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ORIGINAL SCIENTIFIC PAPER

Accelerating Distribution Channels Through a Digital Entrepreneurship Ecosystem: Women's Entrepreneurship



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A B S T R A C T

Conventional distribution has many stages, including manufacturers, wholesalers, retailers, end users, and returns. Although several independent firms work hard through conventional distribution channels to reach consumers, the use of digital entrepreneurship platforms is poorly organized, so engaging the local workforce in distribution cannot flourish. A supply chain with an effective distribution network can be cost-effective, timely, and reliable in reaching all consumers. This qualitative case study is based on Accelerating Bangladesh, which provides education, meetings, and training to women-led digital business entrepreneurs, enabling them to expand in sales, delivery, and distribution. The study examines women's digital entrepreneurship, in which digital entrepreneurs reach consumers through a socially beneficial distribution ecosystem. The study results show that embracing digital entrepreneurship creates a working opportunity for the community workforce in a delivery partnership. Through this business practice, entrepreneurs contribute socially by creating business value.

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Introduction

The process of creating new job opportunities in local communities is complex and challenging. These difficulties stem from a confluence of social factors, a lack of training and specialized knowledge, and institutional problems, such as poor infrastructure and scarce resources. Although significant gaps persist in many sectors, St-Denis and Hollister (2024) stress that experience and awareness are crucial to overcoming these obstacles. Opportunities and services in developing countries are frequently grouped according to competence, which may unintentionally restrict access for the workforce, which makes up about half of the population. Despite the enormous potential of this workforce to drive socioeconomic advancement, structural limitations often result in its underutilization. MacKenzie and McLachlan (2023) list several major obstacles to advancement, including restrictive laws, environmental issues, cultural standards, and unequal access to resources. These obstacles not only prevent certain industries from expanding but also produce inequalities that exacerbate social inequality. To tackle these issues, the government must adopt a proactive, all-encompassing strategy that can be crucial in improving the economic and non-economic facets of community development. Initiatives to improve the socioeconomic structure, such as infrastructure, education, and legal reforms, can foster an environment more conducive to job growth. Furthermore, as Loza and Roscoe (2024) noted, acquiring a substantial amount of cash is crucial but insufficient to promote sustainable development. Employees must be given opportunities that match their abilities and potential. Establishing training pathways for the workforce, encouraging entrepreneurship, and guaranteeing fair access to resources and support networks are all part of this. Labor has yet to realize its full potential in advancing the country in the absence of these complementary policies.

A good way to meet customer requirements, socially helpful distribution departs from conventional approaches by emphasizing inclusivity and acknowledging people's varied tastes. The fundamental idea behind this notion is the integration of community involvement into supply chain operations, which not only promotes economic empowerment but also fosters a sustainable environment for resource distribution. This framework is further strengthened by digital entrepreneurship, which leverages

technology to connect underserved markets and expand distribution channels, thereby ensuring local communities' financial sustainability (Bresciani et al., 2021; Colbert et al., 2016). Market-driven distribution networks make products and services accessible to a larger audience by leveraging community members' skills to overcome important accessibility barriers. Including local labor in these networks offers a practical way to fight unemployment, especially in places with few economic prospects. Research indicates that strengthening community resilience and promoting economic independence are two benefits of empowering people through involvement in distribution networks (Amany, 2025; Rolando & Mulyono, 2025; Wang et al., 2025). Entrepreneurship education, which equips people with the skills, know-how, and confidence to launch and run profitable businesses, is another vital component of community development. Evidence from earlier studies highlights the significant influence of entrepreneurship training, with participants frequently reporting better outcomes and greater creativity in their business endeavors (Boldureanu et al., 2020; Lopes et al., 2025). Therefore, encouraging entrepreneurship education is an ideal way to build prosperous, self-sufficient communities.

The growth of women entrepreneurs has been examined in several earlier studies that used conventional platforms to foster community connections. In several instances, entrepreneurs have founded businesses and inspired community members to pursue entrepreneurship. One of the well-known subjects in the realm of entrepreneurship is education. To inspire people, the entrepreneurship education revolution continues to spread from the general public to higher education institutions. However, there has not been enough research done on how digital entrepreneurship education may support women entrepreneurs in building entrepreneurial platforms for community workers. This study investigates the Accelerating Bangladesh program, which is part of Bangladesh's ICT Division and guides women entrepreneurs through digital entrepreneurship education, serving as a distribution platform that links community members within an ecosystem. In the distribution process, intangible resources are added through skills, knowledge, awareness, and confidence, while tangible resources are added through capital, income, savings, investment, and assets. Adopting digital entrepreneurship does not alter distribution operations; rather, it involves multiple workforces within a single distribution network to reach all consumers.

More specifically, the objectives of the study are as follows:

- To investigate online-based business development through expert entrepreneurs.
- To explore the role of digital entrepreneurship in distribution channels.
- To investigate the benefits of the community workforce from online-based distribution.

Literature Review

Conventional Distribution

For products to move smoothly from raw materials to final customers, distribution management is essential. Throughout the supply chain, it establishes connections between suppliers and customers that generate value. This process, which includes several steps such as planning, sourcing, warehousing, and distribution, is crucial for enabling the flow of products and services. While preserving operational effectiveness, every link in the chain helps to meet customer demand (Croxton et al., 2001; Mentzer et al., 2001). Businesses must ensure that the supply chain connects each step efficiently while also aligning their products with consumer expectations. Customers are guaranteed to obtain the appropriate products at the appropriate time and location due to this alignment (Christopher, 1992). Companies can increase customer loyalty and confidence by achieving supply-and-demand synchronization. The SCOR model, created by the Supply Chain Council (2008), is a well-known framework for comprehending supply chain operations. Plan, Source, Make, Deliver, and Return are the five main phases that are described in the paradigm. From planning and acquiring materials to delivering the finished product and managing returns, every step is essential to preserving the flow of goods and services (Singh & Kumar Singh, 2025; Yuenyong et al., 2026). To ensure a competitive and effective supply chain, businesses must manage these phases effectively. Despite its significance, many businesses struggle with distribution, particularly due to labor shortages, financial constraints, limited market access, and regulatory barriers. To overcome these obstacles, businesses often turn to distribution channels, which act as intermediaries between producers and customers. According to Du (2025), these channels enable businesses to reach a wider audience and distribute their goods more effectively, even in situations where they lack the infrastructure or resources

they need. Additionally, technology has become a vital tool for businesses seeking to enhance their distribution plans. Businesses may create robust distribution networks and maintain their competitiveness through technological integration (Shen et al., 2025; Witosari et al., 2025). Businesses frequently encounter increased competition from regional suppliers and distributors in areas with weak institutional contexts, such as those experiencing economic instability, a lack of infrastructure, or regulatory restrictions. Strong community relationships can provide a strategic advantage despite these obstacles. Businesses can use regional networks and bolster their market presence by establishing strong ties with area distributors and suppliers (Wang et al., 2025; Zhu, 2020).

Digital Entrepreneurship

According to Khrais and Gabbori (2023), digital entrepreneurship is a creative and dynamic approach to starting and running companies that are largely powered by digital tools, social media, mobile applications, and the internet. To communicate with clients, provide products and services, and conduct international operations from almost anywhere in the world, this entrepreneurial model leverages the enormous potential of digital platforms. Digital entrepreneurship, in contrast to the traditional company, frequently flourishes in a virtual ecosystem where companies can function with little overhead expenses, depending on automation and digital tools to maximize customer experience, increase productivity, and streamline procedures (Boom-Cárcamo et al., 2024; Keyhani et al., 2022; König et al., 2019). One of the main benefits of digital entrepreneurship is its ability to scale quickly and reach a global audience, removing regional barriers that would otherwise prevent traditional enterprises from accessing markets (Biswas & Pandey, 2025; Lakshmi & Manasa, 2025). This growth is often achieved through social media platforms, mobile applications, and e-commerce websites, which enable business owners to interact directly with their target audience, conduct transactions, and cultivate a devoted following. The world of digital enterprise is not without its difficulties, despite these advantages. Entrepreneurs must manage the risks related to digital security, privacy, and intellectual property while simultaneously adapting to rapid technological change, shifting customer habits, and intensifying market competition. To compete at the local and international levels, successful digital entrepreneurs frequently use technology and digital tools to develop distinctive value propositions, remain flexible in a volatile market, and

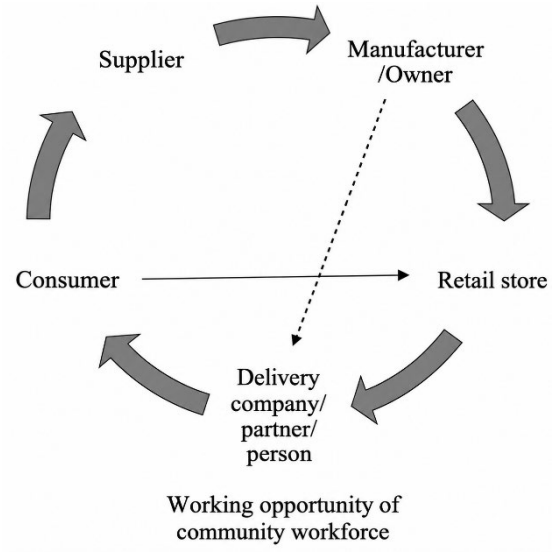
capitalize on emerging trends (Putra, 2025; Steininger, 2019; Wulandari et al., 2025).

Digital Entrepreneurship Education

Universities offer specialized courses that enable students to engage in structured learning and interact with lecturers, as noted by Idrus et al. (2014). However, Liu et al. (2021) indicate that integrating long-term reflection is a more successful strategy that helps students gain a deeper comprehension of entrepreneurship and strengthen their mental framework for overcoming obstacles. Entrepreneurial success requires not only theoretical knowledge but also technical abilities like inventory management, cash flow management, and marketing (Stamboulis & Barlas, 2014). Work-integrated learning, as suggested by Adeinat & Abdulfatah (2019), links classroom learning to real-world business situations, helping students bridge the gap between theory and practice and develop practical skills directly applicable to entrepreneurial endeavors. Ahmed et al. (2020) suggest that entrepreneurial learning is an experiential process that involves reflection, action, and critical thinking, where students create knowledge through real-life experiences and apply theory to practice. Jena (2020) argues that entrepreneurship education must reflect the dynamic challenges entrepreneurs face in their daily lives, suggesting that an ideal curriculum incorporates real-world experiences and complexities. Interactive techniques such as storytelling, dialogue, and experience sharing provide students with more opportunities to learn from peers' and successful business owners' experiences (Elenurm & Reino, 2013; Weerakoon et al., 2020). Through these techniques, students are able to understand the human aspect of entrepreneurship and the individual narratives that accompany entrepreneurial endeavors. To ensure that students have the technical skills, resilience, mindset, and understanding necessary to succeed in the entrepreneurial world, students can develop their entrepreneurial identity by practicing through difficulties and overcoming obstacles (Salavou et al., 2021; Soares et al., 2021). Financial, physical, intellectual, and human factors affect the adoption of digital technology, with intellectual capital having the greatest significance in technology adoption (Feranita et al., 2024). Students' confidence and knowledge do not align in digital entrepreneurship; rather, tests, feedback, and reflection help minimize skill gaps (Veselinović et al., 2026).

Figure 1 shows a value delivery model. Entrepreneurs can focus on targeting a wider range of consumers to gain an advantage in selling more products. Therefore, this market could be vast. Digital entrepreneurship broadens opportunities for distribution by sustainably and profitably engaging the community workforce in the supply chain.

Figure 1: Conventional distribution



Source: Authors

Methodology

Research Strategy

The investigation is carried out using a qualitative research method. Case study analysis provides sufficient help to comprehend real phenomena (Yin, 2018). The goal of qualitative research is to capture the perspectives, knowledge, and experiences of individuals worldwide (Merriam & Tisdell, 2015). MAXQDA is used for coding to perform the analysis (Silver, 2017). Semi-structured questionnaires are used to guide the in-person interviews. Entrepreneurs and the community workforce are interviewed. Observation and secondary data sources are taken into account as part of data triangulation. Additionally, several publications, websites, and brochures are

studied to investigate workforce acceleration through skilled digital entrepreneurs (Maxwell, 2012).

Data Collection

Two types of data are considered. For the primary data, we organized interviews and observations. For the secondary data, we analyzed journals and web data. Around forty-minute individual interviews were conducted between August and October 2025. Table 1 shows the number of participants interviewed during the study. Interviews were conducted using a semi-structured questionnaire. Their profile, past and current feelings, and conditions of work were considered when asking questions. After consulting with Accelerating Bangladesh, 12 women entrepreneurs, 2 courier companies, 2 delivery partners, and 4 consumers were selected through judgmental sampling, based on their marketability and level of achievement. The questionnaires were distributed to learn more about the benefits of digital entrepreneurship education, their entrepreneurial paths, their experiences connecting with the community workforce, and, ultimately, their progress as entrepreneurs. To improve the results, interview data were both recorded and transcribed.

Table 1: Study participants and areas

Organizations	**Entrepreneurs**		**Consumers**		**Courier company**		**Delivery partner/ person**	
	No	Area	No	Area	No	Area	No	Area
Accelerating Bangladesh	12	Dhaka, Chittagong, Rajshahi, Khulna	4	All over Bangladesh	2	Dhaka, Chittagong	2	All over Bangladesh
Total = 20		12		4		2		2

Source: Authors

Twenty interviews were conducted to analyze the data. To analyze the interview questions and answers, the data were converted into Microsoft Word by carefully reviewing the interviews. The interviews were transcribed, anonymized, and imported into MAXQDA. A member of the research team coded the transcripts. Related codes were grouped into the themes and dimensions presented in the Appendix (Table A1), and the coding structure was reviewed and agreed upon by the authors. A large

amount of data on entrepreneurship and community members emerged, and key phrases were extracted to identify the necessary concepts based on interviewees' statements.

There are three different kinds of coding. The original idea of categories is found in open coding. Axial coding is the process of combining the initial-level categories with certain significant and relevant categories. Ultimately, the dimension changes to core categories in selective coding. The concept is first categorized using first-order coding, which is then combined with the major category for the theoretical dimension. All open codes are considered in first-order coding to obtain the second-order build, which guides the gradual expansion of the ecosystem for digital women entrepreneurs. Figure 2 shows the word cluster in which digital educational activities promote the workforce's continuous growth and entrepreneurs' success. It is beneficial to understand the role of digital entrepreneurship in engaging community members in supply chain distribution channels.

Figure 2: Word cluster of entrepreneurship and educational training among digital entrepreneurs



Source: Authors

Case Organizations: Accelerating Bangladesh

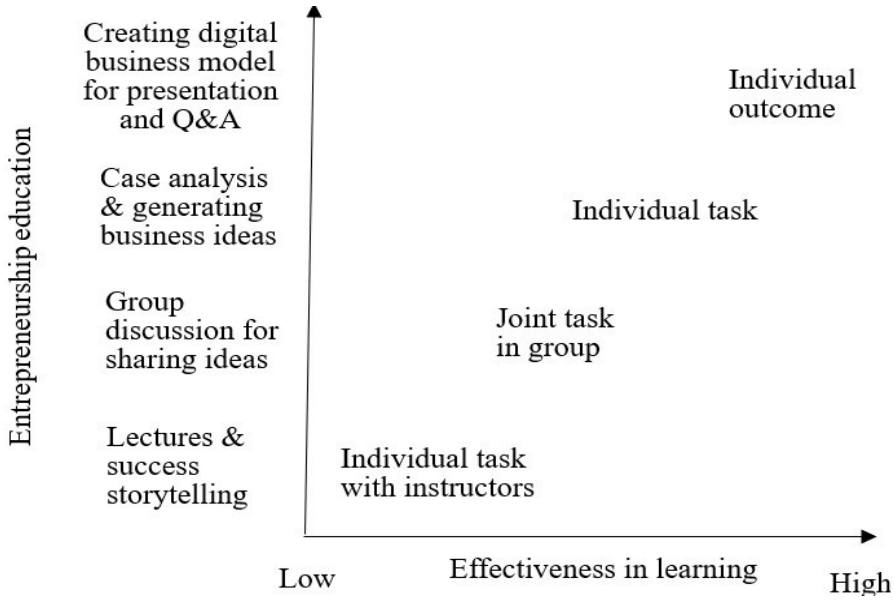
Accelerating Bangladesh began offering online entrepreneurship courses.

- Participating in early-stage cohorts should have a Minimum Viable Product (MVP) or a feasible company idea. At this point, neither business registration nor revenue is necessary.

- Applicants must be women entrepreneurs or cofounders of early-stage digital businesses with a Minimum Viable Product (MVP) or a workable digital business idea.
- If the applicants' registered businesses have full-time staff, a clear scalability plan, and consistent revenue streams, they are invited to join growth-stage cohorts.

Figure 3 shows the steps of education, including joint and individual tasks, by indicating the effectiveness of learning. Participants receive mentoring, business plan assistance, and training for a month. Through its web platform, it offers candidates and trainees 24/7 information services because current knowledge is essential for making decisions. Through backward- and forward-linking operations, graduates who had launched their own firms were given creative opportunities to participate in the supply and distribution of essential goods. Additionally, Accelerating Bangladesh has helped its successful graduates by sharing advice with the appropriate authorities and making stimulus loans easier to obtain.

Figure 3: Application of entrepreneurship education



Source: Authors

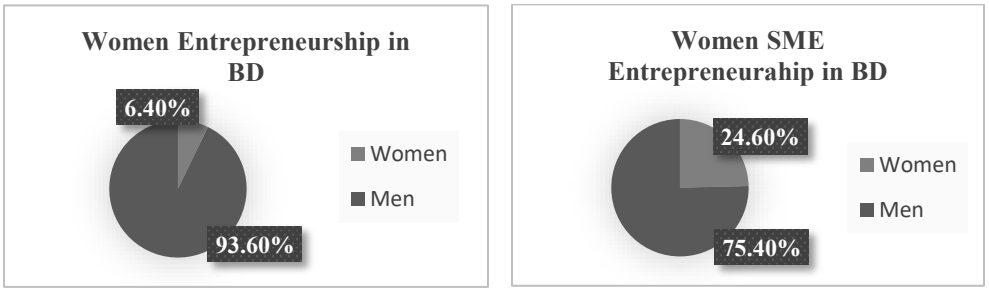
Analysis and Discussion

Participation of Women in Entrepreneurship

The goal of women entrepreneurs is to improve their lives and promote prosperity. They thereby refine their entrepreneurial abilities and knowledge. Through new employment opportunities, women entrepreneurs validate their social, economic, and personal accomplishments. Every day, they overcome obstacles to active engaging in revenue-generating activities. Their professional entrepreneurship certification helped them deepen their business knowledge. Entrepreneurs work together and share their traits. Entrepreneurs share and exchange their opportunities, challenges, successes, and scope for learning and improvement.

One of the entrepreneurs said, "Knowing the process of trade license, account preparation, VAT, etc. helps to start a new business, as well as distribution, digital marketing, and digital communication knowledge to support dealing with customers. We were struggling to pursue our career as an entrepreneur because of our little knowledge about entrepreneurship."

Figure 4: Participation of women in entrepreneurship



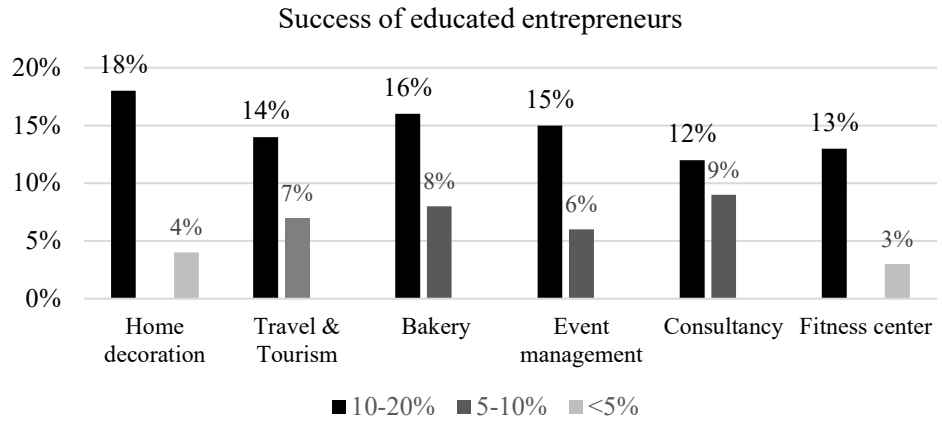
Source: Bangladesh Bureau of Statistics (BBS, 2024) and Labor Force Survey (LFS, 2022)

To gain privileges in their personal lives, women entrepreneurs gain control of their social and financial lives. Opportunities for self-employment help people become self-reliant, independent, and confident. Figure 4 shows that women entrepreneurs average 6.40%, whereas men are 93.60%, but because of the vast online business opportunities, involvement in SME is remarkable. For women, the percentage is 24.60%, compared with 75.40% for men.

Digital Entrepreneurship Expansion

Online delivery-based business distribution has enabled products to be sold in any region. Digital entrepreneurship, courier services, and delivery partners have become more effective across various areas. Entrepreneurs have been able to reach the unserved market through the supply chain networks. Digital entrepreneurship platforms sought to address distribution challenges in many areas where consumers lacked access to a variety of products. Many consumers lacked the opportunity to get the desired products. This digital business model distributes daily use of luxury goods to any consumer by engaging the workforce as couriers and delivery partners. The broader distribution network shows collaboration between production and distribution. The community workforce struggles with various barriers, including government initiatives, knowledge, skills, and more. To overcome all the barriers, digital entrepreneurship contributed to developing the present situation.

Figure 5: Business condition of digital entrepreneurship for educated entrepreneurs



Source: Authors

Figure 5 shows the net income of 12 entrepreneurs. A net profit margin of 10–20% is considered good, a margin of 5–10% is considered healthy on average, and a profit margin of less than 5% is considered inadequate. Based on the aforementioned factors, entrepreneurs' net profit is allocated. 33% of

entrepreneurs have an average profit margin, 17% have a low profit margin, and 50% of entrepreneurs have a high profit margin. The interview data indicate that courses on digital entrepreneurship affect business owners and their associated supply chains.

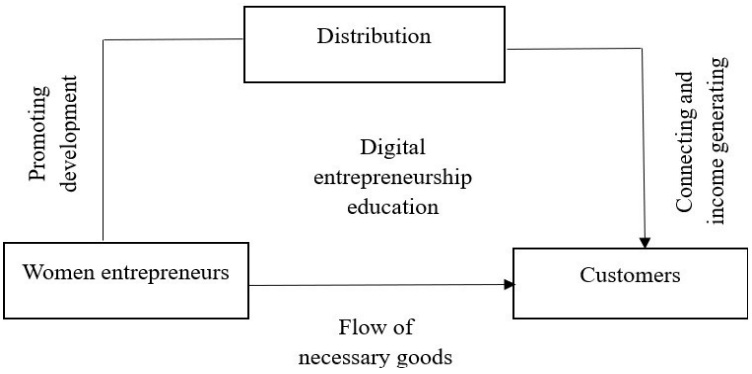
One consumer quoted, "Getting all types of products is very difficult because various types of products are not available everywhere, always. So, because of digital entrepreneurship and its intense distribution, we can get products in accordance with our demand."

A supply chain needs to involve many parties for procurement, production, and distribution. Digital entrepreneurship-based distribution has broadened the scope of networking to ensure reachability. This new communication has improved quality, collaboration, and skills.

Economic Benefits for the Workforce from Online-based Distribution

The courier company sends the product to the local courier hub, and then a delivery person from the courier or delivery partner company picks it up to complete the final delivery. It creates many job opportunities, and the developing market benefits from improved product delivery services and opportunities for the community workforce in the delivery service. Many digital entrepreneurs also build their own distribution networks. In this instance, these business owners employ their own personal distribution network and hire delivery personnel from the local workforce. The community has several areas where many young men face unemployment. These men are facing many opportunities, yet unemployment and lack of opportunity have left them depressed. Figure 6 shows that women who participate in digital entrepreneurship education improve the skills they can use in their businesses. They can inform similar companies about their experiences. Women entrepreneurs develop their competence, knowledge, and self-efficacy. They run their business autonomously, which improves their business expertise and effectiveness. Through the efforts of the local workforce as delivery partners and couriers, customers are linked to the distribution chain.

Figure 6: Interaction among all parties

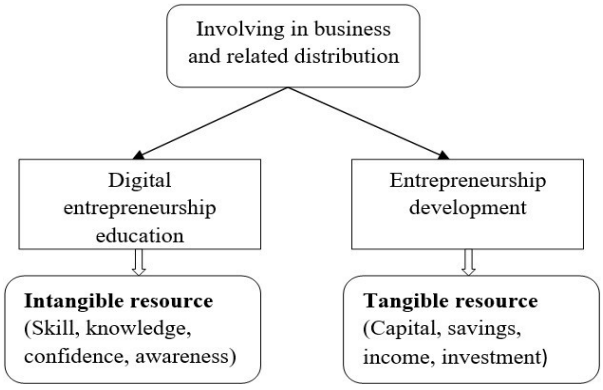


Source: Authors

One courier company owner said, "We provide the product to the delivery partner/person. We are expanding our business and providing employment opportunities to many employees from the local community. It is a good opportunity to have the scope for unemployed people."

Through income-generating activities, the broader distribution model enables entrepreneurs to expand their reach into unserved markets. Figure 7 shows that engaging in entrepreneurship education provides intangible resources. The primary goals are to acquire skills, knowledge, awareness, confidence, and capability. Entrepreneurship in distribution generates tangible resources, where the primary concerns are capital income, savings from income, investments, and assets from savings.

Figure 7: Way of building resources



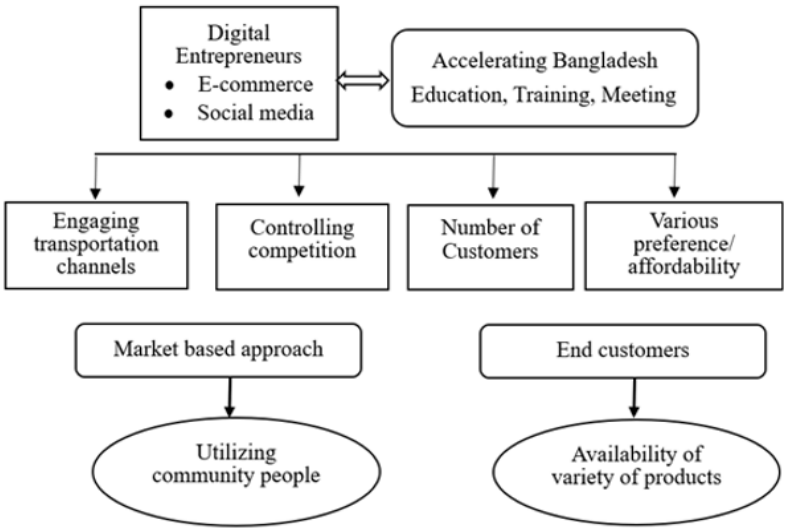
Source: Authors

The delivery person mentioned, "I deliver the necessary consumer items to the customers as a part of my main job. A variety of products are delivered within a reasonable time. My financial situation has improved compared to before; I utilize my earnings for my own well-being."

This is an important driver in this distribution network. Community workers earn an income and invest it in their family's purpose or other profit-making activities. On the other hand, digital entrepreneurship has transformed transportation channels by expanding market reach, reducing costs, and streamlining logistics. Bypassing conventional middlemen, companies can now sell directly to customers. Digital distribution has made businesses more scalable, accessible, and competitive across the country, enabling faster delivery.

Entrepreneurs stated, "We gain both practical and theoretical knowledge. There is scope to understand and consult about our own limitations. It helps us to analyze the risk of business. Gaining capabilities modernizes the business and enables us to identify construction errors. By analyzing challenges and problems through entrepreneurship education, we find real-life possible solutions to start and survive in the business."

Figure 8: Role of digital entrepreneurship ecosystem in distribution



Source: Authors

Figure 8 shows the interaction process through a digital entrepreneurship platform. Consumers are connected to the distribution system, where the community workforce gets income-generating opportunities. The digital entrepreneurship platform works as a collaborator and coordinator in the network. Intensive distribution increases efficiency, which helps improve entrepreneurs' coordination and communication. The development of the community people's lifestyle is also one of the important objectives.

Implications, Limitations, and Future Directions

Digital entrepreneurs make products available and reduce the costs of various consumer goods in the market. A wide variety of goods is a necessary good for all consumers, which increases the standard of living (Abdullah, 2023; Husain & Al Mubarak, 2024; Sagayaraj et al., 2020). Digital entrepreneurship distribution in the supply chain ensures a portfolio of the most usable as well as fancy goods for the market (Syahchari, 2025; Wulandari et al., 2025). Because of this full-coverage distribution system, the lack of employment opportunities is reduced, and community members get the financial opportunity to maintain and support their existence (Richter et al., 2017; Zaheer et al., 2019).

The working conditions and market are determined more creatively with new products and services that can fulfill the needs of the masses (Ballı, 2020). The community people are not excluded; all people are considered prospective individuals (Taskin et al., 2023). So, a digital entrepreneurship platform created a working scope among community people to better reach the market. So, the number of people became engaged in the delivery business (Loza & Roscoe, 2024; MacKenzie & McLachlan, 2023). This delivery system connects the overall market with the intensive supply chain system. Nambisan et al. (2019) mentioned that by focusing on digital entrepreneurship, one country can boost industrialization, innovation, and market formation. While only 20 interviewees were selected using the judgmental sampling technique, additional interviewees could be included to obtain a more comprehensive outcome.

Conclusion

In the traditional approach, community members cannot help themselves, so they usually need charity or public funding. In digital

entrepreneurship, community members are not excluded; all people are considered valuable consumers, producers, and entrepreneurs. To provide economic value, such as competitiveness and profit maximization, self-employment and community development in ecosystems involve many entrepreneurs. Every company wants to have both social and economic value, and this strategy helps businesses be more sustainable. In the long-term, education can help the state of business. Entrepreneurship education is seen as a social good, where the sustainability process has been demonstrated to be an effective approach. Accelerating Bangladesh is providing entrepreneurship education to achieve social responsibility. In addition to increasing economic competitiveness and profit maximization, it also enhances social and communal well-being.

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Appendix

Table A1: Open, axial, and selective coding

1st-order concepts Open coding	**2nd-order themes Axial coding**	**Theoretical dimensions Selective coding**
Entrepreneurship barriers due to lack of digital knowledge, idea generation, information, etc.	Need for entrepreneurship education	Digital education
Gaining both practical and theoretical knowledge helps entrepreneurs to analyse the risk of business and gain capabilities	Need to get all rights	Equality
New circle to present oneself that removes barriers and interacts to make the business successful	Necessary working environment	Economic growth
Education enables one to analyse challenges and find construction errors along with solutions in difficult situations for long survival	Remove social & business barriers	Entrepreneurship development
Savings from operation, economic benefit, investing in business, freedom	Opportunities for personal development	Opportunities
Engaging in distribution channels with personal financial interest	Enhancing scope for financial interest	Community acceleration
Collaboration with entrepreneurs for various goods and necessary goods	Ensuring supply of goods	Collaboration
Ensuring network, product, coordination, self-employment facilities	Business communication	Networking
Conventional flow of goods and conventional purchasing behaviour create barriers in getting products	Defining basic barriers in distribution	Supply chain
Limited working scope with unorganized distribution	Barrier in supply chain	Distribution

1st-order concepts **Open coding**	**2nd-order themes** **Axial coding**	**Theoretical dimensions** **Selective coding**
Enrich the community with the presence of digital entrepreneurship	Integration of digital entrepreneurship	Digital entrepreneurship

Source: Authors