regardless of the language, culture, country. The internet brings the opportunity to get the globe in hand and market their item around the world. It gives a lot of advantages to people and merchants in creating just as evolved nations. Some developed nations easily run overall brand E-trade sites like Amazon, eBay, Walmart.com, LLBeandn.com, Sony.com, Alibaba.com, Taobao.com and so on while a huge number of firms from developing nations, for example, South Korea, Tai-wan, Israel, Brazil and Bangladesh have as of now become worldwide players in many ventures (Cui, Pan 2015). These developing nations firms can take benefits of online business to showcase their item into homegrown and around the world.

Bangladesh took on internet technology in 1996 and the number of internet users developing quickly now. BTRC 2016 reports that half development of internet users and client numbers reached around 60 million from 2013 to 2016. The online business is step by step occurring in Bangladesh through expanding of the network access supplier, IT trained professional, internet business sites and earnest participation from the public authority of Bangladesh and a national bank. In future, an online business system can carry great freedom to this emerging nation if it very well may be applied for appropriate business purposes including all internet business measurements, for example, B2B, B2C, C2C and M-trade. Consequently, seeing all the difficulties, openings, dangers, strengths, weaknesses are without a doubt important now for successful internet business filling in Bangladesh. Disregarding a few

obstructions, as of late numerous e-commerce platforms are set up in Bangladesh. Utilizing information technology and developing several mobile and internet users, Bangladeshi businessmen are presently acquainted with e-commerce (Choshin, Ghaffari 2017) and different fields of internet business stages growing quickly. In 2012 e-business exchange volume around (Bangladeshi currency) was 450 million wherein 2013 it is expected to arrive at BDT-2000 million (Mohiuddin 2014) which shows a striking advancement of internet business area in Bangladesh.

The **research problem** of the current thesis is the lack of information about the characteristics of the startup entrepreneurial ecosystem in the e-commerce sector in Bangladesh. Regardless of the outlined measurement of the online business area in Bangladesh, but just a couple of researchers so far have investigated the strengths, difficulties and weaknesses of the Bangladesh E-commerce business market. Hence, the point is to investigate the strengths, difficulties and weaknesses of the E-commerce business in its improvement measurements in Bangladesh.

The current thesis report includes areas that mention the characteristics of the entrepreneurial ecosystem and their impact on entrepreneurs while incorporating a start-up in e-commerce in Bangladesh (Theodoraki, Messeghem 2017). It would also involve the role of government and other aspects of the entrepreneurial ecosystem for start-ups.

The research **aim** is to determine the strengths and weaknesses of the startup entrepreneurial ecosystem in the E-commerce sector in Bangladesh.

To fulfil the aim, the following **research questions** have been developed:

1. What are the components of the entrepreneurial ecosystem for start-ups in the e-commerce sector in Bangladesh?
2. What are the ecosystem-related opportunities available for entrepreneurs while starting a new venture in Bangladesh?
3. What are the ecosystem-related challenges faced by entrepreneurs while starting a new venture in Bangladesh?
4. What is the role of the government for start-ups in the e-commerce sector in Bangladesh?

The thesis uses a quantitative research design. The primary data is collected with an online questionnaire from E-commerce entrepreneurs in Bangladesh so that their opinions and views regarding the entrepreneurial ecosystem could be collected directly and systematically (Ratten 2020). The current thesis focuses on gathering quantitative information because it is believed that numeric information is more accurate, authentic, reliable, and appropriate based on statistical data (Babii 2020). Therefore, for attaining the objectives of the thesis the author has concentrated on gathering and analyzing numeric information. The collected data is also represented through the graph and tabular format.

The thesis is structured into introduction, literature review, methodology, data analysis, conclusion, and recommendations. The literature review includes the discussion of dynamic capabilities and social network theory and different models of the entrepreneurial ecosystem. In methodology, the data collection method is explained. Analysis part presents the results and discusses these. Conclusion and recommendation are the last chapters that summarizes the thesis and presents practical recommendations for the development of startup entrepreneurial ecosystem in Bangladesh.

1. LITERATURE REVIEW

The present thesis finds appropriate information and relevant information related to the entrepreneurial ecosystem in Bangladesh. With the assistance of secondary sources, the author has worked to answer pre-defined questions systematically and effectively.

1.1. Theory of dynamic capabilities

Dynamic capabilities are more about how the industry uses its variety of resources. Teece and Pisano propounded it in 1994. Teece, et al. (1997) have defined dynamic capabilities as the capacity of the firm to join, create and reconfigure internal and external skills to react to the expediently evolving environments. This theory is developed to solve weaknesses that were in the resource-based view theory. Past research has given a definition of dynamic capacities. Eisenhardt and Martin (2000) characterize dynamic capacities as the course of utilization assets to make new assets that can make market change. Some even concluded that dynamic capabilities can clarify how firms react to change (Newey, Zahra 2009) particularly from the natural setting. By using this theory, firms gain competitive advantages in this dynamic environment. This framework uses different tools and methods through which entrepreneurs can create wealth for their organizations.

Dynamic capacities additionally have been a centre region particularly in the field of strategic management (Barreto 2010) and the firm achievement doesn't just rely upon the assets and abilities that the firm has, yet above all on how the firm change itself with the market they worked (Rua et al. 2018). Organizational performance has a direct relationship with dynamic capabilities. It means that if the capabilities are in favour of the organization, this will help enhance the business's overall performance. A small change in the resource creates an impact on the industry. When entrepreneurs want to expand their business internally, this theory is good for them to use. With the help of their capabilities in terms of skills, knowledge, and resources, firms can go into the global market and increase their public image. By adopting this theory, they can also gain sustainable competitive gain from their competitor. The concept of strategic management has been used by the firm in this theory of dynamic capabilities.

It is important to note that there are a few limitations to dynamic capabilities theory. Birkinshaw et al. (2016), and Pisano (2017) noted that while dynamic capabilities are significant, they have similar innate limits as any conventional strategy in being not able to accomplish competitive advantages simultaneously. It is not only vital for a firm to have a dynamic capability; the capability should be superior to that of each conceivable contender. For the dynamic capability to be genuinely uncommon and significant, it should be an unprecedented ability that eventually only one firm anywhere can have (Collis et al. 2018).

1.2. Social network theory

Social network theory is a framework that the organization uses for communication. In this theory, the organization learns how humans, organizations, and groups will interact within the workplace. This theory was developed in the late 19th century to find what factors can be used within the workplace to share information. Here the organization uses various nodes to connect and maintain social relationships. In social network theory, a network means tying the nodes with actors to perform a social system. Here actors are the individual, organization, industry, and many more. Communication can be based on legal information, a relation based on friendship, affection, authority etc. This framework should be used by the organization to maintain confidentiality and smooth functioning, and the company should develop their internal communication channel to communicate (Burt 2004).

The network comprises of a bunch of actors or shared nodes in a bunch of specific bond types (like friendship) that associate them. The relationship is interrelated to accomplish the same objective to frame a way that indirectly associates actors who are not associated or straightforwardly bound. The bond design in the network creates a specific structure, and the actor possesses a situation inside this structure. Most network studies look at the attributes of the network structure and the situation of the actor (centrality) and endeavor to relate it to the accomplishments/yields produced by groups and actors (Boggati, Halgin 2011).

The entrepreneurial ecosystem structure is introduced as a network that comprises many components that interface in complex ways. The entrepreneurial ecosystem comprises networks that are both

formal and informal between the ecosystem parts (Isenberg 2010; Roudy 2017). A heavenly body of associations exists between the two people (for example entrepreneurs, investors) and associations (universities, support organizations, states, corporations) (Neck et al. 2004; Roudy 2017). The ecosystem is viewed as an impression of how the entrepreneurial group has a profound and very much associated relationship with investors, and cross-sectoral advocates (Case, Harris 2012; Roudy 2017).

Well-established networks among individuals from the entrepreneurial ecosystem are advantageous because they work with the free flow of data, knowledge and skills both between ecosystem individuals and from outside the framework (Spigel 2017; Ter Wal et al. 2016; Roudy 2017). Ter Wal et al. (2016) clarify that the entrepreneurial ecosystem comprises various networks, for example, information networks, political networks, entrepreneur networks and financial networks (Borissenko, Boschma 2016). As well as making connections among ecosystem members, events are significant because they assist with generating local issues' the feeling of enthusiasm and expectation of what occurs in an ecosystem that attracts individuals (Bathelt et al. 2004; Roudy 2017). Jennen and Tina (2016) clarify that entrepreneurial ecosystems have a functional organisational impact so that having more individuals in the networks guarantees further developed practices, allows motivations and talent to be shared, and makes co-location more important.

It is essential to note that there are a few limitations to social network theory. Social actors have ties among themselves that are marks of relationships, not relationships all by themselves, which are more complicated and dynamic than can be found through surveys or secondary source research. Social network researchers using surveys may likewise restrict the scope of responses that network individuals can give by restricting the number of ties being scrutinized, or discretionarily bouncing organizations, or both—possibly barring network individuals and their assets from analysis (Nan Lin at el. 2001).

1.3. Entrepreneurial ecosystem models

There are many models for the entrepreneurial ecosystem (Isenberg 2010; WEF 2013; ANDE 2013; 2014; Spigel 2015; Stam 2015; Nicotra et al. 2017; Spigel and Harrison 2017) that have been developed that are for the most part different in their classification, accumulating the components.

The entrepreneurship ecosystem is a community that uses multiple elements independent from one another and is used for interaction in the geographical area.

There are six elements of the entrepreneurship ecosystem (Isenberg 2010): policy, finance, culture, supports, human capital, and markets. These are those factors that affect the local or regional entrepreneur and also add value to the organization. As introduced, Isenberg's model is solid and famous for its straightforwardness, unequivocal quality, and absence of hierarchy and authority. Additionally, the model is planned around the entrepreneurs and what they see as significant. The weakness is all ecosystem elements are taken as equivalent significance.

In his paper, Spigel 2015, notes the significance of perceiving the connections between the attributes. Spigel's social methodology proposes that the entrepreneurial ecosystem is dynamic and can have various configurations relying upon the relations between the attributes (Spigel 2015). It can likewise be seen that considerable attributes cross-over and separating them into various domains can be restricting. In their paper (Stam, Spigel 2016), Spigel and Stam examine characteristics and deficiencies of various entrepreneurial ecosystem approaches including the Isenberg and propose another model implemented by the relational approach. Since leadership gives hierarchical direction, leaders will in general become good examples and tutors to entrepreneurs. Since this component is hierarchical, it controls whether the ecosystem is solid or not. This is apparent in nations with corrupt administration where development levels are low and business ventures are debilitated. The strong side of this model is that it considers the relation between the components category and the weakness is all ecosystem elements are taken as equally significant.

According to Nicotra et al. (2017) entrepreneurial ecosystem is a blend of social, political, financial and cultural components in an area that upholds the growth and development of inventive new startups and empowers new-born business visionaries and different entertainers to face the challenge of starting, subsidizing, and in alternate ways helping high-risk organizations. There is diversity in the entrepreneurial ecosystem. As the factors are the same for every organization, but the way of using them is different, which is why the ecosystem is not the same.

Reidolf et al. (2019) have in their research merged four models to develop their model, they are: the model of the World Economic Forum (WEF) (2013, 2014) the ANDE (2013) model proposed for applied research; the Stam (2015); the Spigel and Harrison (2017). In their model, they proposed nine

elements of entrepreneurial ecosystems which comprise of different possible elements: leadership, markets, human capital, research and development, financing, support services, infrastructure, policy and regulatory framework, and culture. They also address the dynamics of entrepreneurial ecosystem by including different phases – from nascent to mature and declining. The strong part of the model is it contains all key elements of the entrepreneurial ecosystem.

It is seen that the elements of the entrepreneurial ecosystem are almost the same but, in some model, they are differently presented. The elements of the entrepreneurial ecosystem support the various firms to do innovation and diversify with different ideas. All these elements help the company for a more extended period and gain an advantage in this changing environment. - By using this entrepreneurial ecosystem approach, the organization can also sustain itself on their own. The author has decided to use the model of the entrepreneurial ecosystem developed by Reidolf et al. (2019). Since the model has been applied in Estonia and used as the basis for conducting interviews (qualitative design), the author uses the model for Bangladesh with an online survey questionnaire (quantitative design).

1.4. Characteristics of the entrepreneurial ecosystem

According to Drori and Wright (2018), the entrepreneurial ecosystem refers to the community-made from multiple factors and interdependence. They have interacted with themselves in a geographical area and work together to evolve. The key motive is the promotion of creating new businesses. Fostering and developing entrepreneurship is the core competency for developing an economy in different countries of the world. The formation of an entrepreneurial ecosystem is made up of various stakeholders who are from the public and private domains. Some of the characteristics of the entrepreneurial ecosystem are:

It is essential to know that each entrepreneurship ecosystem is different and unique (Broad, Ortiz 2020). They discussed six domains (Isenberg 2010) that are used to define it; each ecosystem is the outcome of various factors distinctively interacting. Hence, having the exact domains does not mean that all ecosystems are similar to each other.

Diversity is one of the most integral parts of innovation, and diversity in the entrepreneurial ecosystem is one of its characteristics. Diversity is linked to innovation. Diverse and different inputs are required for entrepreneurship from other people who start companies. Culture is needed that supports different communities and multiple industries with many ideas. Entrepreneurs take diverse investment portfolios so that best could be performed (Rock, Grant 2016). According to Cohen and Hochberg (2014), each productive entrepreneurial ecosystem will in general have at least one effective innovative pioneer entrepreneurial leader who turns into an amazing source of motivation to his or her peers. Successful entrepreneurs with a demonstrated history and financial freedom can proceed with their entrepreneurial exercises by rousing and exhorting others based on their mastery and by investing their time and money.

Most entrepreneurial ecosystems are talent magnets. They need to retain, attract, and constantly cultivate the best talents in their companies. This also involves potential employers and entrepreneurs (Bischoff, Volkmann 2018). There is an excellent linkage between schools, universities, and the private sector. This is mainly done so that demand and supply for talent could be managed effectively and efficiently. Talent is necessary for growing the business, and another most significant thing is retaining them in the company for a longer time period. The marketplace is constantly growing faster, and rapid development is also taking place almost everywhere. Companies and organizations have turned towards digital marketing because now people spend more time on the internet, so companies provide training rather than recruiting new ones (Jumasseitova, Potluri 2020). There are multiple resources and knowledge that entrepreneurs need. It involves basic questions such as how to get a license for export to significant strategy changes and management changes. When the ecosystem is great, it always ends up creating advantages for entrepreneurs. Entrepreneurs require different resources like talented people, capital, office space, and professional services. According to the entrepreneurial viewpoint, entrepreneurs perceive the chances for taking advantage of overflows and accordingly make new challenges to change over this exposed information into economic information. This, thus, empowers passage into new business sectors and makes an incentive for the whole economy over the long haul (Acs et al. 2013). In the ideal entrepreneurial ecosystem, all these resources are available abundantly.

It is said that "success breeds success" by nourishing back the entrepreneurial ecosystem six domains, and there is an attraction that is decreasing government involvement. When there are six strong

domains, this helps strengthen and helps public leaders not invest in the business, which allows in surviving battle (Lillis 2021). The six domains which used are policy, culture, finance, support, human capital, and market domain.

Then next is the social-economic environment is the characteristic of the entrepreneurial ecosystem (Sankaran, Demangeot 2017). As it helps in shaping entrepreneurial locally and regionally. This can be done by developing a strategy. Whenever this model is used, the focus is to build region and value creation and addition. This is mainly a collective strategy that is used for creating innovative approaches and assets for start-ups.

1.5. Different aspects of the entrepreneurial ecosystem for start-ups

From the views of Akter and Iqbal (2019), startups are coming into the market nowadays more. Entrepreneurs are the one who is being supported by a community of people also other start-ups surrounded by them. Nowadays, start-ups are coming into the e-commerce sector more to increase profits and enhance their customer base. There can be various aspects of entrepreneurial ecosystems for start-ups in Bangladesh. The most crucial thought which is needed for starting up an organization in the market is human resources. These resources come from colleges, universities, and other educational institutes. Many of the students who know to code and are very fluent in digital marketing should be adequate for start-ups. Universities must cope with updates in their technologies and focus more on entrepreneurial courses. This could help the organization select the best candidates who have the best knowledge about a particular task to be performed in the organization (Wagner et. al. 2021). Being in the E-commerce sector, the entrepreneur needs to find those candidates working effectively in the organization and behaving well in the workplace. Then, the next aspect is funding providers- after identification of resources, it is essential to have funding providers for their start-ups. Being in Bangladesh, there is a need for more funding. This will help the organization get more funds from different sources and use the latest and updated technologies to start their business.

According to Karim et al. (2018), start-ups are more critical of surviving because of investors. Some of the investors who could be utilized to start the business, venture capital firms, loans and grants, crowdfunding and government, etc. These investors help the start-ups and entrepreneurs start their

businesses most virtually. Another aspect to consider is Incubators and accelerators- as these are the programs that assist start-ups in success since, they provide better mentorship, guidance, and training and some partnerships to the new start-ups. These provide at an early stage so that start-ups can work effectively, and they are secure for their future as well. In context with Bangladesh, their E-commerce sector is growing in the market. So, they need proper funding to start and need appropriate mentorship and guidance as well. So, for this, Incubators and accelerators are providing better training programs to use.

Further, consultants and agencies are to be hired by entrepreneurs to develop their organizational structure, and by this, they could be able to earn more profits and revenues. One of the other different aspects which are to be of the entrepreneurial ecosystem is service providers (Malecki 2018). As they are needed as banking providers so that their activities could effectively work in the business environment. In addition, media and blogs can be the best techniques that are being used at the time of starting the new venture. The entrepreneur uses start-ups to make customers aware of products and services (Spigel, Vinodrai 2021). In Bangladesh, the E-commerce sector, they could see these aspects for developing growth opportunities for them and resulting from this in profits of the organization.

1.6. Challenges faced by entrepreneurs while starting a new venture in Bangladesh

According to Luu and Ngo (2019), there are various challenges which is faced by entrepreneurs while starting a new E-commerce venture in Bangladesh. While running a business in an international market creates multiple problems that can affect the business's growth and profitability. So, entrepreneurs must look at those problems before establishing e-commerce business in Bangladesh.

Communication difficulty is one of the problems faced by an entrepreneur while setting up a business in Bangladesh. The entrepreneur has to address the different challenges such as differences in language, time zones, and culture. The e-commerce business must get familiar with the language of Bangladesh so that they can deal with the employees, investors, and customers efficiently (Umurhohwo 2020). To succeed in-country, it is necessary to have effective communication with clients, investors, suppliers, and stakeholders. Cultural differences can influence the market demand for their e-commerce products.

The financial issue is also a problem that is faced by entrepreneurs while establishing a business in Bangladesh. Expanding the business in Bangladesh requires huge investment and resources, which entrepreneurs must manage. The company also requires funds to run the business effectively and survive in the market for the long run. If entrepreneurs successfully establish the e-commerce business with their saved money, they still require more investments to run the business smoothly according to Rana et al. (2021).

Hiring employees and team building is another issue that entrepreneurs may face when establishing e-commerce businesses in Bangladesh. A group of people runs the organization, so it is necessary to hire talented employees who can contribute their best efforts to increase the productivity and profitability of the business. It is stressful to hire new employees from the new country as they have to pick the right staff according to their qualifications and efficiency (Essel et al. 2019). They have to post job requirements by mentioning the specific need and profile of the candidate so that managers can hire top talents for running the business effectively and efficiently.

The currency rate is another challenge that can affect the productivity and growth of business in Bangladesh. So, it is necessary to assess the currency rate fluctuation and monitor the exchange rates as it creates a huge impact on the balance of business profit and expenses. The entrepreneur must choose the proper global shipment method that can influence revenue and increase business growth (Luvizan et al. 2016).

Technological changes can be another challenge for the organization because nowadays, there are various updated and latest technologies coming in the E-commerce sector so that employees could feel more motivated, and their efficiency gets enhanced. Further, organizations and employees can save their time and effort most effectively while using updated and latest technologies (TerjeSen 2016). So, if technology is not updated in the organization, this may result in the entrepreneur's most prominent issue for start-ups businesses.

From the above challenges, it can be said that there are various issues that entrepreneurs could face at the time of starting a business most virtually. Some obstacles like foreign laws and regulations and hiring a talented team can be the biggest challenge for entrepreneurs in starting a business in any company. As in context with Bangladesh, the E-commerce sector is proliferating in the market, so entrepreneurs must develop accordingly by considering these challenges in mind (Crespo et al. 2021).

Other issues like technology challenges and customer taste and preferences would be considered, developing their overall growth opportunities. Further, currency rates and financial performance will be the next challenge that could be considered in mind. In context with the E-commerce sector in Bangladesh, they must work effectively to increase customer satisfaction while considering organizational issues and challenges in mind effectively.

1.7. Opportunities are available for entrepreneurs while starting a new venture in Bangladesh

From the views of Díez-Martín et al. (2021), while starting a new venture, it is vital to analyze the opportunities which are coming into the market. There can be various opportunities coming into the market for entrepreneurs while starting any new venture in Bangladesh. Entrepreneurs in Bangladesh can start new ventures in the E-commerce sector. They could even identify various opportunities so that they could earn more profitability and increase customer satisfaction. First, entrepreneurs have to be innovative and creative while implementing any of the strategies in the market. If the entrepreneur is making effective marketing strategies, this may result in increased opportunities for their businesses. As the first opportunity which can be identified by the entrepreneur in Bangladesh such as innovation in-home delivery, by not charging delivery charges, providing online training and development sessions to employees, teleworking, remote personal, etc. as these small innovations result in enhancing their new venture and developing various opportunities for them to attract customers towards their brand and company. Secondly, identifying customer tastes and preferences can be an immense opportunity for an entrepreneur when starting any new business. In context with Bangladesh's E-commerce sector, it is representing a potential market.

According to Jim-Suleiman et al. (2021), the country is earning a global reputation in women empowerment, maternal mortality ratio reduction rate, etc., so there can be various opportunities that an entrepreneur can identify enhancing their new venture in the market. Some of the opportunities can be inventing in multiple businesses, as this can be the most mammoth opportunity that an entrepreneur could take while starting a new venture. At the biggining, an entrepreneur has to take risks for starting their business and making the growth of their future business. So, for investing in many companies, the entrepreneur can take this opportunity to lose in one industry, then they have another option to

grow. The next opportunity can be Angel investors- as nowadays investors are becoming more popular, and entrepreneurs could take opportunities of taking money from these investors. These investors provide funding to investors under stress and focus on products and the loyalty of customers. The next opportunity can be quality content- as producing quality content will enhance customer satisfaction. As good content will result in the increasing profitability of the company.

According to Nwafidelie (2021), as in context with the E-commerce sector in Bangladesh, the entrepreneur can create opportunities while providing quality products to the customers. As the quality of products helps the business connect with customers, thus resulting in increasing customers' loyalty. Making better products and services can create an opportunity for making new sales. The next opportunity that can be available for an entrepreneur for the new venture is the social power of the internet- as this is another opportunity which the entrepreneur can use as they could make effective use of social networks which helps them in building their brand reputation and connecting with customers as well. As social media handling helps new ventures become aware of their business, even customers get engaged with their products and services. In context with Bangladesh, their e-commerce sector is more effectively used when it is to be placed in social media networks, as by developing various organizational aspects, it is considering that social media is creating opportunities for new ventures so that they could develop more in the market and by this the customer number will be enhanced.

According to Rudeloff et al. (2021), foreign markets can be another opportunity for entrepreneurs to have better contacts with other companies. As in context with Bangladesh, they have more growth opportunities, resulting in creating more growth opportunities for entrepreneurs so that they could develop more in the market and enhance customers more than other companies. While implementing certain strategies and using various updated technologies, an entrepreneur could develop their profits and revenues. Further, they should focus more on cultural diversity, and maintaining quality in the business environment will result in increased growth opportunities for their employees and organization. In addition, entrepreneurs should focus on available resources and financial funding so that their resources could be less and thus there could be no resulting in more profits and revenues. Listening to customer needs and demands can develop business opportunities and making good relationships with a country's government will start a new business in a different country.

Entrepreneurs should keep the prices of products and services in mind, which helps them create productivity and efficiency.

1.8. The role of government and other aspects of the entrepreneurial ecosystem for start-ups in Bangladesh

According to Audretsch and Belitski (2021), The government of Bangladesh is related to develop by national ICT policies for growth and making systematic changes by the end of 2021. There are different policies and procedures for the different starts up in the E-commerce industry with the help of 100 crore funds. After the Covid-19 impact, many businesses make a high impact on the companies and make drastic changes by the end of the Covid-19 disruption (Ur Rehman et. al. 2020). Due to this, approximately 56% of the start-up companies drop their revenue and feel the downfall in their activities. The country's government makes policies to influence entrepreneurs for start-ups growth and makes it an effective sector to achieve talent and boost the morale of their public.

The government initiated with the supportive functions by the own public start-ups and made effective supports wings, whose name is Start-up Bangladesh with the help of 100 Crore BDT. Another way to introduce the products and make the systematic record for analyzing the objective and make changes by the start-up entrepreneur and seed funds throughout U\$ 1.5 Mn. As the government's role affects the company and makes systematic growth over the period and make systematic changes in the different facilities and segments of the country. The use of e-commerce activities and make effective growth in analyzing the situation and make the secured online process to make payment, option for the strong changes, ease of access and make accessible ICT infrastructure for the growth and make an effective educational program to address the change and make effective media structure to the instruction and overall growth (Yavuz 2021). As per the record, the government of Bangladesh makes a strong commitment and makes changes in promoting and using the identifying E-commerce platform. There are some solid roles and support which the government uses for providing a supportive structure to the e-commerce start-ups in the company.

Subsidy: This is the type of grant which the government provides to help the significant industries to grow and get the ability to make an effective and sustainable effort. This can be direct support for the companies related to e-commerce websites site or indirect for the infrastructure, building, and

beneficial character to make the supportive structure and growth. Most government subsidies are related to practical working and make significant steps for providing support and effective, innovative activities to make changes in the goods and services (Parrish, Tilley 2016). Bangladesh Government makes the practical support in the form of cash subsidy, Tax concession, assumption of risk, and government procurement policy to make more market price and make suitable changes.

Innovative direction: This is referred to as the position to work and make regulation, production, and effective innovation in the government regime. This is related to work and makes E-commerce a great opportunity to innovate products for compelling features and standards (Anokhin et al. 2021). The government makes necessary changes and provides related growth for effective innovation and participation tools for safety and innovative support. The government of Bangladesh supports innovative direction. It makes a significant aspect of analyzing the data and making effective challenges in Bangladesh's growth of E-commerce sites.

Standard Setting objectives: This is related to working and doing effective practices for growth and making limitations for the choices and managing the activities in advance technological innovation. In context with the E-commerce sector, they could provide their services to the public and provide better citizens to the customers (Neneh 2019). As the government is the one who is interacting with the people, they help establish the company in the market. They are offering updates and providing delivery speed to the organization well.

Improved infrastructure: this is one of the essential functional organizations which is needed in the business for long-term success. It is vital to have updated and latest infrastructure in their new business, which helps the entrepreneur develop their growth opportunities for the future (Marks, Batev 2021). Infrastructure is attained by government support. The internet is becoming significant nowadays for organizations as an infrastructure for exchanging their data and information. As infrastructure is more important

Security and privacy: As in the e-commerce sector, trust is the most crucial thing which is to be given by an organization, and customers should have trust in the brand. In context with government and business, it is a supreme task to consider security issues that are being raised in the organization most. There can be some risk related to the privacy of payments and delivery security which is to be

considered while the brand is operating (Dai et. al. 2018). On the other hand, the government should focus on individual privacy as they could find stalkers and act against them.

Awareness: In the Bangladesh e-commerce sector, brands have to make effective strategies to bring more awareness to the customers. The government could create awareness about a company to the customers (Chapman 2021). This helps in growing the business and developing potential customers.

1.9. How start-up entrepreneurs view the entrepreneurial ecosystem in Bangladesh

From the views of Thorsteinsdottir et al. (2021), start-ups of the Bangladesh ecosystem are coming in age and riding in an economy. There can be certain investment options, also there is government support for new start-ups. Entrepreneurs are now seeing more opportunities and growth in a country where they want to operate and start their businesses. One of the significant advantages that an entrepreneur could see in Bangladesh is that it consists of a young workforce, which helps the organization innovate and implement a market strategy.

However, there is a shortage of skilled labour which can become a challenge for them to hire effective employees at a time of start-up business; the entrepreneur should have to keep these challenges in mind and works on providing practical training programs to the employees. In addition, Bangladesh's ecosystem is infancy, and its birth starts in Dhaka (Lange, Johnston 2020). There is an innovative environment. It primarily focuses on developing an organization and mainly concentrates on entrepreneur innovation and invention in their products and services. Concerning the e-commerce sector, they mostly work on innovation to attract their customers to their brand. Further, there is a vital role in digital communication service as this helps the start-up business promote their business effectively and attract more customers.

According to Hoque et al. (2021), the Bangladesh entrepreneurs' ecosystem is most effective for digital communication and global management consulting as Dhaka is a fast-growing digital ecosystem in Bangladesh. It is expanding by providing digital connections to their organization and economic growth as well. One of the other opportunities that start-ups entrepreneurs can see in the Bangladesh ecosystem is angel investors. Angel investor helps the entrepreneur in enhancing more

opportunities and attracting them towards their brand for funding. These investors are looking for start-ups that can develop in the future and consist of some new ideas. Then another opportunity which an entrepreneur could gain in the Bangladesh ecosystem is quality control- if the company is providing adequate quality of products and services, then this will attract more customers and build their loyalty and brand image. It is being said that the Bangladesh government is supporting new businesses that are healthy and providing some of the benefits to their local people (Assmann, Ehrl 2021).

Further, Bangladesh's entrepreneurial ecosystems are regarded as an inflexion point with access to 200 million international investments, which can be done by corporate investors and ventures in various large industries and start-up businesses. Currently, the country has 1000+ start-ups generating more than 1.5 million+ employment opportunities to the candidates in the local region. During pandemics, entrepreneurs are welcoming innovations and inventions that could help them generate more profits and revenues. Further, various new businesses are bringing new ideas and innovations to enhance their profits and revenues.

Due to this pandemic, the e-commerce sector has grown effectively, and they are creating more growth opportunities in the market. So, if an entrepreneur is mainly starting a new business, then this will help them in the development of their organizations. Further, concerning the Bangladesh government, they mostly support new businesses coming into their country. However, the organization should have to work according to the government policies and regulations. If they follow all those policies, this will develop the organization's opportunities, and the further government will also support them in their operation within a market.

In addition, the entrepreneur will see this entrepreneurial ecosystem of Bangladesh in competitive economics (AlQhaiwi, Abukaraki 2021). Bangladesh has a more competitive environment which could help the organization in growing. As if there is more competition within e-commerce sectors this creates opportunities for new business. But on the other hand, they could have to face certain challenges which result in demotivation and losing prospects.

Entrepreneurs could enhance good internet opportunities and benefits, which helps them in improving their events and activities. Being in a Bangladesh entrepreneurial ecosystem, they could meet new suppliers and partners while considering e-commerce businesses and potential investors. As for young entrepreneurs, this helps them enhance more investors and find more funds for their businesses.

Further, while having appropriate training and development methods, entrepreneurs could provide training and development opportunities to the employees (Shinnar, Zamantılı Nayır 2019). They could also enhance various opportunities and skills about their organization and thus have to consider multiple challenges while operating their business activities.

From the above, it can be concluded from the literature review that this research is conducted for the characteristics of the entrepreneurial ecosystem of start-ups in Bangladesh. There can be various characteristics of the entrepreneurial ecosystem which help the entrepreneur in the development of their new venture. This literature review assists the researcher in analyzing multiple aspects of the entrepreneurial ecosystem such as media and blogs and funding and training etc. The next is to find out various opportunities for the entrepreneur while starting the new business and the role of government in starting up the businesses. Ascertain opportunities to be taken out for entrepreneurs but at the same time, many of the challenges could be faced at the time of new start-ups. So, if the entrepreneur is starting any new ventures, they must consider various challenges and issues and make strategies to solve them.

1.10. Overview of E-commerce in Bangladesh

The specific number of online business firms in Bangladesh is difficult to get by. The online business Association of Bangladesh (e-CAB) has around 1,300 members. There are more than 1 lakh Facebook-based entrepreneurs. In Bangladesh, three kinds of internet business firms are common: business-to-business, business-to-consumer, and consumer-to-consumer. Bangladesh's internet-based business market is expected to reach \$3 billion by 2023 on the rear of a digital establishment set by the government and a youthful and tech-savvy populace, said Statista, a German research firm, last year (The daily star 2020).

According to Bangladesh Tele Regulatory Commission (BTRC), the number of internet users in Bangladesh had crossed 80 million in 2017. At present, there are around 2,000 e-commerce businesses and 50,000 Facebook-based outlets delivering very nearly 30,000 items per day. Right now, 80% of the e-commerce deals are occurring in Dhaka, Chattogram and Gazipur. In Bangladesh, the retail e-commerce business is developing at 72% a month. As of now, more than 25,000 small and medium enterprises (SMEs) and more than 35,000 people are connected in this area. Till 2018, the number of

online business sites and e-commerce business pages equaled 2,500 and 150,000 respectively. It was assessed that the number of deliveries each day amounted to around 15,000 to 20,000 at the retail level (The financial express 2020).

2. RESEARCH METHODOLOGY

Research methodology refers to the procedure or technique to gather and analyze information related to any field of research. The principal purpose of research methodology is to support the author in collecting and analyzing authentic and appropriate information related to the aim of the study.

2.1. Research design

There are various kinds of methodologies that are great in gathering data about the characteristics of the entrepreneurial ecosystem in Bangladesh and the role of the Bangladesh Government in supporting new ventures. The research approach is defined as a procedure to evaluate collected data efficiently and effectively. This is the approach that is divided into two kinds that are: inductive and deductive approach. These two approaches are great in their manner and facilitate researchers in easily analyzing gathered data (Babii 2020). As per the requirement of the current thesis topic, the deductive approach is the selected approach. This approach assists investigators in evaluating quantitative and primary data about the characteristics of the entrepreneurial ecosystem and the government's contribution to supporting entrepreneurs in Bangladesh. The deductive approach is also helpful because it does not consume more time and assists in attaining each aim and objective properly.

Research choice assists in introducing the process of collecting data related to any topic or subject. This facilitates the researcher with relevant, reliable, and authentic information, and this research choice is mainly divided into three types: mono method, mixed-method, and multi-mixed method (Bairagi, Munot 2019). As per the requirement of the current thesis, the author has selected the mono method. In the mono method, quantitative research choice is chosen because it assists in gathering numbers and statistical information. In the present thesis, the author has also focused on gathering quantitative data so that objectives could be easily attained without taking a long time. Through quantitative research, large data can be processed and analyzed statistically almost without any bias. In this method, the researchers have more control over how the data is collected and analyzed. This method is more structured, researchers use questionnaires to collect data.

Research strategy is classified into various types: experimental research, grounded theory, survey, case study, action research, etc. (Säfsten et al. 2020). The author has picked the survey as the research

strategy since the survey questionnaire is without any problem welcoming by numerous participants, giving individual preference to their own experience. This is the strategy of the thesis for gathering data as it assists the researcher in collecting data directly from the source. A few benefits of the survey include easy access to the reader, inexpensive, primary information collection, cost-effective, and many more. Also, with the survey strategy, the author can effectively use the research instrument as the questionnaire includes closed-ended and open-ended questions. There are generally three kinds of research design: descriptive, experimental, and exploratory (Newman, Gough 2020). Descriptive is one of the standard research designs as it has the main motive of describing a problem, situation, phenomenon, and population. This is also used for quantitative research.

2.3. Data collection and analysis methods

The author has decided to use the model of entrepreneurial ecosystem developed by Reidolf et al. (2019). Since the model has been applied in Estonia and used as the basis for conducting interview (qualitative design), the author uses the model for Bangladesh with an online survey questionnaire (quantitative design). The interest groups for this survey were startup entrepreneurs in e-commerce sector in Bangladesh. Non-entrepreneurs are not considered as this is solely intended for the entrepreneurship area. They are the interest group for the survey. Looking over the non-professionals could cause the twisting of results and conclusions.

The author uses the Aspen Network of Development Entrepreneurs (ANDE) Entrepreneurial Ecosystem Diagnostic Toolkit to develop the questionnaire. The toolkit has been adapted and changed based on the regional aspect of the country under study. The questionnaire has been divided into three parts. I Demographic Information, in this section there were 10 questions about the respondents and the organization. II Entrepreneurial Perceptions of the Ecosystem, in this section there were 15 close-ended and open-ended questions about the entrepreneurial ecosystem components. III Key Firm and Entrepreneur Indicators, in this section there were 11 questions regarding the indicators of the company and the respondents. The author used multiple-choice questions, open ended closed ended questions in the questionnaire and the respondents were asked to choose one option and or give opinion. Thirty-five such questions have been asked.

To make the questionnaire understandable to the audience, the author has done an experimental run among five respondents. With the help of this pilot, some minor changes were brought to the questionnaire. Also, the structure of the questionnaire was reformed to make it simple. Facebook and Gmail are the most popular social network used in Bangladesh. To disseminate the survey question to startup entrepreneurs in the e-commerce sector, these social networks, entrepreneur's groups, communities, organizations related to entrepreneurs have been used as the primary distribution channel. The online survey was live for 17 days from 2nd of October to 18th of October. The survey was done anonymously and as an online survey to allow entrepreneurs to show their viewpoints openly and with no bias. The survey comprised of distinct questions (see Appendix 1). The questionnaire was the same for all respondents. For this thesis, descriptive statistics illustrated with graphs have been utilized.

2.4. Sampling and sample

The target groups for this survey were entrepreneurs. Non-entrepreneurs are not considered as this is solely intended for the entrepreneurship area. They are the interest group for the survey. Looking over the non-professionals could cause the twisting of results and conclusions. The total population of the survey is around 1200-1500 and the total number of respondents is 125 e-commerce startup entrepreneurs from Bangladesh. Using a questionnaire constructed expressly for this study, the author was able to gather the data needed. In this research non-random sampling has been used. Getting responses from the respondents using non-random sampling is faster, cost effective than the random sampling. Non-random sampling is beneficial to ensure that there is a great deal of data about the observation of specific targeted people.

The demographic data of this research is shown and interpreted below. While the data was collected, no preferences were given to the location. From Figure 1 it can be seen that 84% of respondents age range is between 21-30. Besides 8% are from the age group 31-40. However, only 4% from the age group between 41-50 followed by 2% from under 21 and above 51. That means most of the entrepreneurs who participated in this research are young whose age is between 21-30 years.

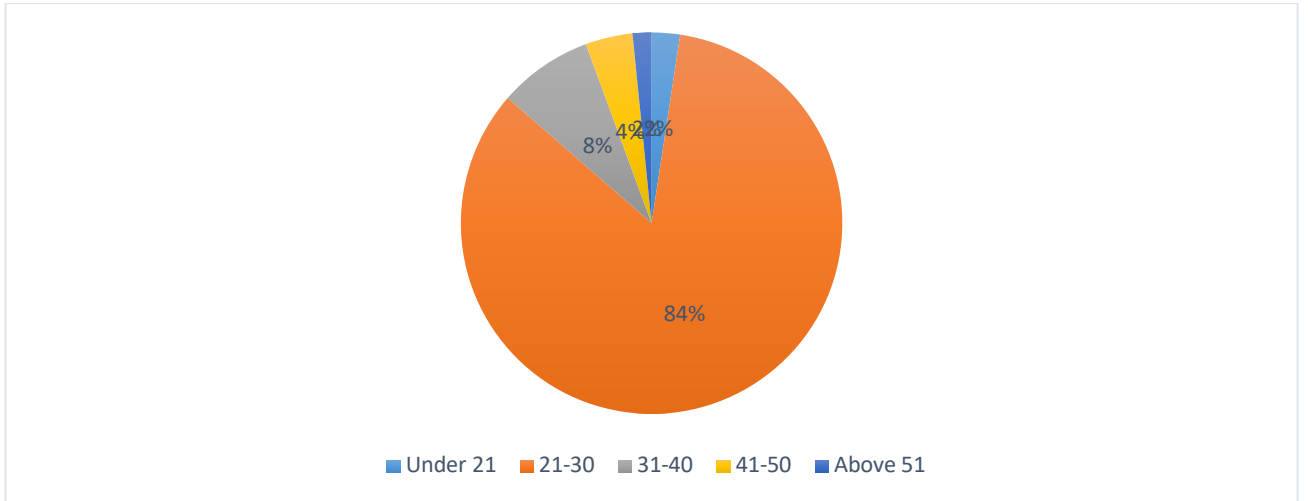


Figure 1. Age of the respondents
 Source: Prepared by author

The survey results are in line with the data from the Global Entrepreneurship Monitor (GEM). GEM claim that the entrepreneurial ecosystem is globally dominated by males. Findings show that 73% of the survey respondents represent male entrepreneurs compared to 27% female entrepreneurs. According to GEM report (2020), total early-stage entrepreneurial activity female/male ratio is 0.6. The total early-stage entrepreneurial activity female/male ratio in Bangladesh is 0.21 and in this thesis the ratio is 0.36.

Regarding the level of education attained by the entrepreneurs, findings reveal that 76% of the respondents possess bachelor's degrees followed by 8% master's degree (Figure 3). 7% percent have a higher school certificate.

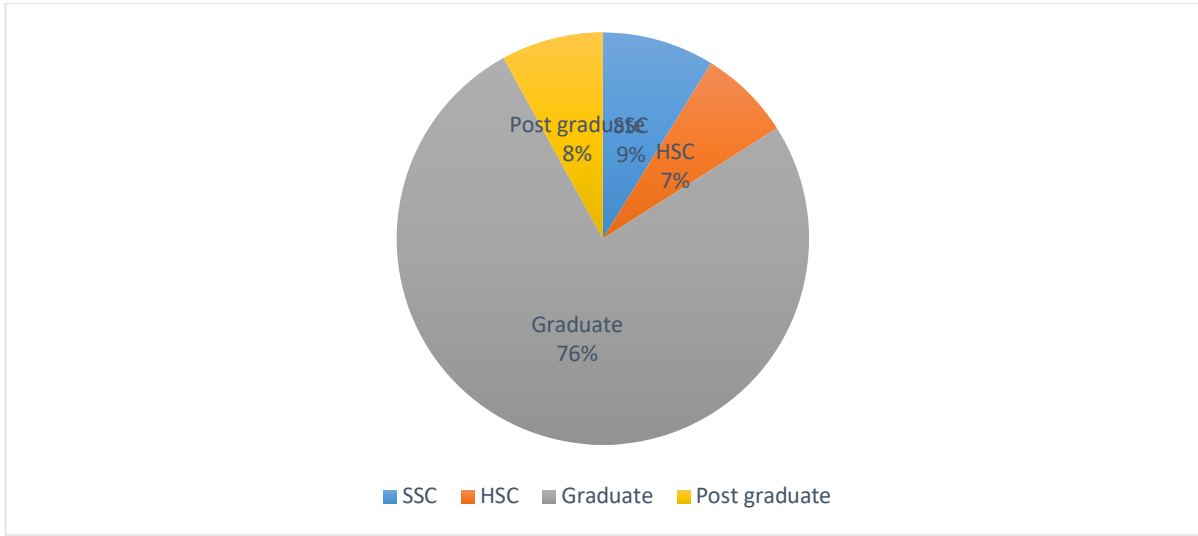


Figure 2. Educational qualifications of the respondents

Source: Prepared by author

The survey shows that the service sector is dominating in organizational type. 68 percent of the firms are service whereas 32 percent manufacturing based.

Sector

The survey shows that the garments sector is on the top of the sector which accounts to 31 of the entrepreneurs followed by 19 of the respondents are from the textile sector (Figure 3). Almost the same number (18) of respondents are from the electronics sector. The lowest number of respondents (3) are from the transport and construction sector.

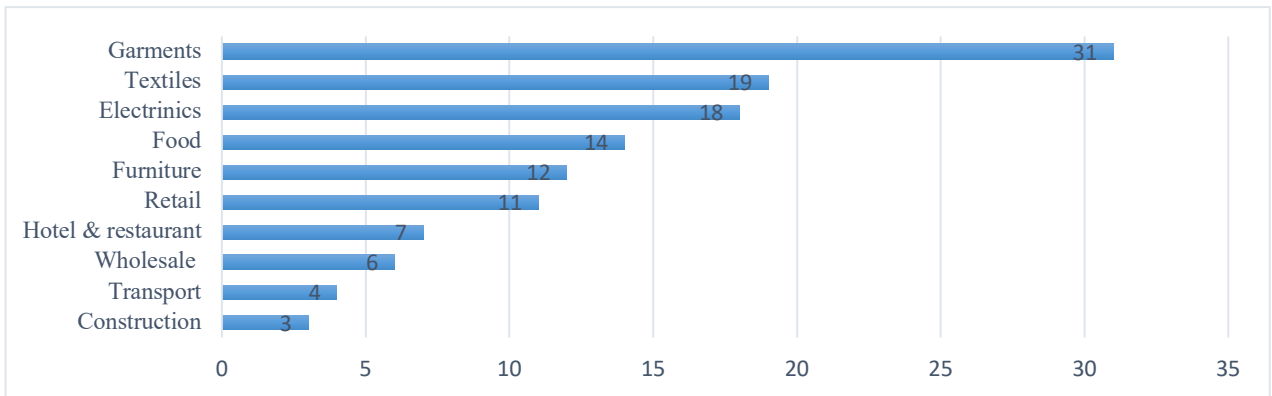


Figure 3. Type of sector

Source: Prepared by author

Years of entrepreneurial experience

Analyzing the data collected from the entrepreneurs, in Figure 4. 45% of the entrepreneurs have experience of 0-1 year, 36% have 2-5 years, 12% have 6-10 and 7% have more than 10 years. So, it can be said that most entrepreneurs have experience under 5 years.

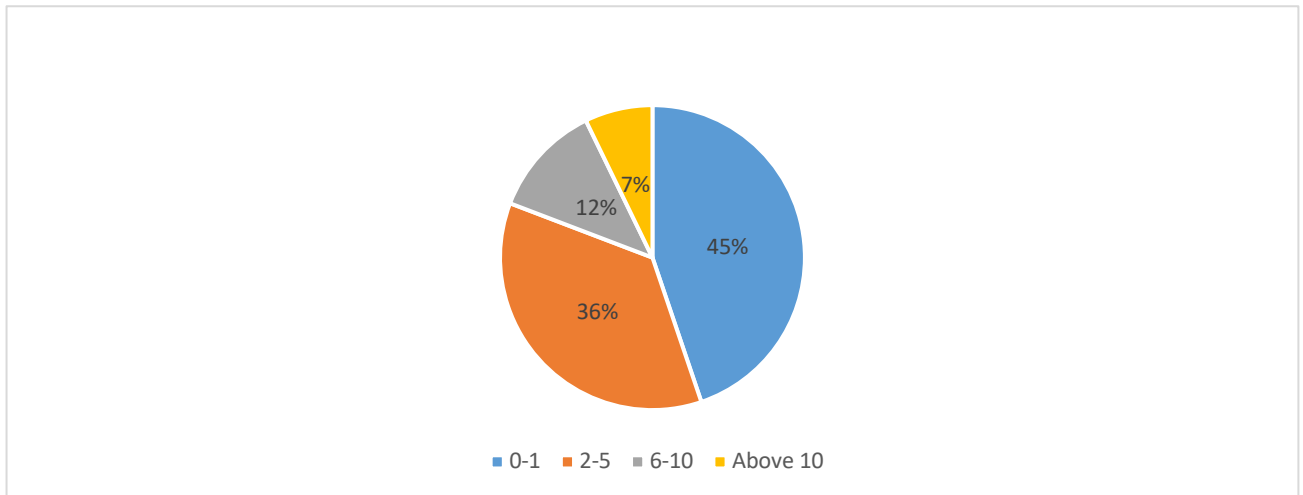


Figure 4. Years of entrepreneurial experience

Source: Prepared by author

Legal Status

It can be seen that, 68% of the companies are limited liability companies and 32% of the companies are corporations. Legally speaking, corporations are different from their owners. Many of the legal privileges and obligations that apply to people also apply to businesses. It's legal for them to engage in contracts, loan and borrow money, sue and be sued, hire people, possess assets, and pay taxes, among other things. LLC is a corporate form in the United States that shields its owners from personal accountability for the company's debts and obligations. They are hybrid entities that combine the features of corporations and partnerships or sole proprietorships.

3. ANALYSIS AND FINDINGS

The data from the survey was evaluated with the use of an excel spreadsheet and percentage analysis. This analysis was carried out to make the data more understandable. The next section will include the results of the data analysis, as well as any applicable interpretations:

3.1. Entrepreneurial perceptions of the ecosystem

Overview of the entrepreneurial ecosystem components

The chart below represents how important or unimportant the nine components of entrepreneurial ecosystem human capital (3.75), finance (3.59), R&D (3.48), market (3.32), infrastructure (3.18), leadership (2.93), policy and support system (2.84), culture (2.82), are (Figure 5). The figure shows that according to respondents among these nine components human capital, finance, R&D, market, policy and infrastructure are very important components for them. 41% respondents considered human capital as very important element of entrepreneurial ecosystem followed by 31% claim that finance is very important followed by 34% considered as important. After these two, the other is R&D considered as the important or very important by 58% of respondents. Around more than half of the respondents claim the policy is either an important or very important component. On the other hand, support system, culture, leadership are comparatively less important to entrepreneurs.

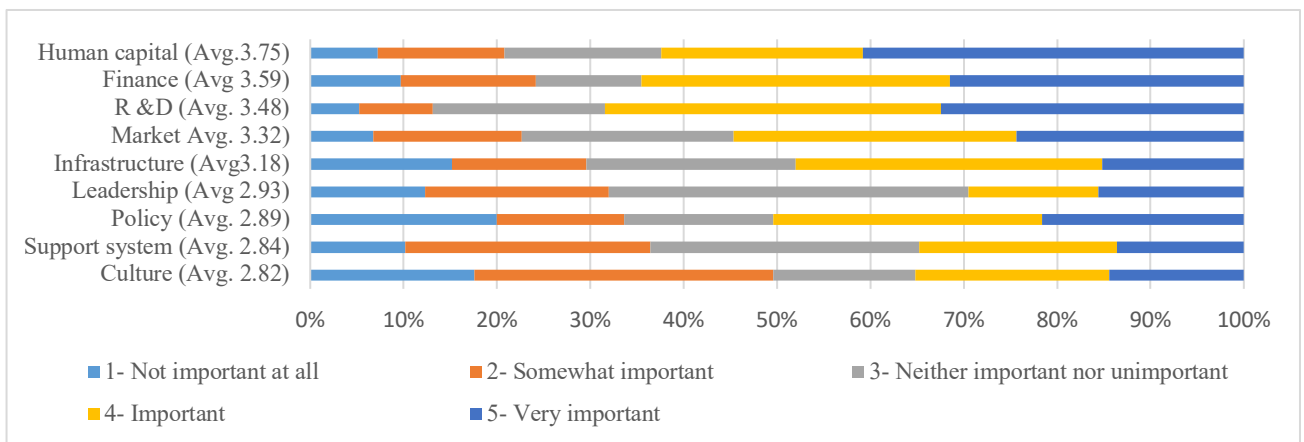


Figure 5. Components of entrepreneurial ecosystem.

Source: Prepared by author

Policy environment and governmental support for startups in Bangladesh

Figure 6 below shows the level of satisfaction with service and support provided by the government among startup entrepreneurs in the e-commerce sector in Bangladesh. It is evident from the figure that the entrepreneurs are not satisfied at all with the service and support provided by the government which indicates the requirement of changes and improvement of service and support provided by the government. 64% of respondents are either not satisfied at all or somewhat satisfied regarding tax rate (2.28). Regarding financial support (2.58), 52% of respondents are not satisfied at all or somewhat satisfied. The cost to start a business is not in favor of the entrepreneurs according to the graph. Around 50% respondents claim that starting a business (2.64) is too expensive. Only a little satisfaction can be realized in case of time to start a business according to around 18% respondents are totally satisfied with the time to start a business.

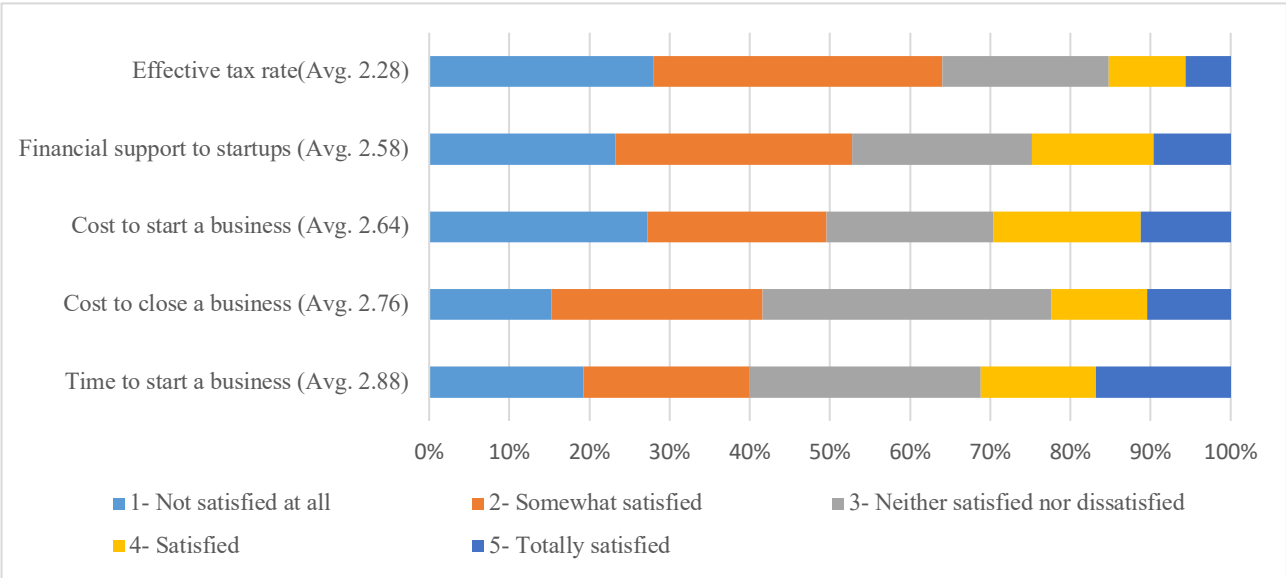


Figure 6. Services and support provided by the government
 Source: Prepared by author

Figure 7 below portrays the elements of the policy environment. In the policy environment section, 72% of respondents claim the tax administration (3.85) as a major or severe obstacle to start their business followed by 70% of entrepreneurs considered that the tax rate (3.79) is another major or severe obstacle for the e-commerce startup. Labor regulations (3.21) do not seem to be as an aid to the entrepreneurs. Obtaining business licensing and permits (3.19) is next obstacle considering the

number of respondents (48%). However, entrepreneurs did not find the following customs and trade regulations hard and fast for their business.

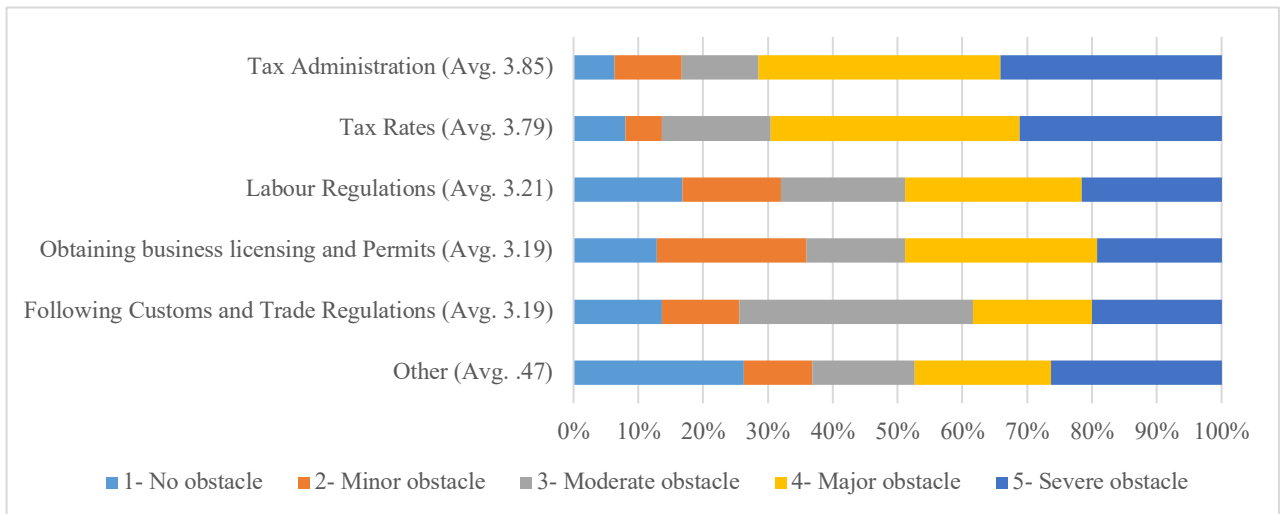


Figure 7. Elements of the policy environment
Source: Prepared by author

So, it can be said, there are moderate obstacles in terms of following customs and trade regulations in Bangladesh. On the other hand, according to entrepreneurs, there are severe obstacles in tax administration and tax rates in Bangladesh.

Financial environment for start-ups in Bangladesh

Figure 8 below depicts that 26% of entrepreneurs receive financial support from friends and family which is the most reliable source of finance for them. The second and third sources of finance, according to respondents, are debts (20%) and angel investors 15% respectfully. It can be said that having finance is a major barrier for start-up entrepreneurs in the e-commerce sector in Bangladesh. The financing organization might find it difficult to rely in investing on the new start-up business.

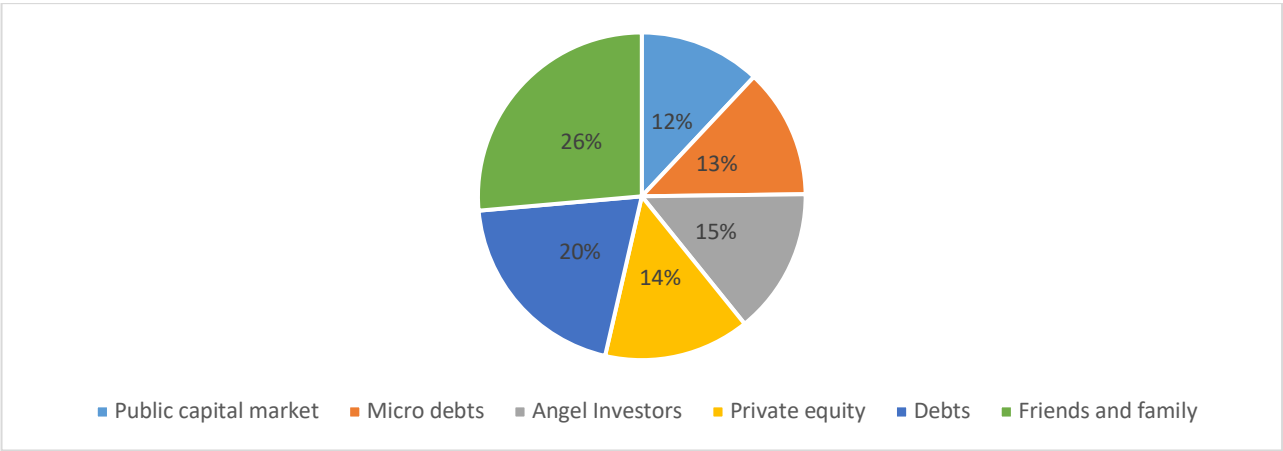


Figure 8. Sources of finance
 Source: Prepared by author

Figure 9 below shows available access to finance for entrepreneurs in Bangladesh. Access to finance for entrepreneurs remains a major problem in the e-commerce startup in Bangladesh. The entrepreneurs face problems having access to debt (3.08), equity finance (3.03) and grants (2.95) makes them rely on their friends and family. 45% respondents find it major or severe obstacle to access to debt finance. Almost the same result (44%) can be seen in access to equity finance. However, only regarding access to grants, the smaller number of respondents (38%) find it as a major or severe obstacle

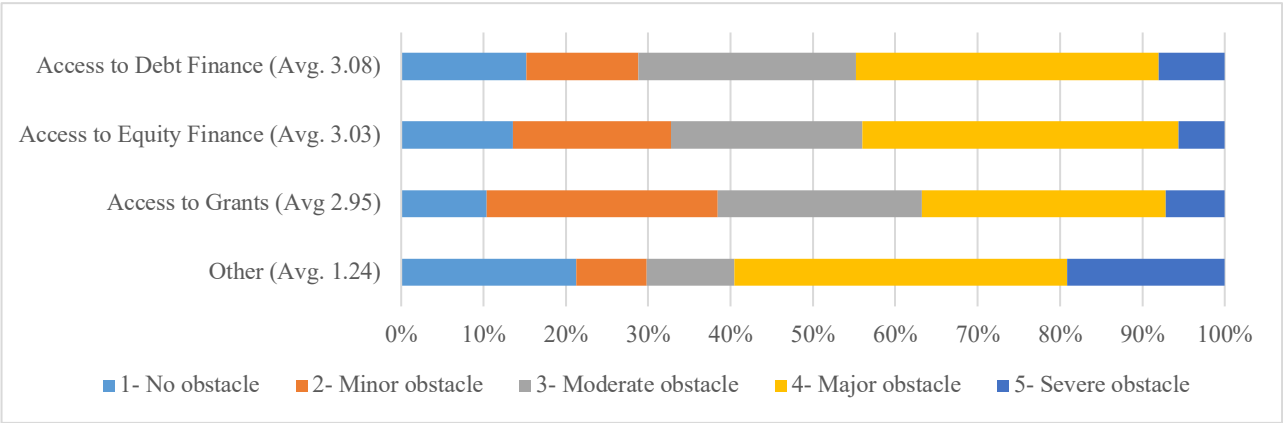


Figure 9. Financial elements

Source: Prepared by author

Business support services for startups in Bangladesh

Figure 10 below indicates the survey results about the satisfaction level among entrepreneurs regarding the available business support services. Findings show that (32%) of respondents are not satisfied at all with transport and logistics services (2.52). 26% of respondents are not satisfied at all with legal (2.64). Regarding entrepreneur friendly association (2.80) around half of the respondents are either not satisfied at all or somewhat satisfied. More than half of the respondents are either satisfied or totally satisfied with the private equity (3.40) services. However, the entrepreneurs are satisfied or moderately satisfied with the available business support service of energy (2.87) and accounting incubation (3.11).

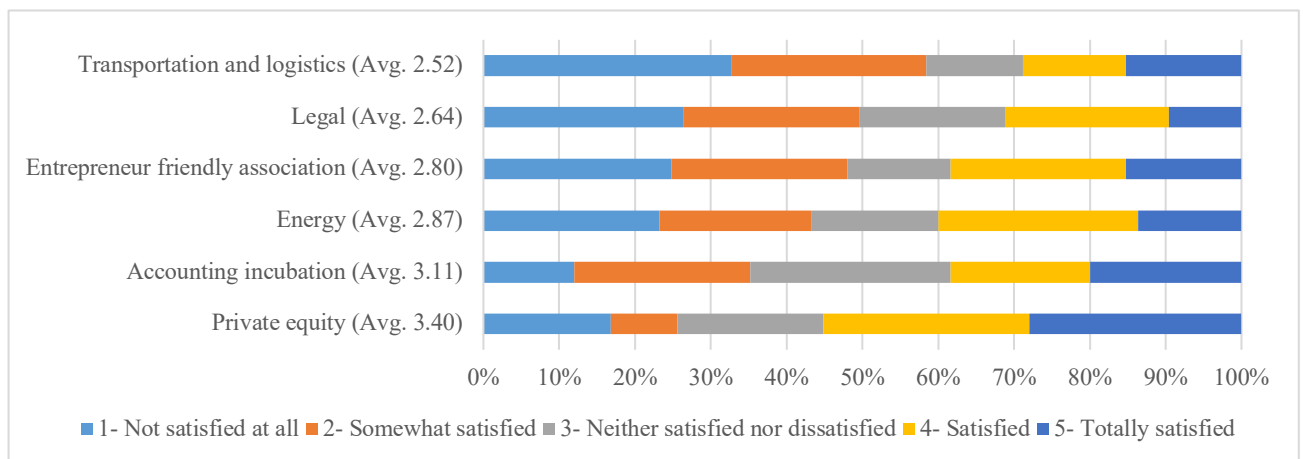


Figure 10. Available business support services

Source: Prepared by author

Educational environment and human capital for startups in Bangladesh

Figure 11 below presents that education does not satisfy entrepreneurs at all. This may be one of the reasons to feel human capital is the most important element. 40% of the respondents are not satisfied with the business schools (2.58) and 34% of the respondents are not satisfied at all with the education quality (2.64) of the country. On the other hand, 29% of the respondents are not satisfied at all with

entrepreneurship education (2.52). Hence, the employment of graduates (2.47) hinders according to the respondents.

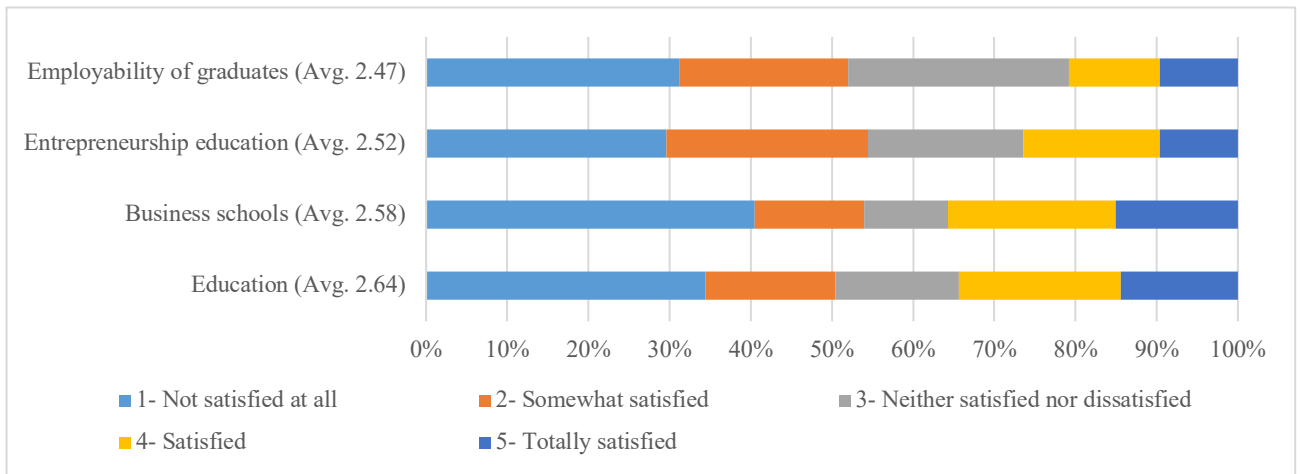


Figure 11. Educational service quality
Source: Prepared by author

Figure 12 below presents that the obstacles are transparent in terms of an adequately educated/ trained general workforce (3.03). 72% of the entrepreneurs responded that shortage of adequately educated or trained general workforce are either major or severe obstacle for their business. Most of the entrepreneurs (63%) expressed the availability of top managers with the qualifications in the business requires (3.0) in Bangladesh as major or severe obstacles. That clearly links the dissatisfaction of the education system and the availability of top managers with qualifications. Furthermore, according to 69% respondents, there is major or severe obstacle in the case of the Availability of IT people with the qualifications their business requires (2.68).

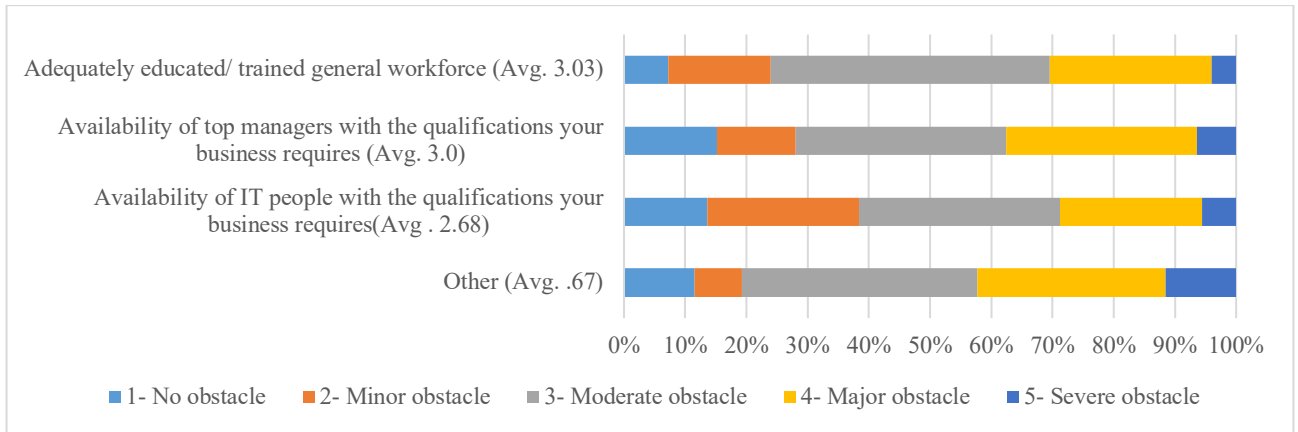


Figure 12. Human capital elements

Source: Prepared by author

Market characteristics for startups in Bangladesh

Figure 13 indicates that the access to international market (3.9) is vulnerable for the entrepreneurs of e-commerce sector in Bangladesh. 46% entrepreneurs find it difficult to enter the international market. Almost half of the respondents have the available information about the market (2.20), meaning that they do not consider this an obstacle for their business. 56% of respondents do not consider the size of the market (2.17) as an obstacle for their business. This clearly shows that there is a market to grow for the startup business.

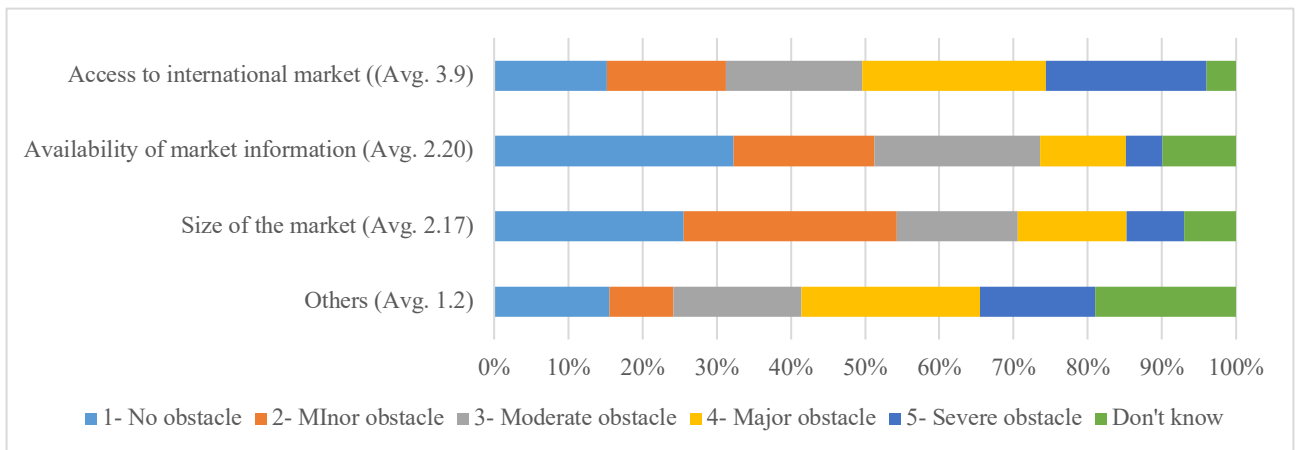


Figure 13. The elements of the market as obstacles

Source: Prepared by author

The changes suggested by entrepreneurs should be brought to get access to the market in order to increase their sales are easy access to international payment and money return policy for international payment cancellation, online payment, and swift delivery channel throughout the country and globally.

Infrastructure for startups in Bangladesh

From Figure 14 below, it can clearly be said that the transport (3.57), internet (3.36), and gas (2.98) are major or severe obstacles for their business. 71% of the entrepreneurs claim transportation is a major or severe problem for their business. As transportation is one of the key elements to run their business in e-commerce cannot be weak regarding service. Next is the internet, 62% of the respondents consider internet as a major or severe obstacle for their business. The business is based on internet connection and so the speed and the quality must be up to the level to run the business uninterrupted. Around half of the respondents referred gas as either a major or severe obstacle followed by almost the same number regarding telecom (2.93). Regarding electricity (2.51), about 40% respondents claim as a major or severe obstacle.

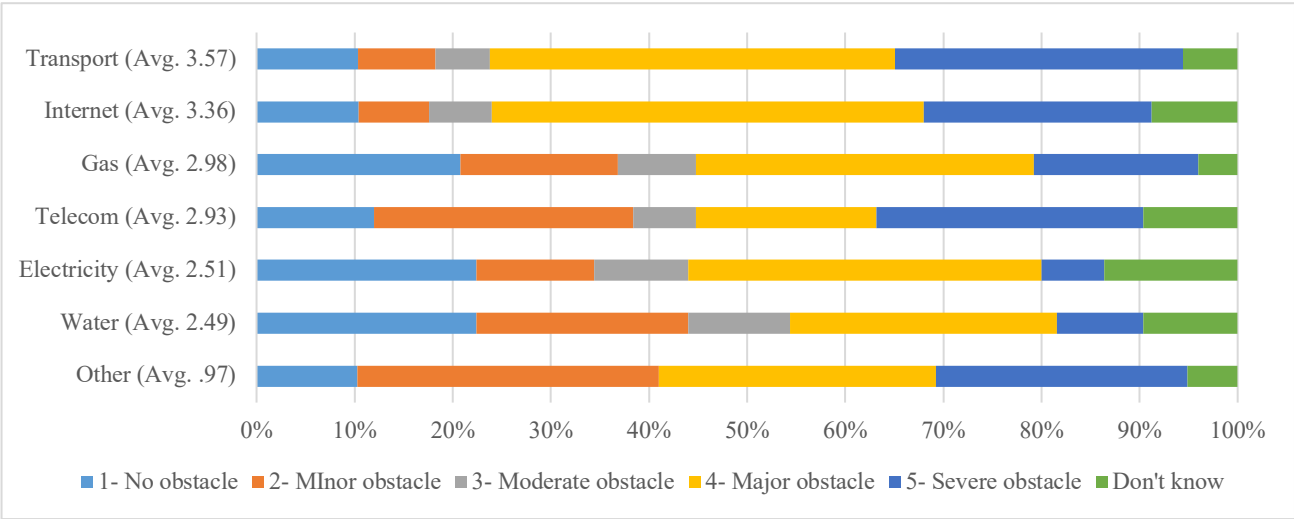


Figure 14.Elements of infrastructure as obstacle
Source: Prepared by author

Figure 15 below shows a connection with the previous figure of 14. 67% entrepreneurs are not satisfied with the availability of internet access (2.19). Followed by poor mobile network (2.38) resulting in poor internet access. 67% of entrepreneurs are not or somewhat satisfied with the availability of mobile networks. Regarding the connectivity services (2.8), 32% respondents referred this as neither satisfied nor dissatisfied.

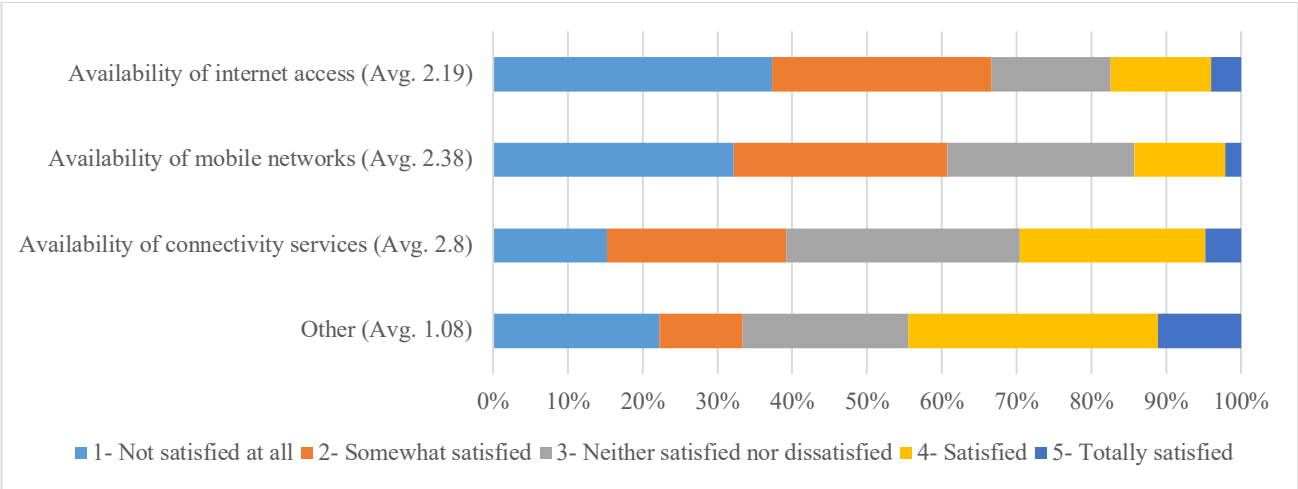


Figure 15. Elements of infrastructure
Source: Prepared by author

R&D activities for startups in Bangladesh

Figure 16 below shows the research and development aspects of the company. The survey results show that 35% of entrepreneurs are not satisfied at all with R&D collaboration between university researchers and business (2.2) followed by 30% somewhat satisfied which shows the lack of research to attract new people for being entrepreneurs. 50% of respondents are not or somewhat satisfied with

the opportunity for knowledge and skill building (2.58). The entrepreneurs show moderate trend of satisfaction with access to information (3.03).

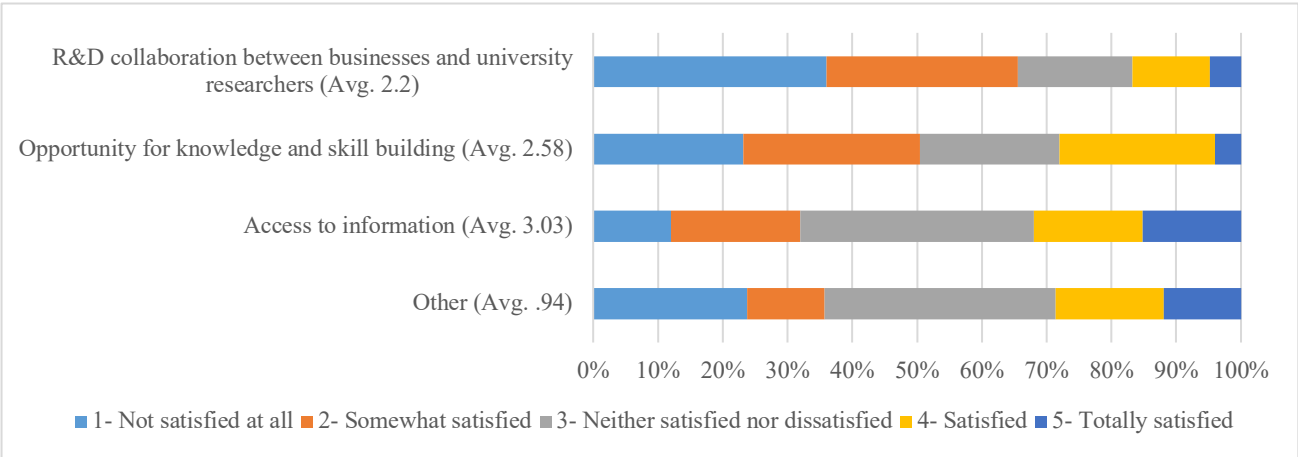


Figure 16. R&D activities
Source: Prepared by author

The suggestions given by entrepreneurs to improve the environment of R&D component. Entrepreneurs provided different ideas such as, time management, installing computerized data management system, proper inclusion of resources, easy access to specialists, access to information, the opportunity for knowledge and skill-building, business incubator, market Research about a competitor, quality control were some of their opinions that can be conducted to develop the e-commerce sector.

3.2. Key firm and entrepreneur indicators

Overview of sources of financing

Figure 17 below depicts the sources of finance. About 65% of the respondents claim that they receive funding from their friends and family members. Regarding angel investors 33% of entrepreneurs received financial support. The other source of finance is not having an impact on funding.

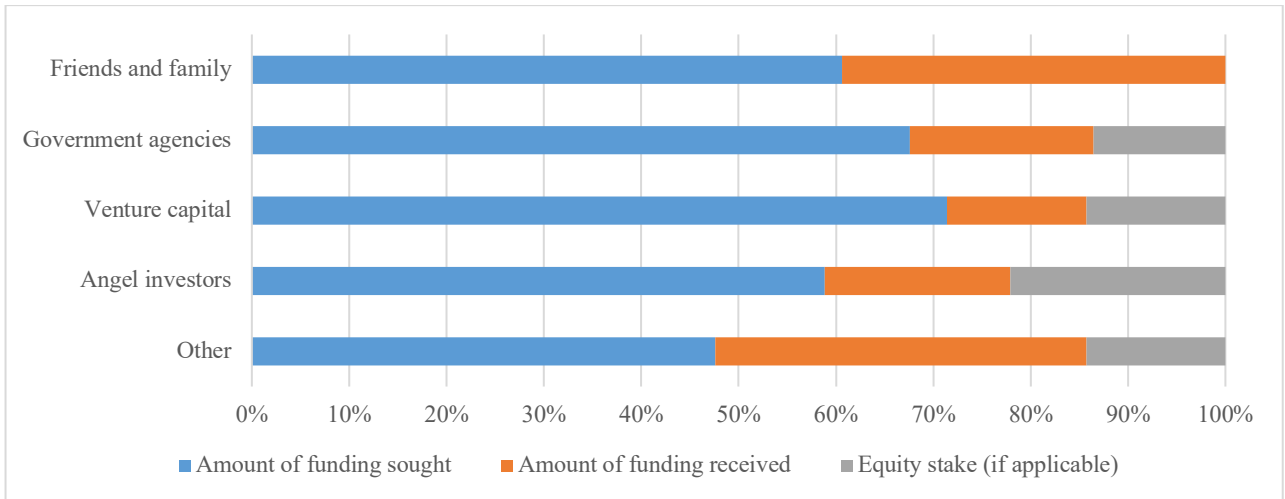


Figure 17. Sources of finance
Source: Prepared by author

Figure 18 below depicts the amount of funding sought and received by entrepreneurs as financial equity. Only 49% of entrepreneurs were successful in receiving amount of funding they sought from the bank. This clearly shows the non-reliance of the bank on entrepreneurs. The success rate of funding received is higher in venture capital (80%) than that microfinance institute (43%).

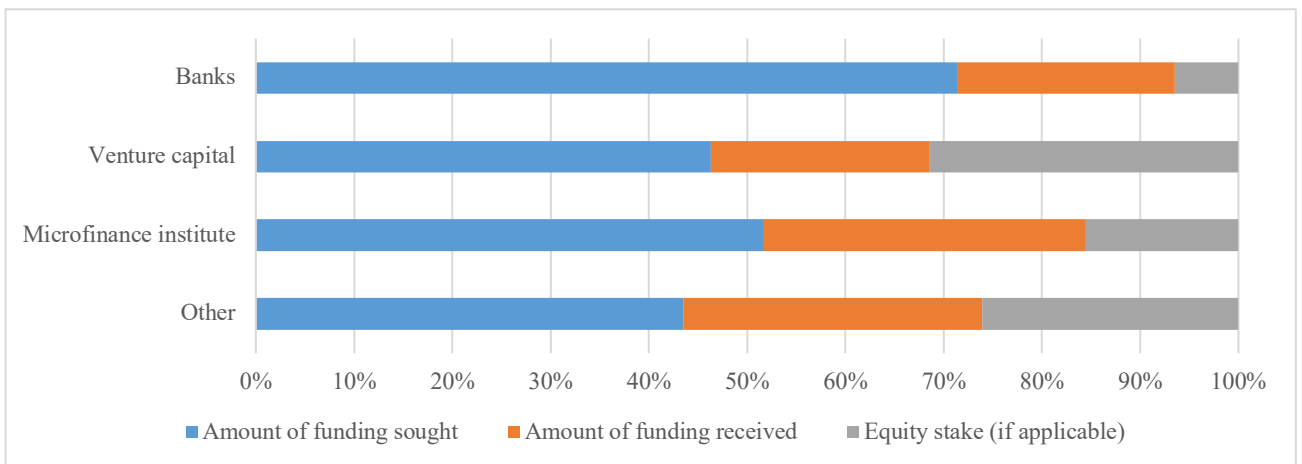


Figure 18. Financial equity
Source: Prepared by author

Figure 19 below presents the short time and long-time additional capital sought by entrepreneurs. The chart shows that 55 are seeking capital for the next 12 months in the kinds of equity, 40 are seeking

for 36 months. Regarding the debt, 66 entrepreneurs seek debt within the next 12 months followed by 19 for the next 36 months. Concerning the grants, 69 seek additional capital within next 12 months followed by 55 within the next 36 months.

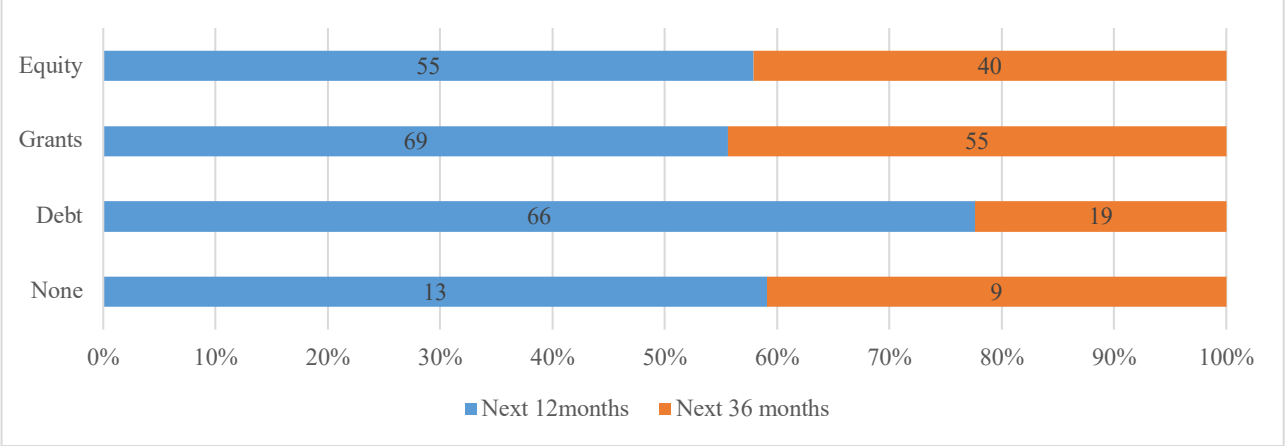


Figure 19. Additional capital
Source: Prepared by author

Operations of the company

From the Figure 20 below survey findings show that 92% startups generated revenue last year. While only 8% startup generated loss. This reflects the potential of the market for the startup to gear up and target more market segments. It is also mentioned that 28% startup organizations had profit margin between 06-10% followed by same percentage of companies (21%) earned profit margin of 0-5% and 11-15% respectively.

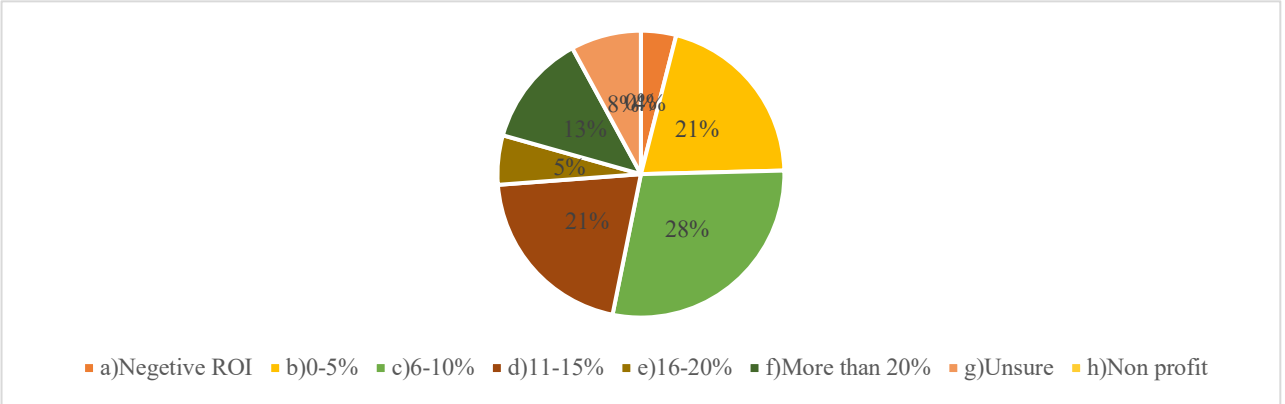


Figure 20. Profit margin (last year)
 Source: Prepared by author

Figure 21 below depicts the number of employees recruited by the startup. The nature of the startup leads them to recruit a smaller number of employees at the time of launching the company. Figure 21 shows that in the founding year 54 companies had 14 or less employees in the beginning. Currently, as shown in figure 21, the number decreased to 47. In figure 21 also shows that 51 had between 15-29 employees. With the time span, this number now reached 53. There is also increase in recruiting between 30-49 employees from 11 to 15. It is worth mentioning that the number of companies that employ fewer employees has decreased and the number of more employees recruited has increased. This reveals that there is potential to grow business in this sector.

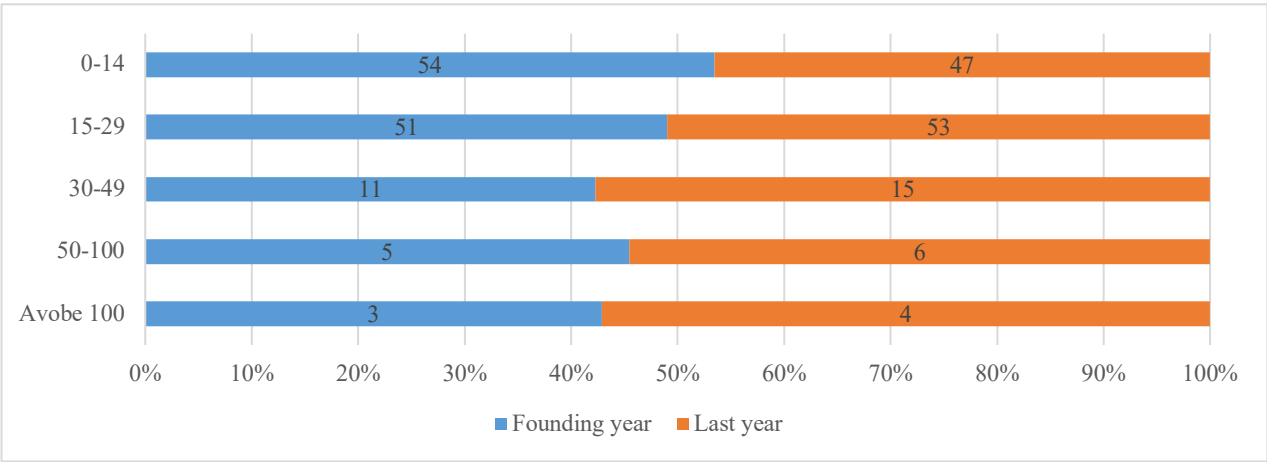


Figure 21. Permanent full-time employee (last year) and Full-time employee (founding year)
 Source: Prepared by author

Delivery of Infrastructure and Services

From Figure 22 below, For the connection of water 83 out of 110 entrepreneurs had to make informal gifts. Regarding gas 63 out of 96 entrepreneurs made informal gifts for the connection. Concerning electricity, almost half the people had to make informal gift. It is worth mentioning that almost no connection or services are available without informal gift or payment.

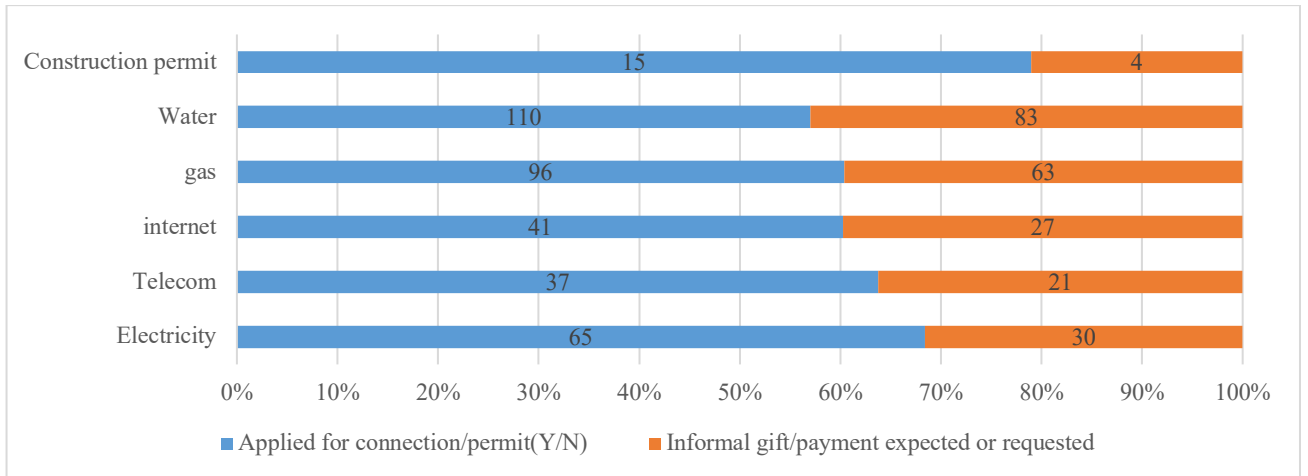


Figure 22. Delivery infrastructure
 Source: Prepared by author

Concerning the new services 57% entrepreneurs responded positively meaning that they brought new services to the market.

Reasons for engaging in entrepreneurship

Figure 23 below depicts the reason behind engaging in entrepreneurship. 39% entrepreneurs claim that they engaged entrepreneurship for combination of both to take advantage of business opportunities or there is no better choice for work. 30 % chose this profession for seeking better opportunities while they have job as well. It is also worth mentioning that 17% joined in entrepreneurship only to take advantages of business opportunities.

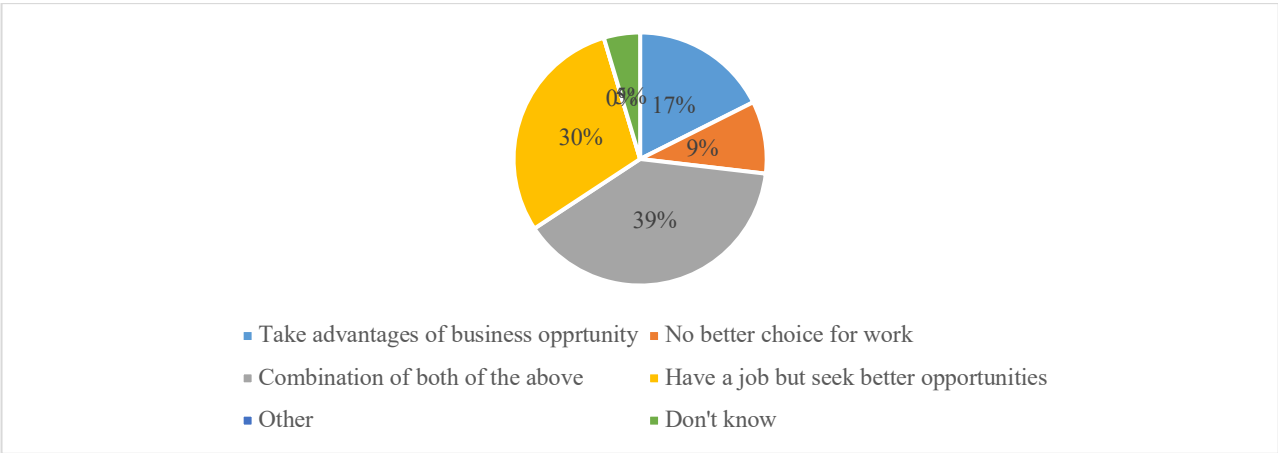


Figure 23. Reason to engage in entrepreneurship

Source: Prepared by author

Survey findings in Figure 24 also show that 52% entrepreneurs joined this because they have the chance to work independently and the freedom that can bring them new ideas and dreams to be an intrapreneur. 24% entrepreneurs shared that the possibility to increase their income that motivated them to become entrepreneurs. Only 15% joined entrepreneurship just to maintain their income. To conclude, it can be said that personal autonomy is the key reason to join this profession.

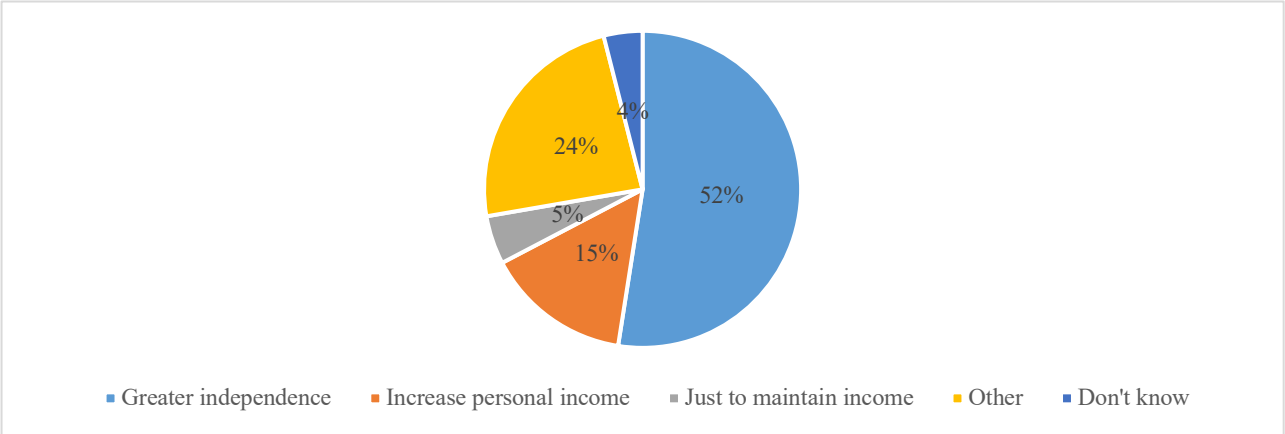


Figure 24. Motives for pursuing the opportunity

Source: Prepared by author

3.3. Discussion and recommendations

In this chapter the author discusses the basic findings of the survey. Furthermore, the author also analyzes the findings to identify the strengths and weakness of entrepreneurial ecosystem components followed by recommendations. Reviewing previous studies on entrepreneurial ecosystem components in the first chapter corroborated the importance of different entrepreneurial ecosystem elements. Based on the country and region, they showed that the elements of the entrepreneurial ecosystem are differently important in different regions and countries.

Entrepreneurial ecosystem components

The entrepreneurial ecosystem is a community that includes various factors which are interdependent and interact in geographical areas (Drori, Wright 2018). The main purpose of the entrepreneurial ecosystem is to promote the new business. Based on the survey findings, the author evaluates the strengths and weaknesses of the entrepreneurial ecosystem components in the e-commerce sector in Bangladesh. Each component is evaluated as either strength or weakness based on the survey findings.

Human capital and education - weakness

The basic skills and education of the people do not seem to be in line with the country's development. Human capital is the most important component of the entrepreneurial ecosystem for the startup e-commerce sector in Bangladesh considered by the entrepreneurs (41%). Entrepreneurial ecosystem is talent magnet (Hossain et al. 2020). Human capital with the qualification required by the company makes it successful. Survey findings reveal that the overall quality of human capital is weak according to the requirements of the survey companies. Survey findings assign human capital as one of the worst components of the Bangladeshi startup entrepreneurial ecosystem in the e-commerce sector. Though Bangladesh is in abundance with labor, entrepreneurs (63%) still complain regarding the shortage of top managers with the qualification they require. On the other hand, universities are providing thousands of graduates every year who do not possess any entrepreneurial lessons that create an imbalanced environment in the job market. Around 38% of entrepreneurs claim that most graduates remain unemployed. General skills and knowledge about entrepreneurship of the country's population hinder the development of startup e-commerce in Bangladesh. Hence, the school and universities do not prepare students for entrepreneurship oriented resulting in creative human capital also missing. The education system of a country provides the skilled human capital required by employers. So, to

make skilled human capital, practical work should be added to higher studies. The infrastructure for extracurricular activities could be increased. So, the students will get real-life experience.

Finance - weakness

Finance is the second most important component of entrepreneurial ecosystem considered by the entrepreneurs (31%). Naturally the startups are high cost and low revenue business in their early stage. Startups always require investment until it reaches growth and mature phase. The financial support system for entrepreneurs does not seem to be supportive for the establishment of startup e-commerce. Findings showed that most of the companies (66%) raised funding from their friends and family. The findings of the current study agree with the findings of Elston et al. (2015) who studied the role of informal capital on new venture formation and growth in China. Their findings suggested that the new venture will prefer informal capital over formal capital. According to the survey findings, it seems that debt financing, government grants do not perform relatively well. On the other hand, equity, angel investor does not seem to offer sufficient support to startup entrepreneurs in the e-commerce sector in Bangladesh. Survey findings also reveal that most of the organizations seek additional funding immediately which shows that the urgent need for funding.

Policy environment and government support - weakness

The policy of the country does not fully favor the entrepreneurs in establishing the startup e-commerce. Survey findings show that the tax administration and tax rate are the main obstacles to start the business. Regarding tax rate, 70% entrepreneurs find it not suitable for the startups business that may result demotivating them from starting business. In the beginning of company life, high tax rates may reduce the profits and fail the startups. On the other hand, entrepreneurs (48%) find starting a business expensive. Regulations of the country increase the cost of starting a business resulting in lower profits, therefore making startups less attractive to entrepreneurs. 48% entrepreneurs find it expensive to complete the required procedures to start a business that can divert them from spending money on other productive work. Having a license and permits easily encourages entrepreneurs for business. Around half of the entrepreneurs claim obtaining a license and permits hinders the starting a business. In addition, the government support is insufficient to fuel the entrepreneurs to startup businesses. More than half of entrepreneurs referred that financial support from the government does not fulfill their expectations.

Infrastructure - weakness

The most needed aspect of infrastructure for startup e-commerce entrepreneurs is the internet. The survey findings show that the internet is the major weakness in infrastructure. According to digital quality of life index 2021, Bangladesh has the worst mobile internet speed among 110 countries where Bangladesh ranks 103rd. Transportation is an inevitable part of an e-commerce business as the transportation system makes it possible to reach the customers with the orders on behalf of a business. The transportation system impacts greatly on expanding e-commerce. However, the findings show an adverse scenario regarding transportation. Around 75% entrepreneurs claim that transportation is an obstacle for e-commerce business. Delivery channel services hinder entrepreneurs from running the business smoothly.

Market - strength

Survey findings suggest that there is potential in the market for startup e-commerce to scale up the business. According to survey findings, the size of the market favors entrepreneurs to establish business in the e-commerce sector. Around 25% entrepreneurs found the size of the market favor them to grow followed by 30% found minor obstacle. To grow widely, entrepreneurs need to pierce in foreign markets (Rudeloff et al. 2021) the study reveals that entrepreneurs (50%) can get access to international markets with some minor obstacles followed by other half found it difficult to enter the international market.

R&D – weakness

From the aspect of R&D, it does not seem to be in line with the establishment of startup businesses. Survey findings also show that the collaboration between the business and the university for R&D does not exist. Lack of research and development forces entrepreneurs to replicate the ideas from another country which might not bring the same results regarding business being successful. BINH et al. (2020) who studied the effect of R&D expenditure on firm output evidence from Vietnam have confirmed that the expenditure on R&D increased the firm output. The current study shows a lack of research and development activities. Around 35% entrepreneurs claim that there is no R&D collaboration between business and university, followed by 30% claim there is little R&D collaboration between business and university.

Challenges and opportunities

Successful entrepreneurial ecosystems are talent magnets. Entrepreneurs need to retain, attract and constantly cultivate the best talents in their companies. This also involves potential employers and entrepreneurs (Bischoff, Volkmann 2018). According to Karim et al. (2018), start-ups are more critical of surviving because of lack of funding or investors. Survey findings emphasized that the main challenges entrepreneurs face are lack of funding and skilled human capital. Lack of skillful human capital is another major pitfall for e-commerce startup entrepreneurs. The entrepreneurs find it difficult to recruit the right employees with knowledge and qualifications. There are many other challenges found in the survey such as government policy and regulations, lack of financing and government grants. Transportation is also an obstacle in growing the e-commerce sector. More specifically regarding transportation, the entrepreneurs mean the delivery channel for the product supply and delivery. The entrepreneurs still need to rely on a few traditional delivery channels. According to entrepreneurs, there is no swift delivery right now. Having said that there are many obstacles but there is also an opportunity to gear up the e-commerce sector. It is worth mentioning that the survey findings uncovered the market as a big opportunity for the e-commerce sector in Bangladesh.

Government role

The role of government directly impacts the functioning of business activities as there are various laws and regulations which must be followed by the Entrepreneurs in order to stay away from any conflicts and issues (Drori, Wright 2018). The government of Bangladesh has taken new initiative by giving commitment and making changes in E-Commerce business. There are various roles and support which is played by government in subsidy, innovating direction, standard setting objectives, improved infrastructure, and privacy. Survey findings reveal that the government role is not satisfactory level according to the entrepreneurs in the e-commerce sector in Bangladesh. Entrepreneurs across the country find tax administration disadvantageous to business. Findings also show that the technological infrastructures e.g., internet, mobile network and so on, hinder the local e-commerce sector from competing globally. Laws and regulations set by the government are currently unfavorable to the e-commerce sector in Bangladesh and this often leads to a complex situation in handling the organization.

The researcher makes the following recommendations:

Efforts need to take from many levels to ensure the advancement of entrepreneurial ecosystem conditions in the e-commerce sector in Bangladesh, for example.

- Improvement concerning access to finance can be solved by making an alternative funding tool for startups. Where different entities can join and enjoy the profit or return on equity, such as individuals, banking organizations, private financial organizations,
- The government needs to form an exclusive startup policy that will offer multiple benefits to the startup entrepreneurs. The interest rate and conditions to get debt finance should be brought within the reach of entrepreneurs.
- Getting business permits and licensing must be made easier. One of the steps can be getting the permits and licensing via online and that will save their invaluable time and money.
- From the perspective of infrastructure, internet quality and speed need to improve. As for e-commerce business, the internet plays a vital role in running the business. Delivery infrastructure and services should be made without any informal payment. Using an online platform could be a solution.
- In Bangladesh most of the buyers (95%) pay cash on delivery, the rest 5% is made through credit or debit cards, banking channels and or mobile banking channels Muhammad Z. I. (2015). For the domestic market, online payment must be made available, bringing more people to get the online banking system used. Here, the central bank might play an important role in asking the private and public banks to motivate the customers to use more debit and credit cards. To pierce into the international market, the government should make a policy for international payment gateway. In case of order cancellation for international payment, the entrepreneurs find it difficult to return the money because of bureaucratic system set by the central bank.
- Using technology and fintech platforms can make the tax payment secure and seamless. In addition, this will make the tax administration less bureaucratic. Tax exemption or rebate can be another option to ease the tax burden at the beginning of the establishment of the company. Also, making different tax rates at different phases of company lifetime can encourage more entrepreneurs.

- The government needs to ensure that the environment helps investors to invest in the startup. They must feel secure, and barriers should be limited for foreign investors to invest in the startup. The government may bring required changes to the Foreign Exchange Regulations Act 1947 that can motivate foreign investors to invest in the e-commerce sector.
- To nurture innovation and talents, infrastructure at colleges and universities need to be improved. The related ministry and authorities can gather knowledge on entrepreneurial studies and skill building activities at the university level visiting other countries where entrepreneurship is taught as a priority at the university level. To promote culture of innovative entrepreneurial mindset among the students, the entrepreneurial universities need to increase their expenditure on research and development.
- Business incubators can play a vital role for nascent startup companies in their early stage by providing them with advice, funding, and mentors. For example, they can provide startup access to finance with seed funding, coaching them with expertise in their early stage.
- If the students learn how to start a business at the colleges or university level that may increase the probability of being an entrepreneur. So, the education system of Bangladesh should lead in providing the skills to foster entrepreneurship. Entrepreneurship programs at the university level can be offered to all the students irrespective of their study background.
- Some special courses at college and university level can be offered to those who do not have any entrepreneurial skills and would like to become an entrepreneur.
- Universities can organize competitions for the students to bring their new startup ideas and present it therefore the top selected ideas can be recommended to the public and private financial support organization to get financial support.
- The entrepreneurs may find finance or other entrepreneurial ecosystem components a problem for them. Therefore, consultation for startup entrepreneurs can be formed publicly or privately to provide the entrepreneurs with consultation on the actual problems they are facing.
- Normally the commercial bank does not invest in high-risk organizations. So, the central bank might keep separate funds for startups loans that can be disbursed by the commercial banks and can use the certificate of entrepreneurs as collateral. They might also give the entrepreneurs a grace period to repay the loan that can ease the entrepreneurs and concentrate on the business.

CONCLUSION

The research aim of the thesis is to determine the strengths and weaknesses of the startup entrepreneurial ecosystem in the E-commerce sector in Bangladesh. For this purpose, the author has made an extensive study of the elements of entrepreneurial ecosystem model targeting the startup entrepreneurs in e-commerce sector in Bangladesh. Leadership, markets, human capital, research and development, financing, support services, infrastructure, policy and regulatory framework, and culture of entrepreneurial ecosystem components were investigated in the study. Within the nine components, a few subcategories were distinguished to widen the general structure and make it more straightforward for investigation.

A total of 35 questions have been used in this data analysis, which has been divided into three sections. Total 125 responses were received from the startup entrepreneurs in the e-commerce sector in Bangladesh. The sample comprised of 44% of the responses submitted by entrepreneurs having experience of 0-1 year, 36% having 2-5 years, 12% having 6-10 and 8% have more than 10 years.

To fulfil the aim, the following research questions have been discussed:

1. What are the components of the entrepreneurial ecosystem for start-ups in the e-commerce sector in Bangladesh?
2. What are the ecosystem-related opportunities available for entrepreneurs while starting a new venture in Bangladesh?
3. What are the ecosystem-related challenges faced by entrepreneurs while starting a new venture in Bangladesh?
4. What is the role of the government for start-ups in the e-commerce sector in Bangladesh?

From the study, it can be concluded that the important elements of the entrepreneurial ecosystem for startups in the e-commerce sector in Bangladesh are culture, policy, markets, human capital, finance. Several factors, including leadership and culture, the size and significance of the organization, and the maturity of the organization all played a role in the dismantling of entrepreneurial ecosystem into numerous subordinate organizations.

According to the primary data, it is being found that there are various opportunities that can be gained by startup entrepreneurs while starting a business in e-commerce sector in Bangladesh. The e-commerce company may have access to a huge market and new customers which can help in increasing the profitability and growth of the business. It is important to identify the target market so that they can know the customer and the area in which products and services must be offered. The entrepreneurs can also increase their customer base by developing products and services to its customers as compared to competitors. They can also attract a large number of consumers in a new market of E-commerce business by developing goods and services through research and development.

As per the analysis of primary data, it is identified that there are several challenges that are associated with establishing a new startup e-commerce in the Bangladesh market. The problems that entrepreneurs face can reduce their morale and motivation level to set e-commerce businesses in Bangladesh. Investment is one of the major problems that can affect the functioning of business activities. In order to start the e-commerce business, it is necessary to identify the investors by attracting and providing them with the detailed structure of the business so that they can invest in the business and provide the required funds. Another challenge that must be addressed by entrepreneurs is to understand the laws and legislation of Bangladesh so that organizations do not face problems and run their businesses smoothly. Entrepreneurs must also focus on maintaining healthy relations with local companies who are already in the business for long run that can help in making them familiar with local culture to attract people and provide information about their products and services.

The government plays vital role in subsidy, innovating direction, standard setting objectives, improved infrastructure, and policy for startup entrepreneurs to start their new business in e-commerce sector in Bangladesh. There are various legislation and regulations which are framed by Bangladesh government in order to establish and run the startup business. Bangladesh government is focusing on boosting the start-up companies so that they can set their venture and bring their new ideas in fulfilling the need and requirement of customers. The role of government directly impacts the functioning of business activities as there are various laws and regulations which must be followed by the entrepreneurs in order to stay away from any conflicts and issues.

From the findings, it has been seen that overall entrepreneurial ecosystem of Bangladesh is not at satisfactory level to the entrepreneurs. To develop this startup entrepreneurial ecosystem, the author has made recommendations that include government, banks, colleges universities and other relate groups. The government must take the necessary steps to attract new startup entrepreneurs, for example, tax cuts, startup-friendly laws and legislation, less bureaucracy and cost to start a business. The other step could be developing the infrastructure; the quality of the mobile network, the speed of the internet, transportation, and utilities should be developed. In college and university, the study of

entrepreneurship should be included in the syllabus. So, the process of being an entrepreneur can start while studying.

Overall, the major findings of this thesis uncover that the enterprising soul in Bangladesh is high. The business environment challenges hindering e-commerce entrepreneurs are identified with the public policy, program and projects, where entrepreneurs indicate the regulatory framework towards new startup creation is bureaucratic, tedious and costly. Tax rate is felt to be high. Access to finance is generally reliant upon self-financing or utilizing friends and family support. Banks abstain from financing e-commerce. E-commerce entrepreneurs have a positive attitude towards internationalization, however, facing difficulties in having access to enough knowledge and contacts and so on. Last, the education framework in Bangladesh needs to rebuild to stimulate entrepreneurial mindset among youngsters as well as provide entrepreneurial knowledge and skill to young entrepreneurs through its universities, colleges.

There are some limitations of the study. First, the study was done only in the e-commerce sector. Second, the sample size used in the study may not be representative of the total population. The online survey questionnaire is used in this study, which may not be comprehensive to some extent to respondents. The respondents might get the clarification of any doubt about the questionnaire if it was done through interviews. It would be interesting to explore in future in different sectors emphasizing a couple of entrepreneurial ecosystem components.

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Appendix 1. Questionnaire

THE CHARACTERISTICS OF THE START-UP ENTREPRENEURIAL ECOSYSTEM IN THE E-COMMERCE SECTOR IN BANGLADESH

This survey questionnaire has been developed by Md Sahadat Hossain, who is a student of MBA at TALTECH. Please spend a few minutes and complete this questionnaire. I assure you that all your answers will be used only for research purposes and responses to the questionnaire will be kept anonymous. The purpose of this survey is to determine the strengths and weaknesses of the startup entrepreneurial ecosystem in the E-commerce sector in Bangladesh. I kindly request you to offer your opinions on the following questions to complete my thesis. Your response to all the questions will be appreciated. This survey will only take about 7-10 minutes

I. Demographic Information

1. Age: < 21/ 21-30/31-40/41-50/above 51
2. Gender: M/F/other
3. Education: SSC / HSC/Graduate/Postgraduate/
4. Type of firm (Select One): ___ Manufacturing ___ Services
5. Number of Employees (Number):
6. Yearly Turnover.....
7. Years of entrepreneurial experience: 0-1 year/2-5/6-10/ more than10 years
8. Sector (Select One): (Add/Remove Sectors if necessary)
 - o Food
 - o Tobacco
 - o Textiles
 - o Garments
 - o Leather
 - o Wood
 - o Paper
 - o Publishing (Print and Recorded Media)
 - o Refined Petroleum Products
 - o Chemicals
 - o Plastics and Rubber
 - o Non-metallic Mineral Products
 - o Basic Metals
 - o Fabricated Metal Products
 - o Machinery and Equipment
 - o Electronics
 - o Precision Instruments
 - o Transport Machines
 - o Furniture

- o Recycling
- o Retail
- o Wholesale
- o Information and Communication Technology
- o Hotel and Restaurant
- o Service of Motor Vehicles
- o Construction
- o Transport
- o Miscellaneous

9. Legal Status (Select One): (use locally relevant classifications)

- o Corporation
- o Limited Liability Company
- o... ..

10. Year founded (Date):/...../.....

II. Entrepreneurial Perceptions of the Ecosystem

11. How important are following the components of entrepreneurial ecosystem for your company?

	1.Not important at all	2.Somewhat important	3.Neither important nor unimportant	4.important	5.Very important	Don't know
Policy						
Culture						
Human capital						
Support system						
Finance						
Market						
Leadership and active network of companies						
R & D						
Infrastructure						
Other						

If you selected other, please specify what you mean?

12. How satisfied are you with the quality of services and support provided by the government?

	1. Not satisfied at all	2. Somewhat satisfied	3. Neither satisfied nor dissatisfied	4. satisfied	5. Totally satisfied	Don't know
Effective tax rate						
Financial support to startups						
Cost to start a business						
Time to start a business						
Cost to close a business						
Other						

If you selected other, please specify what you mean

13. To what degree are the following elements of the policy environment an obstacle to the current operations of your company?

	1. No obstacle	2. Minor obstacle	3. Moderate obstacle	4. Major obstacle	5. Severe obstacle	6. Don't know
Obtaining business licensing and Permits						
Following Customs and Trade Regulations						
Labour Regulations						
Tax Administration						

Tax Rates						
Other						

If you selected other, please specify what you mean.....

14. Which changes should be undertaken in the current **policy set by the government** to boost start-ups in Bangladesh?

--

15. Which sources of financing are available to the e-commerce start-up entrepreneurs of Bangladesh?

	1.Strongly disagree	2.Somewhat Disagree	3.Neither agree nor disagree	4.agree	5.Strongly agree	Don't know
Micro debts						
Angel investors						
Friends and family						
Private equity						
Debts						
Public capital markets						
Venture capital funds						
Other						

If you selected other, please specify what you mean.....

16. To what degree are the following elements of financing an obstacle to the current operation of your company?

	1.No obstacle	2.Minor obstacle	3.Moderate obstacle	4.Major obstacle	5.Severe obstacle	6.Don't know

Access to debt finance						
Access to equity finance						
Access to grants						
Other						

If you selected Other, please specify what you mean ...

17. How satisfied are you with the quality and availability of business support services?

	1. Not satisfied at all	2. Somewhat satisfied	3. Neither satisfied nor dissatisfied	4. satisfied	5. Totally satisfied	Don't know
Legal						
Accounting incubation						
Private equity						
Transportation and logistics						
Energy						
Entrepreneur friendly association						
Other						

If you selected Other, please specify what you mean ...

18. How satisfied are you with the quality and availability of educational service?

	1. Not satisfied at all	2. Somewhat satisfied	3. Neither satisfied nor dissatisfied	4. satisfied	5. Totally satisfied	Don't know
Education						
Employability of graduates						
Entrepreneurship education						
Business schools						
Other						

If you selected Other, please specify what you mean ...

19. To what degree are the following elements of Human Capital an obstacle to current operations of your company?

	1. No obstacle	2. Minor obstacle	3. Moderate obstacle	4. Major obstacle	5. Severe obstacle	6. Don't know
Availability of top managers with the qualifications your business requires						
Adequately educated/ trained general workforce						
Availability of IT people with the qualifications your business requires						
Other						

If you selected Other, please specify what you mean ...

20. To what degree are the following elements of the market an obstacle to the current operations of your company?

	1.No obstacle	2.Minor obstacle	3.Moderate obstacle	4.Major obstacle	5.Severe obstacle	6.Don't know
Access to international markets						
Availability of market information						
Size of the market(domestic)						
Other						

If you selected Other, please specify what you mean ...

21. Which changes should be undertaken in terms of the **market access** so that it would be easier to sell your products and services?

22. To what degree are the following elements of infrastructure an obstacle to current operations of your company?

	1.No obstacle	2.Minor obstacle	3.Moderate obstacle	4.Major obstacle	5.Severe obstacle	6.Don't know
Electricity						
Telecom						
Internet						
Water						
Gas						
Transport						
Other						

If you selected Other, please specify what you mean ...

23. How satisfied are you with the following elements of infrastructure?

	1.Not satisfied at all	2.Somewhat satisfied	3.Neither satisfied nor dissatisfied	4.satisfied	5.Totally satisfied	Don't know
Availability of internet access						
Availability of mobile networks						
Availability of connectivity services						
Other						

If you selected Other, please specify what you mean

24. How satisfied are you with the R& D activities available?

	1.Not satisfied at all	2.Somewhat satisfied	3.Neither satisfied nor dissatisfied	4.satisfied	5.Totally satisfied	Don't know
R&D collaboration between businesses and university researchers						
Access to information						
Opportunity for knowledge and skill building						
Other						

If you selected Other, please specify what you mean ...

25. Which changes should be undertaken to improve **R&D cooperation** for your company?

III Key Firm and Entrepreneur Indicators

Finance

26. During last year, how much equity financing did this firm obtain from all of these external sources?

Source	Amount of funding sought	Amount of funding received	Equity stake (if applicable)
Friends and family			
Angel investors			
Venture capital			
Government agencies			
Other companies			
Other			
None			

If you selected Other, please specify what you mean ...

27. During last year, how much debt financing did this firm obtain from all of these outside sources?

Source	Amount of funding sought	Amount of funding received	Equity stake (if applicable)
Banks			
Microfinance institute			
Venture capital			
Other			
None			

If you selected Other, please specify what you mean ...

28. How much additional capital of the following kinds are you seeking?

Type of capital	Next 12 months (1 year)	Next 36 months (3 years)
Equity		
Debt		
Grants		
None		

Market and sales

29. What was this firm’s profit margin (as a percentage of total investment) for last year

- a) Negative ROI (Loss)
- b) 0-5%
- c) 6-10%
- d) 11-15%
- e) 16-20%
- f) More than 20%
- g) Unsure
- h) N/A (e.g., nonprofit)

Human capital

30. Last year, how many permanent, full-time individuals worked in this firm?

.....

31. In the year of founding, how many permanent, full-time individuals worked in this firm?

.....

32. In the year of founding, how many temporary, full-time individuals worked in this firm?

.....

Infrastructure

33. Delivery of Infrastructure and Services:

	Applied for connection/permit(Y/N)	Number of days to receive a connection/approval	Informal gift/payment expected or requested

Electricity			
Telecom			
internet			
gas			
Water			
Construction permit			

R & D

34. Has your firm introduced any new or significantly improved products or services in the past 3 years? Please provide a brief description:

.....

Business Support Services

35. Are you involved in this start-up to take advantage of a business opportunity or because you have no better choices for work?

- Take advantage of business opportunity
- No better choices for work
- Combination of both of the above
- Have a job but seek better opportunities
- Other (Please specify)
- Don't Know

36. Which one of the following do you feel is the most important motive for pursuing this opportunity?

- Greater independence
- Increase personal income
- Just to maintain income
- Other (Please specify).....
- Don't Know

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