

**ADOPTION OF DIGITAL MARKETING BY AGRI-
ENTREPRENEURS IN SOME SELECTED AREAS OF
BANGLADESH**

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**ADOPTION OF DIGITAL MARKETING BY AGRI-
ENTREPRENEURS IN SOME SELECTED AREAS OF
BANGLADESH**

by

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CERTIFICATE

This is to certify that the thesis entitled, “**ADOPTION OF DIGITAL MARKETING BY AGRI-ENTREPRENEURS IN SOME SELECTED AREAS OF BANGLADESH**” submitted to the Department of Development and Poverty Studies, Sher-e-Bangla Agricultural University, Dhaka in partial fulfilment of the requirements for the degree of **Master of Science (MS) in Development and Poverty Studies**, embodies the result of a piece of bona-fide research work conducted by **MD. PIYAS MAHMUD, Registration No. 15-06831**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that any help or source of information, received during the course of this study has been dully acknowledgement by him.

Dated: JUNE,2022

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Devoted to
My Grandfather
and
Grandmother

A C K N O W L E D G E M E N T S

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ABBREVIATION AND ACRONYMS

CRM Customer Relationship Management

DM Digital Marketing

IAB Interactive Advertising Bureau

IEBT International Exchange and Business Training

NGO Non-Government Organization

PEOU Perceived Ease of Use

PLS Partial Least Squares

PPC Pay Per Click

SD Standard Deviation

SEO Search Engine Optimization

SME Small and Medium Enterprise

SPSS Statistical Package for The Social Sciences

STATA Statistical Software

TAM Total Addressable Market

DMD Digital Marketing Device

ABSTRACT

Marketing has been a challenge for any kind of business around the world due to its cost. Traditional marketing which involves television, radio and billboards come at a cost way high for the agri-entrepreneurs and therefore growth of these companies becomes a challenge. Digital marketing has provided entrepreneurs a platform to create awareness to consumers on what they offer due to their relatively low cost. This study empirically examines the factors affecting the adoption of digital marketing by agri-entrepreneurs in Bangladesh. The study obtained a list of SME foundation of agri-entrepreneurs in Bangladesh which was about 300 agri-entrepreneurs. From this list, this study selects on 80 by random sampling method technique Data for this study were collected through face-to-face interview during November, 2022 to February, 2023 using the structured questionnaire. Both descriptive and statistical tools were used in this study. Data were analyzed by using STATA software. The findings show that technological factors, organizational factors, business environment, relative advantage, perceived ease of use, and entrepreneurs characteristics have significant influence on the adoption of digital marketing. The study provides a clear understanding of entrepreneur's perception about digital marketing adoption in their businesses. It was observed that the entrepreneurs faced some problems like lack of digital marketing knowledge, lack of relevant technique, lack of finance etc. The study recommended that agri-entrepreneurs should be trained and sensitized on the available digital marketing techniques and how they are suitable for their businesses. The study also recommended that proper policies should be made by the government that assist agri-entrepreneurs to adopt digital marketing. Finally, the study recommended that agri-entrepreneurs should be provided with funds in order to finance their digital marketing.

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Businesses usually aim to grow in terms of market size and assets and due to competition, they have to ensure they attract and retain customers in order to remain profitable. Jobber et al. (2013) noted that the marketing concept is based on the basic principle that its application helps in business performance. They also stated that marketing is not an abstract concept, but rather, an acid test to the impact that its use has a significant corporate index such as profitability and market share. For a long time, successful small businesses could market their products and services through word of mouth but with the growth of digital marketing, the basic logic of marketing has shifted from the exchange of goods to the provision of services, interaction, connectivity and customer relationships (Vargo et al. 2004). This change has been made possible by innovations in technology, new marketing channels and constant changes in the media environment (Bhattacharya et al. 2000). Advances in digital marketing devices (DMD) such as emerging mobile digital applications for marketing provide a massive opportunity for Agri-entrepreneurs to promote and advance their businesses. According to Scharl et al. (2005), digital marketing is a technology application that facilitates a business the opportunity to interconnect with clients in regular basis. Entrepreneurs that implement DMD into their essential marketing plans are required to focus on developing strategies that will create awareness, promote dialogue, issues and win the trust of the target customers. As the customers are now educated, sophisticated, skilled and tech savvy so the businessmen are necessarily aware of that. They can reach a larger audience in a shorter time period. Technological advances have resulted in considerable attrition of the customer-base of traditional marketing agencies and departments. People have moved on to tablets, phones, and computers, which are the areas where digital marketers have gained the most ground.

1.2 Agri-Entrepreneurs

Entrepreneurship is the capability to develop ideas and attain success with them. Entrepreneurship is one of the key factors of economic development. During the economic crisis, the importance of business development increases. Entrepreneurship

has been associated with improved growth, increased wealth and quality of life. In developing countries like India, Pakistan, and Bangladesh planning and implementing entrepreneurship program development is necessary to raise living standards in most backward areas that are too dependent on agriculture for employment. Thus, entrepreneurship development appears to be the best option for improving employment opportunities, income generation, poverty reduction, and improving nutrition, health and overall food security in the national economy. Innovation, ability to accept change and risk and the organization of resources are some of the factors involved in creating a sustainable enterprise. The entrepreneurial spirit is responsible for generating employment, competitiveness and the ability to exploit any sector or business.

Agri-entrepreneurship in common language can be defined as sustainable, community-oriented, directly-marketed agriculture. Sustainable agriculture refers a system-oriented approach to farming that put emphasis on the interrelationships of social, economic, and environmental processes. It is the beneficial combination of agriculture and entrepreneurship and convert your farm into an agribusiness. This association of agriculture and business promotes Agri entrepreneurs who innovate, identify markets, and satisfy needs by developing different ways. The term Agri-entrepreneurship is similar with entrepreneurship in agriculture and denotes agribusiness establishment in agriculture and allied sector (Bairwa et al., 2014). Entrepreneurship in agriculture can also be defined as the formation of a new type of economic organization for the purpose of risk and uncertainty in agriculture (Dollinger, 2003). Gray (2002), on the other hand, defines an entrepreneur as an individual who runs a business with the goal of growing the business and the management skills necessary to achieve those goals.

1.3 Marketing & Agricultural Marketing

Marketing is a comprehensive term. It includes a group of business activities in order to create and promote consumer demand and to direct the flow of goods/services from the original producer to the final consumer in the process of distribution.

Several people and associations have come up with the definition of marketing.

The American Marketing Association defines marketing as an activity, a set of institutions, and processes to create, communicate, communicate and exchange offers that have value for customers, clients, partners and society in general (American Marketing Association, 2008). Dealing with these exchange processes requires considerable work and skill. It is contained in ten different entities, which are: goods, services, experiences, events, people, places, properties, organizations, information, and ideas. In the simplest of term, - 'marketing' is selling of goods and services. Of course, sale of goods leads to transfer of ownership and possession of goods. The term 'marketing' has a wider coverage.

Philip Kotler defines marketing as "human activity directed at satisfying need and wants through exchange process". (Kotler & Keller, 2012). According to him activities such as product development, search, communication, distribution, pricing and service contribute the core of marketing activities.

Therefore, marketing is a comprehensive system of business activities aimed at designing, evaluating, promoting and distributing goods and services that satisfy needs, prevent goods and services and potential customers. Thus, industrialized and urbanized societies require MORE marketing activities. Thus, marketing must play a key role not only in a for-profit organization but also in a non-profit organization. This includes buying, selling, transportation, storage, standardization and classification, financing, risk and marketing information.

According to Thomsen, the study of agricultural marketing comprises all the operations, and the agencies conducting them, involved in the movement of farm-produced foods, raw materials and their derivatives, such as textiles, from the farms to the final consumers, and the effects of such operations on farmers.

Over the years, the concept of marketing has evolved from the production concept, then the product concepts. This was followed by the selling concept which holds that

consumers, if left alone, will not sufficiently buy an organization's products or services. This concept has become a practiced marketing concept for many years, and now companies have adopted a comprehensive marketing concept based on the development, planning and implementation of marketing programs, processes and activities, which recognize their scope and interdependence (Kotler and Keller, 2012). The growth of the Internet and digital channels has caused marketing to grow exponentially in terms of customer reach, speed of customer reach, and business communication.

1.4 Digital Marketing

Digital marketing is the promotion of brands to connect with potential customers using the internet and other forms of digital communication. This includes not only email, social media, and web-based advertising, but also text and multimedia messages as a marketing channel. Essentially, if a marketing campaign involves digital communication, it's digital marketing. Digital campaigns are more specific and part of the marketing communications mix. However, the boundaries are unclear because digital technology is not only a way of communication, but also a technology of distribution. The flexibility offered by the technology means that it is very complex (Jobber et al. 2013). Digital technologies are also increasingly important in defining many sectors of the economy. Due to its high interconnection, the Internet has been compared to a bicycle and an airplane in terms of its ability to influence the future development of business and society. The Internet has thus prompted many companies to rethink the role of technology, and findings already show the extent of its global impact (Jobber et al. 2013). Digital channels can also provide ways and means to customize media content; With digital channels, customers can create or change forms of brand communication, for example communicating their channel and content preferences. Digital technology thus affects the business models, marketing tools and media that all communication agencies must be able to deliver. There has, therefore, been a major move away from previously traditional communication tools and media and businesses are in pursuit for ways in which service providers are able to sufficiently articulate their digital marketing plans (Singh, 2011). This shift in emphasis indicates

that marketers should be aware of customer expectations and how they can use technology to achieve their marketing goals.

1.5 Research Problem

Digital marketing is the utilization of electronic media by the marketers to promote the products or services into the market. It is one of the current trends not only in Bangladesh but also all over the world. According to the speech in the Wall Street Journal by Jerry Jasinowski, President of the US National Association of Manufacturers warned his fellow members by saying “small firms need to get in the e-commerce game or they are going to be shut out of a critical part of the marketplace” (Lomerson et al. 2004). This might have encouraged some entrepreneurs in the USA as well as other developed nations but the rate of e-commerce or digital marketing adoption in the developing nations is rather slow. Although there are empirical studies of digital marketing adoption in industrialized countries such as Canada and Australia (MacGregor and Vrazalic 2004; Sparling and Toleman 2007), there are fewer similar efforts to digital marketing adoption, especially in developing countries, a country like Bangladesh, India, Malaysia.

Consumers and business owners in Bangladesh are facing a number of new challenges and issues in the digital age. However, there are still some opportunities and strengths to use digital marketing, such as increasing the use of smartphones, government online advertising, popularity of local advertising, etc. (Ohidujjaman et al., 2013). It has been observed that in the digital age, marketing strategies have been changed, as there have been several business-to-consumer online takeovers (chaldal.com, foodpanda.com, aarong.com etc.). Users also use digital marketplaces like Bikroy.com, olx.com, othoba.com etc.

Bangladesh, as a country with a vast population, is full of potentials. Information technology is the key to utilize those potentials. From 2009, Bangladesh has been experiencing numerous ground breaking developments in IT sector. According to the BASIS (Bangladesh Association of Software and Information Services) survey the ICT industry has consistently grown in recent years at 20 to 30 percent per annum. Over 800 registered ICT companies generated total revenues of approximately \$250 million. More than 75 percent of companies are involved in customized application

development and maintenance, 50 percent are dedicated to IT enabled services, and 45 percent offer E-commerce/Web services. The survey also shows that 60 percent of companies solely focus on the domestic market (Digital Marketing Summit: Annual event organized by Bangladesh Brand Forum, Last Accessed: 27 April, 2019, URL: <http://dms2015.bbf.digital>). The introduction of information systems depends on specific social, cultural, economic, legal and political contexts, which can differ significantly from country to country (Spanos et al. 2002), which limits the generalizability of research results from developed countries to the contexts of developing countries (Dewan and Kraemer 2000). This requires empirical research on Bangladesh Agri-entrepreneurs awareness, perception and organizational readiness or concern about their current and potential use of digital marketing to discover factors that encourage or inhibit the digital marketing adoption.

1.6 Justification of the Study

The study involves a number of agri-entrepreneurs among which some are running their business as sole proprietorship and some are running as partnership business. First, the study is valuable for agri-entrepreneurs as well as entrepreneurship development. This study also indicates the current scenario of agri-entrepreneurship in Bangladesh. Agri-entrepreneurs know which digital marketing method to use and how to reach potential customers and can maximize their digital marketing. This in turn maximizes their sales and is able to grow and become more competitive. The study is valuable for marketers who will thus learn how to integrate digital marketing into their organization's existing traditional marketing. The impact of digital marketing on entrepreneurships would also be similar to that of large organizations and therefore marketing departments will learn how they can incorporate digital marketing. And Secondly, the study is important for marketing researchers who want to know about changes and trends in marketing. This would enable them to accurately advise their customers to adopt the most effective marketing mix. The study is important for decision makers in governments and other institutions who want to know how to improve business opportunities for entrepreneurs and other businesses. It would provide an enabling environment for governments in terms of IT infrastructure, and laws and policies governing digital marketing.

1.7 Research Objectives

The objective of the study was to determine the factors affecting adoption of digital marketing of Agri-entrepreneurs in Bangladesh. The specific objectives were to:

- a) To assess the socio-demographic profile of the selected agricultural entrepreneurs;
- b) To explore the descriptive characteristics of agri-entrepreneurs;
- c) To identify the factors influencing adoption of digital marketing and
- d) To spot the problems and prospects of digital marketing.

1.8 Summary of this Chapter

Being an agricultural country, Bangladesh has a lot of Agri-entrepreneurs. These entrepreneurs contribute the economy alongside with the thriving Ness of the economy. Due to the digitalization of the age, traditional marketing in business is no longer much viable to launch or practice. Now a days customers are more updated and learned than to the previous time or ages. These are some factors for the business holder or any entrepreneurs for the adoption of digital marketing to cope up with the new business environment. These factors whether have positive or negative impact have been appraised in the study.

CHAPTER II

REVIEW OF LITERATURE

2.1. Introduction

The chapter reviews the theoretical framework together with empirical literature on the factors affecting adoption on digital marketing on company's performance for the entrepreneurs and Agri-entrepreneurs. In particular, it explores the theories informing the study, general review of literature on study variables, empirical review as a conceptual framework with a model. Finally, the chapter provided a conceptual framework to identify the variables and operationalize them.

2.2. Theoretical Review

The study was conducted on several theories that are captured hereunder:

2.2.1 Social network theory

The network approach's concept originates from several of the structural concepts brought forward by sociological thinkers such as Emile Durkheim, Georg Simmel and anthropologist Radcliffe-Brown. Their research was largely based on comprehending the structure and impact of relational webs or "networks" of social associations between and among individuals. Network theory analyses all kinds of relationships, whether it is between people, animals or things. Social network analysis is an overlapping instrument used for learning about patterns that manifest within social networks and their influence on behavior. Digital marketing channels are important in this respect since they allow marketers to listen and understand what is said by consumers, and also enable them to take advantage of the power of influential users so as to be able to spread the messages to other people in their networks. Research indicates that the very powerful users are those with the most impact across a number of differentiated networks. The network theory sees social relationships in terms of nodes and ties. The nodes are the players within the networks, and ties are the relationships amongst the players. Various types of ties are present between the nodes, and in its basic form, a social network outlines all the relevant ties between the nodes being analyzed. The network can also be used to "determine the social capital of individual players". These ideas are usually exhibited in a social network diagram, where nodes represent the points while ties are the lines. This theory is useful in the study since it generates an

idea of technological factors. This theory also analyses how entrepreneurs can maximize their 'networks', in this case their customers.

2.2.2 Theory of collective intelligence

Collective intelligence refers to the process by which a large number of people can simultaneously focus on the same data points and simultaneously achieve intellectual efficiency. Collective intelligence theory assumes that groups are generally more intelligent and more productive than the sum of individuals. Crowdsourcing is an Internet phenomenon where projects are divided into small individual tasks that are distributed to a large number of individuals until completion and may have collective intelligence properties. According to Tapscott et al. (2008), the existence of collective intelligence requires four principles. These principles include openness, communication, sharing and global action. Openness: The full potential of collective intelligence requires that people and companies openly present and share their ideas with the people of the Internet so that their products can be improved. Peering: Taking old information or products and modifying them to suit one's own and others' personal needs before releasing them to the public for human use. Sharing: This explains how intellectual property is required to be shared with other team members. It is important to allow a constant exchange of ideas and criticism around which productivity improves. The principle of act worldwide is based on the development of communication technology, which allows organizations to reach their entire network of partners and involve everyone. This indicates the technological factors as well as new business environment. This concept overcomes challenges such as departmental and branch boundaries to capture and exploit new ideas, new talent and new markets and to a new business environment. This theory is useful for research because it shows how digital marketing can bring Agri-entrepreneurs and their consumers together to communicate and exchange ideas to develop products or services that improve the overall experience.

2.2.3 Theory of consumer engagement

According to Van Doorn et al. (2010), consumer engagement is defined as customer behavior, as interaction with a specific brand or company after purchasing, which encourages customers to associate and loyalty on their purchase path. The basis of consumer involvement is widely used by managers and consultants around the world

in industry and business (Gambetti et al. 2012). When a company manages to adapt and facilitate an innovative approach while building long-term relationships with its customers, it is called consumer engagement (Sashi, 2012). Customer engagement is a priority focus, especially among competitors to achieve brand loyalty. Loyal customers not only remain stakeholders but also create high value and high business capital to satisfy customer needs and wants. In today's business environment, social media is an important channel to engage consumers online. Although the concept of engagement still does not have a clear definition and application, the concept that has received the most attention among entrepreneurs is consumer engagement. Digital media is popular and necessary for business because it facilitates two-way communication as it reaches all people and demographics (Divya et al. 2014). Discussion forums, card room bulletin boards, e-mail, and social media networks are examples of networking platforms that creates the path of the perceived ease of use, communication and customer experiences Brodie et al., (2011). Dedicated customers can also play an important role in the development of new products and services and in creating experiences and value. (Wang, 2006) believe that consumers can be more sensitive to brands when they are deeply involved with the media. Digital media allow entrepreneurs to continuously grow their brand due to low costs and low technical requirements Ferrer et al., (2012). Entrepreneurs can maximize the potential of digital marketing because it allows access to markets outside their immediate geographic area without necessarily requiring a physical presence (Siamagka et al. 2015).

2.2.4 Generational theory

Generation theory explains that the era in which a person was born impacts them perception of the world. It also indicates that our value systems are shaped in the formative years of our lives through our families, friends, communities, significant events and the general era in which we are born (Jurkiewicz et al. 1998). Initiated by Strauss and Howe in 1991, generational marketing theory stipulates that consumer born during the same era, usually a 20-year period, have similar attitudes and behaviors due to shared experiences that influenced their childhood and molded their world views. This current era can be defined as that of digital information which can be defined by the use of digital media. Generational theory is relevant to digital marketing based mainly on how each generation communicates and the online places where they can be

accessed easily by marketers. This theory is useful to the study since assists Agri-entrepreneurs to identify customer generations and homogenous groups and formulate appropriate marketing content for them using digital media.

2.2.5 Types of digital marketing

Digital technologies have the ability to copy almost all aspects of traditional media channels and marketing communications and, in the process, cover the marketing mix. Digital promotions are, however, more specific and are a marketing communication mix component. Digital marketing involves the use of digital media in the process of carrying out the marketing practices. The forms of digital marketing include emails, mobile marketing, search engine optimization (SEO), social media, pay-per-click (PPC), online advertising, and viral marketing. Email marketing is one of the digital marketing techniques earliest used and it involves providing personalized or targeted messages to specific people at the correct time. With the emails, businesses will deliver emails that meet the user's requirements. Mobile marketing is defined as the use of a wireless medium to provide consumers with time and location-specific, tailored information that promotes products, services and ideas (Scharl et al. 2005). It therefore improves the interaction between consumers and their mobile phones, the consumer brand relationship, together with the mobile advertising capability to control the viewing environment, giving advertisers with the opportunity to create more meaningful brand relationships (Aaker et al. 2001). Search engine optimization (SEO) is the process of designing the contents of the website to fit what the business prospects are looking for, and presenting it in a way which is easily accessible to both people and search engines. If a business wants to increase its targeted traffic to the website, the organic or natural search results (the results in the middle of the search engine results page) are the place to be (Ryan et al. 2009). Pay-per-click marketing provides businesses an opportunity to be highly ranked in a search page for specific keywords and phrases through payment. It is viewed as an effective way to rapidly generate search engine traffic depending on the type of business and the specific keywords they want to rank for. Although pay-per click continues to grow in popularity and competitiveness, keywords are becoming increasingly expensive for smaller businesses (Ryan et al. 2009). Online advertising is when advertisement is done on the internet and consists of advertisements placed on search engine results pages, advertisements

embedded in emails, and other ways in which advertisers use the internet. The primary aim is to acquire a prospective customer to act immediately by clicking on the advert. These advertisements are used to prompt various actions from potential customer and meet several marketing communications objectives such as increasing action, changing opinions, and increasing recall. Affiliate marketing is a form of online advertising where a digital user or website promotes an online retailer and, depending on the sales or leads is generated for that online retailer, earns a commission (IAB Australia, 2016). In this case, the third party earns revenue every time a potential customer clicks on the link provided by the originator of the advert website. Viral marketing is a mixture of the several elements of digital marketing and it involves publicizing the message content through multiple channels. It may include YouTube videos, email marketing, blogs, and also some traditional components, all with a purpose of ensuring that the content captures the market attention and automatically spreads to other online communities.

2.2.6 Digital marketing and sales

Several studies and literature have indicated a relationship between digital marketing and sales. Digital marketing is able to reach new customers and provide personalized communication to the customers, hence increasing awareness and sales (Jain, 2014; Jagongo et al. 2016). Small businesses could be able to use digital media such as social media, e-mails which are known to be very cheap to access potential customers to create product awareness, while medium enterprises have some revenue to use digital tools such as pay-per-click (PPC), search engine optimization (SEO), online advertising, and viral marketing.

2.2.7 Measurement of digital marketing effectiveness

In today's dynamic business environment, it has become more important than ever to measure the success of digital marketing as effectively as possible. Digital marketing tools have a number of ways to measure success through various metrics provided by business owners (Gregorio, 2016). One of the methods for measuring digital marketing effectiveness is analytics built into most digital marketing tools. According to a white paper presented by Fernandez et al. (2015), analytics based on big data helps a company make accurate future decisions by providing the right message to consumers at the right time. There has been rapid growth in intuition-based marketing, and as a result, big data

analytics and digital marketing have become closely intertwined. Access to data and insights make digital platforms perfect, relatively more advantageous and thus provide marketers a great opportunity to draw conclusions and make the right decisions based on this data (Jain, 2014). Perceived ease of use promotes customers adopt the online platform as more effective. By measuring the effectiveness of each campaign, Agri-entrepreneurs would learn to continuously improve their campaigns and thus understand the relationship of the target group with different touch points and messages sent. The digital world has made online behavior and visitor tracking much easier as marketers try to understand where visitors are coming from, what pages they viewed, how much time they spent on the site, which sources are sending quality traffic, and most importantly whether Website visits are converting into leads or conversions.

2.3. Empirical Review

The empirical review outlines similar studies done previously by researchers.

Ifinedo (2011) did a study on An Empirical Analysis of Factors Influencing International Internet/E-Business Technologies Adoption by SMEs in Canada. The sample population was determined by the understanding that a sampling frame that is properly selected and large enough will increase the response rate. To determine the minimum number of completed responses required for a meaningful analysis, the G*Power 3 software was used. In all, 2200 questionnaires were mailed out. A wide range of industries were considered for inclusion. A total of 192 questionnaires were undelivered and 237 responses were received, of which, 214 were considered valid. The unusable 23 responses included questionnaires with a high percentage of missing entries and those indicating nonadaptation of any IEBT. Thus, the effective response rate for the survey is 11.8%, which is considered good for an exploratory study. The Partial Least Squares (PLS) technique was used for data analysis as it is suitable for validating predictive models. He found that, The greater the perceived relative advantage of IEBT, the greater the adoption of such technologies by SMEs. The greater the compatibility of IEBT with the adopting SME's operations, the greater the adoption of such technologies by SMEs. And, the greater the pressure from customers to adopt IEBT, the greater is the need to adopt such technologies by SMEs.

Onyango (2016) did a study on the influence that digital marketing strategies have on the performance of cut flowers exporting firms in Kenya. The study conducted qualitative and quantitative research using semi-structured interviews targeting 30 cut flowers exporting firms in Kenya. From the analysis, the results indicated that digital marketing significantly improved revenue, improved market share, and increased profitability. Firms using digital marketing showed better performance than their counter parts using conventional marketing strategies. It also noted that digital marketing's major benefit emanates in its exceptional capability to give personalized and interactive information without the restriction of time and place.

Srinivasan et al. (2016) did a study to understand social media marketing concept and its role in the micro, small and medium enterprises sector. The study used exploratory research to identify the social media marketing techniques used to acquire and retain customers by MSMEs. Judgmental sampling was used to collect data from fifty micro, small and medium enterprises (MSMEs). The study results indicated that participation in social media creates a strong impact on brand awareness and brand trust, which results in a strong influence on customer acquisition and retention. The study also indicated a positive relationship between the time spent on social media and number of sales made. It concluded by stating that social media marketing strategies have a positive impact on customer acquisition and retention which results to market share increase.

Jagongo et al. (2013) in another study sought to establish the impact of social media on SME growth in Nairobi, Kenya. The study findings indicated that social media tools provide greater accessibility to the market and CRM which subsequently have a significant effect on SMEs growth. Additionally, businesses through social media experience fast and cheap communication with customers and also allow them to create a database which the business may then use to generate leads which might eventually lead to increased sales which grows the SMEs. The study recommended that policy makers should keep monitoring the current technological adoption trends by SMEs to come up with policies which encourage best practices for the SME sector growth.

S.Alam,(2011) did a study to understand the factors affecting the adoption of electronic commerce in SMEs in Malaysia. The focus of the field survey was SMEs in Klang Valley, Malaysia. From the sampling frame, only a total of 441 SMEs were listed with

SMIDEC were eligible to be selected as part of research samples. As such, all of them were chosen as the research samples. Survey instrument packages consisting of a cover letter, a questionnaire and a stamped reply envelope were mailed to the 441 companies of the research sample. The contact person identified was typically either the owner of the business or a top-level manager in the organization. The questionnaire was based on extensive literature survey and opinions of experts in the e-commerce area and hence, it demonstrates content validity. The data were analysed using multiple linear regression analysis. Multiple Regression analysis was an appropriate analytical technique for the research question of this study that seeks to find out the relationship between E-commerce use intention (dependent variable) and a set of factors such as relative advantage, compatibility, ease of use, organisational readiness, security, perceived cost, and owner/manager's perceptions of E-commerce initiative, (independent variables). Assumption of multivariate normal distribution, independence of errors, and equality of variance were first tested. This study involved a relatively large sample (200 companies) and therefore, the Central Limit Theorem could be applied and hence there is no question on normality of the data. Two major methods were utilized in order to determine the presence of multicollinearity among independent variables in that study. The research was done under theoretical framework. The multiple regression analysis showed that relative advantage, compatibility, organizational readiness, managers' characteristics and security were significant elements of e-commerce adoption.

Khatun et al. (2020) did a study on Consumer Perception of Online Marketplace in Bangladesh. The study analysed the current status, challenges and opportunities of digital marketing in Bangladesh. Questioners were developed based on dichotomous, multiple choice, and demographic survey type for collecting data on digital marketing in Bangladesh. Randomly 150 respondents were surveyed for completing that digital marketing survey. It has been found that maximum respondents were male (about 73%), and major respondents are young in age (20 to 40 years) which about 77%. They found that, almost every people are aware about digital marketing and maximum respondents prefer online marketing which about 79%. Several significant bivariate relationships among collected data were found. The research observed that out of the total e-commerce activities carried out, 70% comprised of males, with females involved in only 30% of the total. However, the average e-commerce conversion rate between the

two genders was nearly similar. The fact that was carried out was people falling in the age bracket of 21-30 years were more inclined towards technology and its usage. These people were seen to the forefront of the technological revolution and were more open to online shopping. This paper presented an empirical study on consumer perception towards the digital marketplaces in Bangladesh. Total 150 responders were analyzed to determine the preferred products based on age, gender, occupation and educational variation. Demonstrated view was that young age (between 19 to 38 years) were the main responders who always prefer to buy books and food. Whereas, based on occupational distribution, students and job holders were the maximum consumers who preferred books, cloths and foods accordingly. However, no significant difference been found between male and female preference to purchase.

Arobo (2022) did a study on The Effect of Digital Marketing on SMEs. The result of this study showed that most SMEs do not have a clear digital marketing strategy in their brand marketing approach. Some believed that it is time-consuming and somewhat difficult to implement, despite the fact of how important it can be to grow the market sustainable and successful brand. Study also reflected the importance of brand recognition; customer awareness and engagement were the most identified reasons why SMEs use digital marketing. Finally, the researcher found in this study that digital marketing has the ability to attract and retain customers and has a significant impact on customer loyalty and brand association.

In another study Chigombe et al. (2022) observed the Factors Affecting Adoption of Social Media Marketing by Construction MSMEs in Zimbabwe. The study examined the factors influencing social media adoption by Construction MSMEs in Harare guided by Technology Acceptance Model (TAM), and Chaffey's theory. A sample of 119 was drawn from CIFOZ and SMEA using systematic and purposive sampling techniques. Questionnaires and interviews were used in data collection and were analysed using SPSS version 25.0, thematic analysis and Nvivo. Positive factors noted were environmental, (at $\alpha=0.05$ level of significance,) organisational (statistically significant at $p\text{-value}<0.000$) and CEO characteristics towards the adoption of social media marketing by these notwithstanding different barriers. The study concludes that while MSMEs in the construction sector appreciate social media marketing and positive

factors towards its adoption, there are significant barriers towards its adoption that include lack of expertise, information, high maintenance costs and legal issues. Quantitative data collected through a semi-structured questionnaire was analysed using the Statistical Package for Social Sciences (SPSS). Questionnaires used were pre-coded and the responses were entered on a 5.0 Likert Scale. Qualitative data collected through in-depth interviews was analysed using thematic analysis and Nvivo where a list of common themes from the interviews were extracted and then grouped in order to express common elements emerging through participants' voices. Data was presented in the form of frequency tables, as well as supportive narratives in the light of the emerging themes from the interviews as well as word tree diagrams. The triangulation of methods was used to ensure internal validity of the data collection instruments. The objectives of the study were to analyse the positive factors influencing the adoption of social media marketing by MSMEs in the construction sector; to evaluate the barriers hindering the adoption of social media marketing by MSMEs in the construction sector; and elaborate innovative measures that MSMEs can introduce to reduce barriers to social media marketing adoption. Analysis is in the form of frequency analysis in SPSS and thematic analysis in NVivo.

Additionally, analysis of variance (ANOVA) tests was performed to measure the degree to which different factors affect the adoption of social media marketing by MSMEs at $\alpha=0.05$ level of significance.

Kaur et al.(2022) in another another titled by Leveraging Social Media Platforms for valuing Agri-Entrepreneurship in Punjab, India found that agripreneurs in Panjab has significant usage of adopting social media platform. The data were collected from 200 agripreneurs, who got or were getting training from Punjab Agricultural University during the year 2019. The findings highlighted that WhatsApp and Facebook were the two topmost used social media applications for agribusiness pursuits in Punjab, followed by Instagram, YouTube, Twitter, and LinkedIn. Among various demographic attributes, age, educational qualification, and marital status of the agripreneurs were found to have significant relationships with their usability in agribusiness. The young, highly educated, and unmarried agripreneurs recorded more use of social media tools for agribusiness undertakings as compared with older, less educated, and married agripreneurs. It concluded that all agribusiness stakeholders should encourage the

synchronized use of such digital platforms to make the right information available at right time to the agripreneurs. The adoption and frequency of using social media platforms are greatly affected by certain demographic characteristics of social media users. The result showed the significance of the relationship between the age groups of respondents and the use of social media platforms for agribusiness pursuits. There were statistically significant differences in use-scores of Facebook ($X^2(3) = 9.163, p = 0.027 < 0.05$) and WhatsApp ($X^2(3) = 13.290, p = 0.004 < 0.01$) among the different age groups. Facebook and WhatsApp were considered advantageous tools for developing and maintaining better customer relations.

Agripreneurs in the age group of 21 to 40 yrs documented the maximum use of Facebook and WhatsApp for marking their presence on various digital platforms and sharing their experiences among others. The statistical analysis of using YouTube, Twitter, LinkedIn, and Instagram did not find any significant relationship with the age groups of respondents (Kaur et al. 2022).

Jagongo et al. (2013) in another study sought to establish the impact of social media on SME growth in Nairobi, Kenya. The study applied descriptive research design and questionnaires were administered to 246 small and medium enterprises in Nairobi, having either the business owners or managers as the respondents. The study used cluster sampling to separate the target population and thereafter used simple random sampling technique in order to identify the specific businesses that were used for the study. The study findings indicated that social media tools provide greater accessibility to the market and CRM which subsequently have a significant effect on SMEs growth. Additionally, businesses through social media experience fast and cheap communication with customers and also allow them to create a database which the business may then use to generate leads which might eventually lead to increased sales which grows the SMEs. The study recommended that policy makers should keep monitoring the current technological adoption trends by SMEs to come up with policies which encourage best practices for the SME sector growth.

In another study, Jain (2014) did a study on how social media marketing has an impact on SME businesses in India. The study results indicated that small and medium enterprises can achieve the following through digital marketing: create leads and drive

sales, reach new customer groups, improve brand awareness, drive customer engagements, gain customer insights, and improve productivity.

Kithinji (2014) also did a study to determine the impact of internet marketing use on SMEs performance in Nairobi county. This was done using a descriptive survey research design and used a sample size of 90 SMEs. Primary data was collected using questionnaires from the top management of the SMEs. The collected data was analysed factor analysis and regression analysis. The study indicated that a large number of SMEs stated that their biggest challenge in the usage of internet marketing was the fear of losing their current customers who could not access internet. With regards to impact of internet marketing on SMEs performance, the study indicated that there was increased profitability, market share increase and the ability to expand their market growth.

2.4. Conceptual Framework

Conceptual framework is the foundation for understanding the research issues and linkage among different variables. It helps guiding principles for analyzing the research issues. It also helps easy visualization of the relationship between the dependent variables and the independent variables.

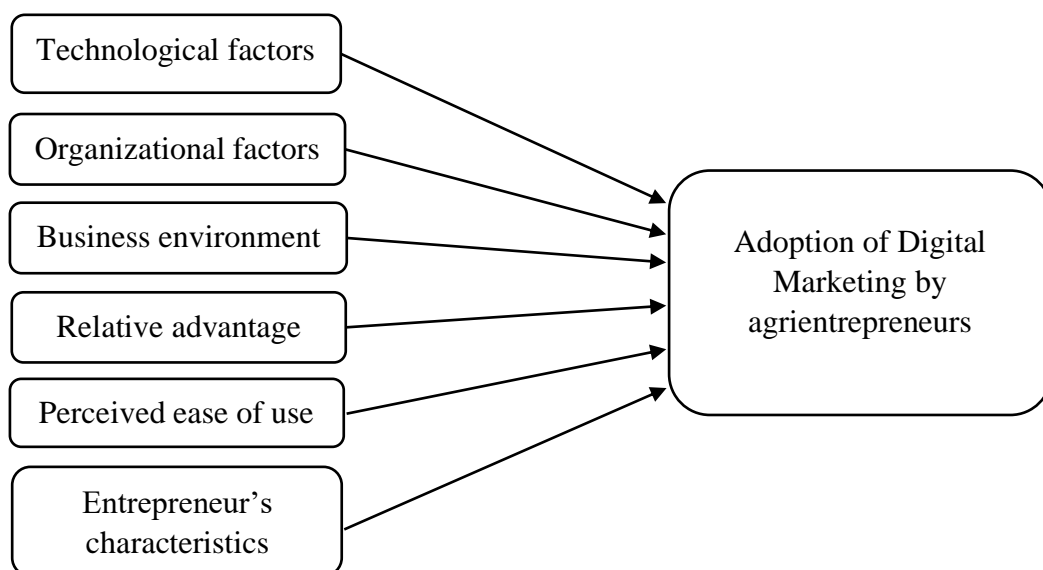


Figure 2.1 Conceptual Framework of this study

2.4.1 Technological factors

The simplicity of use and perceived benefits of the technology by the adopter are the most crucial technological elements. The owner of the business should have the choice to consider a new technology's potential value prior to adopting it (Vadapalli et al. 1997). No framework is sufficiently contemporary to measure the viability of e-marketing (Dahnil et al., 2016). End users, it may be said, have a big influence on how entrepreneurship perceive new technologies.

Although there are certain presumptions and concerns about the technology's viability in relation to money invested, previous studies have once again demonstrated that end users have become more receptive to the web (Stockdale et al. 2006). The same goes for Bruque et al. (2007) assertion that entrepreneurship will enable information sharing.

Hypothesis 1: Technological factors have a positive effect on the adoption of digital marketing in Agri-entrepreneurship in Bangladesh.

2.4.2 Organizational factors

Top management impact on issues of resource accessibility guarantees that satisfactory cash, time and human ability are accessible for the inception and fulfilment of new online business projects (Tarafdar et al. 2006). These authoritative attributes decide the degree of social media marketing adoption. For example, mindfulness and eagerness about arising advancements, solace with their use on piece of directors, and the presence of related experimentation and development emphatically impact the adoption (Tarafdar et al. 2006). The most common organizational are: Chief Executive Officer (CEO) qualities; age; IT information; creativity; business size; authoritative culture; inner resources; and representatives' IT information. Among these components, CEO qualities, like ingenuity and IT information, have shown to be the main determinants in the choice to receive IT in entrepreneurship (Thong et al. 1995). The age of the CEO has additionally exhibited to be huge in the adoption of a new technology, as more seasoned chiefs are generally more dedicated to schedules and, in this way, less willing to transform them (Damanpour et al. 2009). Business size has additionally exhibited to be quite possibly the main discriminator among adopters and nonadopters of IT among entrepreneurs. This is intelligent, since bigger businesses will have more resources accessible and just businesses that have the fundamental hierarchical and monetary resources would consider receiving a new technology (Thong et al. 1995). At last, the

degree of IT information inside the association has additionally been discovered to be a huge determinant of IT adoption by entrepreneurs. This bodes well since by and large; a business will be more able to receive an advancement on the off chance that they have the personnel to understand that technology (Brancheau et al. 1996). Thus, we propose that:

Hypothesis 2: *Organizational factors have a positive effect on the adoption of digital marketing in Agri-entrepreneurship in Bangladesh.*

2.4.3 Business environment

Entrepreneurs perceived technology as a tool to stay in competition. At the point when the contenders begin to use technology to remain ahead, MSMEs will in general leap into the cart and begin to accept the new technology (El-Gohary, 2012; Ifinedo, 2011; Grandon et al. 2004). Government impact, strategy and drive impact the adoption the essential framework, for example, fast web association is critical to support the use of technology (El-Gohary, 2012). Another significant positive factor is the point at which the market is prepared and accessible to use the medium and can acknowledge such exchange electronically (Kendall et al., 2001). Globalization, economy environments and market pattern are significant outside factors that influence the SMEs choice (Stockdale et al. 2006; El-Gohary, 2012). Previous and this study propose that:

Hypothesis 3: *Business environment has a positive effect on the adoption of digital marketing in Agri-entrepreneurship in Bangladesh.*

2.4.4 Relative advantage

Relative advantage is viewed as an advantage for an organization over previous way of performing the same task (Agarwal and Prasad 1997). Relative advantage has been found to be one of the best predictors and positively related to an innovations rate of adoption (Premkumar et al. 1994; Rogers 1995; Tan et al. 2000; Alam et al. 2007). In view of the advantages that e-commerce offer, it would thus be expected that entrepreneurs who perceived e-commerce as advantageous would likely to adopt the e-commerce. This leads to the fourth hypothesis:

Hypothesis 4: *Relative advantage has a positive effect on the adoption of digital marketing in Agri-entrepreneurship in Bangladesh.*

2.4.5 Perceived ease of use

Information systems that users believe are less complicated and easier to use in their businesses are more likely to be adopted and used (Lee et al. 2001; Tan et al. 2000). Perceived ease of use (PEOU), in accordance with TAM, is a crucial element that influences acceptability of system of information (Davis et al. 1989). According to Davis (1989), PEOU is defined as "the extent to which a person believes that using a particular system would be free of effort." E-commerce will be easier to use and more likely to be accepted by users if the right skills and technological knowledge are in place. Applying these to the context of e-commerce, we hypothesize:

Hypothesis 5: Perceived ease of use has a positive effect on the adoption of digital marketing in Agri-entrepreneurship in Bangladesh.

2.4.6 Entrepreneur's characteristics

Adoption of digital marketing is heavily reliant on the acceptance of digital technology by the business owner (Cloete et al. 2002). It can be summarized from the previous study that entrepreneurs' characteristics are important factors affecting the adoption and utilization of the Web. Manager is an entrepreneur figure who is crucial in determining the innovative attitude of a small business (Rizzoni 1991). From Therefore, entrepreneurs' characteristics are expected to influence the adoption of digital commerce (Mirchandani et al. 2001). This is because managers determine the management style of the company. Managers' characteristics which include prior experiences, resistance to change, education level and training are important factors that affect the adoption and utilization of the Web (Torcchia et al. 2000; Larsen et al. 1999; Woodcock et al. 2000; Nutt 1995; Folger et al. 1999; Mick et al. 1998; Thong et al. 1996). This leads to the sixth hypothesis:

Hypothesis 6: Entrepreneurs who have more positive attitude towards adoption of digital marketing are more likely to adopt digital marketing.

CHAPTER III

METHODOLOGY

3.1 Introduction

This chapter provides the methodology that was used to conduct the research. Section 3.2 began by indicating the overall research design used, followed by section 3.3 which discussed the target population which was relevant in providing relevant information for the study. Section 3.4 provided the sampling design which was used in the study, while section 3.5 presented the data collection instrument to be used, the justification for the choice. Finally, data analysis and presentation together with diagnostic tests was provided in section 3.6.

3.2 Locale of the Study

Dhaka district was selected purposively for this study. Most of the data was taken from Mirpur, Mohammadpur, Jatrabari region of Dhaka. The main reasons for selecting study area were as follows:

- a) Easy accessibility and good communication facilities.
- b) Expected better cooperation from the respondent since the area and language of the respondent is well known to the researcher.
- c) No such type of study was conducted previously in this study area.

3.3 Sample Size and Sampling Procedure

The entrepreneurs who are engaged in a business concerning agri-products constituted the population of the study. Total 80 sample was selected by random sampling method out of the 300 population.

3.4 Data Collection Procedure

This study is based on survey methodology and generally the entrepreneurs dealing with agri-products were interviewed with a pre-tested interview schedule. Different type of agriproducts like Jute and handicrafts, textile, wooden products, jam, jelly, pickles, honey, leather products etc. In survey research an interview schedule is very helpful in order to collect reliable and valid information from the respondent. Before preparing the final schedule, draft schedule was prepared keeping the objectives of the study in mind. Then the schedule was pre-tested to verify the relevance of the questions and the nature of the respondent. After pre-testing and necessary adjustment, final

survey schedule was developed. Data for this study were collected through personal interview by the researcher himself during November 2022 to February, 2023. Data were collected from the respondents in face-to-face situation using the structured questionnaire. During interview all possible efforts were made to explain the purpose of the study to the respondents in order to attain valid and pertinent information from them.

3.5 Variables of the Study

A variable is an attribute that describes a person, place or thing. The value of the variables can vary from one entity to other. Research cannot possible without taking into consideration measurable factors that are subject to change due to circumstances. In a descriptive social research, selection and measurement of the variable constitute a crucial task. The variables should be determined in accordance with the research purpose and components. According to research objectives independent and dependent variables were used in this study. Independent variable is a variable we can manipulate, but it's not dependent on the changes in other variables. But the dependent variables are expected to change as a result of an experimental manipulation of the independent variables. In this study, the independent variables are technological factors, organizational factors, business environment, relative advantage, perceived ease of use, and manager's characteristics.

3.6 Data Processing

After completion of filed survey, all the data were coded, compiled and tabulated according to the objectives of the study. Local units were converted into standard units. All the individual responses to questions of the interview schedule were transferred into a master sheet to facilitate tabulation, categorization by using computer. In case of qualitative data, appropriate scoring technique was followed to convert the data the data into quantitative from.

3.7 Data Analysis

Both descriptive and statistical tools were used in this study. Data were analyzed by using STATA software. The descriptive measures such as range, means, standard deviation, number and percentage distribution were used to describe the variables.

CHAPTER IV

SOCIO ECONOMIC CHARACRERISTICS

There were various characteristics and factors that leads the adoption of digital marketing In Agri-entrepreneurs in Bangladesh. There were various socio-economic factors that were likely to affect the adoption of digital marketing by the respondents but in this study selected nine characteristics were considered for research purpose. These are age, gender, year of schooling, highest year of schooling, business experience, training received on business activities, training received on adopting digital marketing, membership on entrepreneurship development club, and membership on entrepreneurial or business association. A short description of these factors is given below:

4.1 Gender

The following table shows that the gender comprises both male and females almost in equivalent level.

Table 4.1 Gender

Gender	Frequency	Percent
Female	42	52.50
Male	38	47.50
Total	80	100.00

Total 80 respondents were chosen among which female were 42 and male were 38. In percent female comprises 52.50% and male 47.50% respectively.

Above table shows that the participation level of the female is almost in equivalent level and in some cases, even more than the male.

4.2 Distribution of Respondents According to Age

The age of the respondents has been varied from 18 to 52 years with a mean and standard deviation of 31.125 and 7.448345 respectively. Considering the recorded age of the respondents were classified into three categories namely young, middle aged and old aged. The distribution of the Agri-entrepreneurs in accordance of their age are represented in Table 4.2

Table 4.2 reveals that the middle-aged entrepreneurs comprised the highest proportion (75%) followed by young-aged (22.5%) and the lowest proportion were made by the old-aged (2.5%).

Table 4.2 Distribution of respondents according to age

Category	Basis of Categorization(years)	Observed Range(years)	Agri-Entrepreneurs		Mean	SD
			Number	Percent		
Young Aged	Up to 25	18-52	18	22.50	31.12	7.44
Middle Aged	26-50		60	75.00		
Old Aged	51 or above		2	2.50		
Total			80	100.00		

The above data indicates that the young and middle-aged category constitute almost 97.5 percent of total respondents. The young and middle-aged entrepreneurs were more involved in the business than the old ones. Sturiale et al. (2013) observed that young agripreneurs tend to use Facebook more than the elder ones. The significance of the age factor to the use of the internet was also supported by Fawole et al. (2012); Linh et al., (2016). Agripreneurs in the age group of 21 to 40 yrs. documented the maximum use of Facebook and WhatsApp for marking their presence on various digital platforms and sharing their experiences among others.

4.3 Year of Schooling

Year of schooling of the entrepreneurs ranged from secondary level to post graduate level. Based on the education level the respondents were classified into five categories.

Table 4.3 Year of schooling

Category	Basis of Categorization(class)	Observed Range(class)	Agri-Entrepreneur		Mean	SD
			Number	Percent		
Up to Primary	0-5	8-22	0	0.00	13.92	2.40
Secondary	6-10		5	6.25		
Higher Secondary	11-12		32	40.00		
Graduation level	13-16		37	46.25		
Post Graduate or above	17 or above		6	7.50		
Total			80	100.00		

The Table 4.3 shows that the entrepreneurs under graduation level comprises the highest proportion (46.25%) followed by the higher secondary level (40%). The average year of schooling is 13.92 and the minimum year of schooling is 8 whereas maximum 22. On the other hand, secondary level and post graduate level respondents are very less in number. Primary level did not provide any data in this study.

Entrepreneurs having graduation or higher education have the highest tendency in advancing entrepreneurship. In a study titled “Leveraging Social Media Platforms for valuing Agri-Entrepreneurship in Punjab” India, Kaur et al. (2022) revealed that the relationship between the educational attainment and the use of different social media platforms for agribusiness activities revealed that there were significant differences in the use scores of Facebook ($X_2 = 12.218$, $p = 0.016$) and LinkedIn ($X_2 = 6.438$, $p = 0.040$) among the different educational groups. The agripreneurs with post-Graduation marked the maximum average use of Facebook (7.52 hrs. per week) and LinkedIn (4 hrs. per week) for their agribusiness endeavors, while the agripreneurs, who didn't pass even their matriculation qualification, recorded the least average use of Facebook (1 hr. per week) and no use of LinkedIn for agribusiness pursuits. The significance of

educational qualification in internet use was also evidenced by Linh et al., (2016). Moreover, the use-scores of WhatsApp for agripreneurs confirmed the compliance of social media platforms for agribusiness tasks. There was a significant difference between agripreneurs belonging to different educational groups and the extent of using WhatsApp ($X_2 = 14.236$, $p = 0.007$) for agribusiness purposes. The agripreneurs with Graduation demonstrated the maximum average use of WhatsApp (9.42 hrs. per week), while the agripreneurs with below matriculation qualification marked the least average use of WhatsApp (1.67 hrs. per week) for their agribusinesses. So, education level is one of the crucial factors regarding this study.

4.4 Highest Year of Schooling in the Family

Table 4.4 shows the highest schooling year of the family of the respondents. This was classified into four categories namely Up to secondary level, then up to higher secondary level and lastly Graduation level or more. The data shows that graduation level or even more dictates highest (38.7%) followed by the secondary level (31.25%). Higher secondary level also shows significant level of contribution (30%). The average schooling level was found 12.97 percent. Minimum schooling was 5 and maximum provides 17.

Table 4.4 Highest year of schooling in the family

Category	Basis of Categorization(class)	Observed Range(class)	Respondents' family Education		Mean	SD
			Number	Percent		
Up to Secondary Level	1-10	1-17 or more	25	31.25	12.97	2.87
Up to Higher secondary Level	11-12		24	30.00		
Up to Graduation Level or more	13-17 or more		31	38.75		
Total			80	100.00		

4.5 Agricultural Entrepreneurial Experience

The following table shows the agricultural entrepreneurial experience by the Agri-entrepreneur. It has been classified into three categories. Less than 5, less than 10 and 10 or above.

Table 4.5 Agricultural entrepreneurial experience

Category(years)	Observed Range(years)	Agri-Entrepreneur		Mean	SD
		Number	Percent		
Less than 5	1-11	54	67.50	4.61	5.34
Less than 10		15	30.00		
10 or above		11	2.50		
Total		80	100		

Observed range is 1 to 11 years. The table exhibits that experience less than 5 years comprises the most number 54 which in percentage 67.50 followed by the the years less than 10 years are 15 in number comprises 30 percent. Minimum experience has been found out 1 years and maximum 11 years. The average years of experience is 4.61 and Standard deviation is 5.34.

The above discussion dictates clearly the entrepreneurs who have less than five years of experience have the larger tendency in adopting something new. In a study titled, “Effect of Digital Marketing on the Performance of MSMES in Kenya” Kawira et al (2019), also found that entrepreneurs having the experience less than 1 year constitute 18.9 percent. Whereas, experience having 1 to 5 years constitute 53 percent. So, experience could be an important factor that adopt digital marketing in Agri-entrepreneurship in Bangladesh.

4.6 Training received on Entrepreneurial Activities

The following table shows the training received by the entrepreneurs. Sixty percent took training and forty percent did not take training.

Table 4.6 Training received on entrepreneurial activities

Category	Frequency	Percent
Yes	48	60.00
No	32	40.00
Total	80	100.00

4.7 Training Received on Adopting Digital Marketing in Entrepreneurial Activities

The following table shows the training received on adopting digital marketing in entrepreneurial activities by the respondents. 39 among 80 respondents adopted digital marketing which comprises 48.75 percent. And 41 respondents did not adopt it, in percent which is 51.25. Here mean is 2.8 and standard deviation is 2.21.

Table 4.7 Training received on adopting digital marketing in entrepreneurial activities

Category	Frequency	Percent	Mean	SD
Yes	39	48.75	2.8	2.21
No	41	51.25		
Total	80	100.00		

Above discussion states that whether training received or not on adopting digital marketing have very less effect in entrepreneurial activities. It does not impact on our studies.

4.8 Membership on Entrepreneurship Development Club

The following table shows membership on entrepreneurship development club by the agri-entrepreneurs. 36.25 percent has the membership and 63.75 percent has not any membership.

Table 4.8 Membership on entrepreneurship development club

Category	Frequency	Percent
Yes	29	36.25
No	51	63.75
Total	80	100.00

4.9 Membership on Entrepreneurial Association

The following table shows the membership on entrepreneurial or business association by the entrepreneurs. 35 percent has the membership and 65 percent has not.

Table 4.9 Membership on entrepreneurial association

Category	Frequency	Percent
Yes	28	35.00
No	52	65.00
Total	80	100.00

CHAPTER V

ORGANIZATIONAL CHARACTERISTICS

5.1 Types of Business

Type of business has been classified into two categories. Sole proprietorship and partnership business.

Table 5.1 Types of business

Category	Frequency	Percent
Sole proprietorship	49	61.25
Partnership	31	38.75
Total	80	100.00

The table dictates that most of the respondents are doing sole proprietorship business. 49 respondents are doing sole proprietorship business. In number they are about 61.25 percent. And 31 out of 80 are doing partnership business. In number they are about 38.75 percent.

The entrepreneurs are doing Sole proprietorship business to a greater extent rather than partnership business. In a study titled, "Effect of Digital Marketing on the Performance of MSMES in Kenya" Kawira et al. (2019) found that, most of the participants (57%) were sole proprietors, while partnerships accounted for 38.1% of the sample population and only 5% claimed to have limited companies. So, Sole proprietorship business could be a factor in adopting digital marketing.

5.2 Number of Employees

Here the mean of the employee is 4.41 and standard deviation is 4.27. Minimum employee is 1 and maximum employee is 30.

Table 5.2 .Number of employees

Category	Observation	Mean	SD	Min	Max
Number of Employee	80	4.41	4.27	1	30

5.3 Annual Turnover Before and After Digital Adoption

The following table shows the minimum and maximum annual turnover before and after the digital adoption. Minimum annual turnover before digital adoption is 1.50 lakh and the maximum is 250.00 lakh. Here mean is 46.66 and the standard deviation is 47.44. The minimum annual turnover after the digital adoption is 2.00 lakh and the maximum is 300.00 lakh. Here mean is 60.00 and the standard deviation is 59.92.

Table 5.3 Annual turnover before and after digital adoption

Category	Mean	SD	Min	Max
Annual turnover before digital adoption (Lakh Tk.)	46.66	47.44	1.50	250.00
Annual turnover after digital adoption (Lakh Tk.)	60.00	59.92	2.00	300.00

The above data exhibits that annual turnover in business after digital adoption has increased than annual turnover in business before digital adoption. Kawira et al. (2019) concluded that digital marketing yields superior performance for MSMEs. The digital marketing tools of mobile phones, Internet and social media sites play significant roles in attracting/reaching and retaining customers hence resulting to improved sales volumes and profitability. So, increasing profit margins is one of the big causes that leads entrepreneurs adopting digital marketing.

5.4 Business Operation Time

The following table shows that the minimum years run by the respondent is 1 year and maximum is 15 years. Here mean is the 4.6 years and standard deviation is 3.32.

Table 5.4 Business operation time

Category	Observation	Mean	SD	Min	Max
Business operation time (years)	80	4.67	3.32	1	15

5.5 Formal Marketing Section

The following table shows that about 36.25 percent respondents have formal marketing section and 63.75 percent do not have formal marketing section.

Table 5.5 Formal marketing section

Category	Frequency	Percent
Yes	29	36.25
No	51	63.75
Total	80	100.00

Most of the entrepreneurs do not focus on formal marketing section. Instead, they are focusing on conventional marketing. It could be due to their perception or belief that formal marketing section has very little impact on running the business.

CHAPTER VI

TECHNOLOGICAL CHARACTERISTICS

Technological characteristics are very crucial to play the role for adaptation of digital marketing. In this study email marketing, mobile marketing, social media marketing, search engine optimization, pay-per-click, online advertising has been considered as a key factor to conduct the research.

6.1 Email Marketing

E-mail marketing has taken place as a newer form of marketing by the entrepreneurs.

The following table shows the adoption of e-mail marketing by the entrepreneurs of 80 respondents. 54 respondents follow e-mail marketing which dictates that 67.50 percent have adopted e-mail marketing whereas 32.50 percent does not adopt it. In a study Olonde (2017) showed that about 51.1 percent had great extent of e-mail usage and 13.2 percent had very great extent usage. This data shows the intensity and dependency of e-mail use by the entrepreneurs.

Table 6.1 Email marketing

Category	Frequency	Percent
Yes	54	67.50
No	26	32.50
Total	80	100.00

As a very common, technologically supportive and comfortable way of communication e-mail marketing is adopted by many businessmen. The above data shows that about 67.50 percent entrepreneurs use e-mail marketing which simply summarizes e-mail as an important medium of digital adoption.

6.2 Mobile Marketing

The following table shows that 47.50 percent respondents use mobile marketing strategy whereas 52.50 percent does not use it.

Table 6.2 Mobile marketing

Category	Frequency	Percent
Yes	38	47.50
No	42	52.50
Total	80	100.00

6.3 Social Media Marketing

The following table shows that 86.25 percent respondents adopt social media marketing strategy where as 13.75 percent does not adopt it. In a study Olonde (2017) showed that about 43.2 percent use social media marketing to a great extent and 23.7 percent use it to a very great extent. It's a clear ephemeron that social media marketing has captured significant amount of place in doing business by the entrepreneurs now a days.

Table 6.3 Social media marketing

Category	Frequency	Percent
Yes	69	86.25
No	11	13.75
Total	80	100.00

Social media marketing has been now a very important form of mass communication. People can easily access and interact through different social media like LinkedIn, Twitter, Facebook etcetera. From that perspective businessmen, entrepreneurs are giving special priority to reach and connect the customers through different social media. While doing the research, in a question whether the entrepreneurs use or not social media, the researcher find most of the entrepreneurs answered yes which clearly dictates that social media is one of the major factors that positively affects the adoption of digital marketing in agri-entrepreneurs in Bangladesh. The data in the above table shows that 86.25 percent respondents adopt social media marketing strategy where as 13.75 percent does not adopt social media marketing strategy which also supports the above discussion.

6.4 Search Engine Optimization

The following table shows that 28.75 percent respondents use search engine optimization strategy where as 71.25 percent does not use it.

Table 6.4 Search engine optimization

Category	Frequency	Percent
Yes	23	28.75
No	57	71.25
Total	80	100.00

Search engine optimization is a set of practices that any content creator can use to help certain web pages rank higher in search results (i.e., bringing content closer to the top of the first page on any search engine site, where users are more likely to see and click on it). Regarding this particular research the researcher finds the entrepreneurs does not seem very keen on this subject or perhaps, Search Engine Optimization is not very popular to them to adopt.

6.5 Pay-Per-Click

The following table shows that 27.50 percent respondents use Pay-Per-Click strategy where as 72.50 percent does not use it.

Table 6.5 Pay-per-click

Category	Frequency	Percent
Yes	22	27.50
No	58	72.50
Total	80	100.00

Pay-per-click (PPC) is an internet advertising model used to drive traffic to websites, in which an advertiser pays a publisher (typically a search_engine, website owner, or a network of websites) when the ad is clicked. Regarding this particular research the researcher finds the entrepreneurs does not seem very keen on this subject too or perhaps, PPC is not very popular to them to adopt. Olonde (2017) found almost similar kind of result in his study. He found that 40% (N=76) of the SMEs do not use pay per click marketing at all as a digital marketing technique. Another 32.6% (N=62) of the SMEs use pay per click as a marketing technique to a little extent, 15.3% (N=29) of them use pay per click to a moderate extent, while 12.1% (N=23) use pay per click as a digital marketing tool to a great extent. The mean responses indicated a value of 1.99 which implied that pay per click is used by SMEs in Nairobi to a little extent. He also showed that only 27.50 percent entrepreneurs use PPC where as 72.50 percent does not use PPC.

6.6 Online Advertising

The following table shows that 60 percent respondents use online advertising strategy where as 40 percent does not use it.

Table 6.6 Online advertising

Category	Frequency	Percent
Yes	48	60.00
No	32	40.00
Total	80	100.00

Online advertising is the most important and highly rewarding marketing tactic in recent times. Almost everyone's trying to ride the 'online' growth wagon these days. Online advertising refers to ads that appear in emails or websites. It's a marketing strategy that uses the internet to generate website traffic and deliver specific marketing messages to the right customers. It's very popular among the entrepreneurs. The above data in the table clarifies that.

CHAPTER VII

ADVANTAGE OF DIGITAL MARKETING

7.1 Awareness of the Digital Marketing

The following table shows that 86.25 percent respondents are aware of the advantage of the digital marketing. Only 13.75 percent does not aware of it. The number of the awareness is massive.

Table 7.1 Awareness of the digital marketing

Category	Frequency	Percent
Yes	69	86.25
No	11	13.75
Total	80	100.00

When we talk about relative advantages, awareness, believing, comfortability etcetera comes into light. In a question, whether the entrepreneur is aware of the digital marketing or not, most entrepreneurs answered yes. Very few are not aware of the digital marketing.

7.2 Believing in the Practices of Digital Marketing

The following table shows that 76.25 percent respondents are aware of the practices of the digital marketing. Only 23.75 percent does not believe in it.

Table 7.2 Believing in the practices of digital marketing

Category	Frequency	Percent
Yes	61	76.25
No	19	23.75
Total	80	100.00

The above data shows that Believing in the practices of digital marketing influences the adoption of digital marketing. Most people now a days are very much attached to the technology. The entrepreneurs are aware of that and thus leads them to practice.

7.3 More Comfortability of Using It by New Customers

The following table exhibits that 75 percent respondents says that new customers are more comfortable of using digital technology. Only 25 percent does not agree with that.

Table 7.3 More comfortability by new customers

Category	Frequency	Percent
Yes	60	75.00
No	20	25.00
Total	80	100.00

Modern customers are more tech-savvy. The entrepreneurs are aware of that. They know that now a days customers are more comfortable of using digital technology. The above data shows that 75 percent respondents are more comfortable of using digital technology. Only 25 percent does not agree with that.

CHAPTER VIII

ENTREPRENEUR'S CHARACTERISTICS

8.1 Assessment of Customer Behavior

The following table shows that 62.50 percent entrepreneurs think digital marketing helps assessing customer behavior. On the other hand, about 37.50 percent does not think that digital marketing helps assessing customer behavior.

Table 8.1 Assessment of customer behavior

Category	Frequency	Percent
Yes	50	62.50
No	30	37.50
Total	80	100.00

Digital platform provides the customers likeness, dislikeness, attitude, norms, behavior, pattern and other traits. By studying these kinds of traits of the customers entrepreneurs can easily provide the customers desired quality or services and eventually can drag them. The above table shows that exactly. It says about 62.50 percent entrepreneurs think digital marketing helps assessing customer behavior. On the other hand, about 37.50 percent does not think that digital marketing helps assessing customer behavior.

8.2 Marketing and Management

The following table shows that 57.50 percent entrepreneurs think that technological factors affect marketing and management. On the other hand, about 42.50 percent entrepreneurs does not think that technological factors affect marketing and management.

Table 8.2 Marketing and management

Category	Frequency	Percent
Yes	46	57.50
No	34	42.50
Total	80	100.00

The above data shows that about 57.50 percent entrepreneurs think that technological factors affect marketing and management. On the other hand, about 42.50 percent entrepreneurs does not think that technological factors affect marketing and

management S. Alam et al. (2011) showed that there is a positive correlation between organizational readiness and e-commerce adoption. This research therefore further proves the earlier findings that showed observability as having a positive and significant influence on e-commerce adoption (Grandon et al. 2002; Thatcher et al. 2002). Existing Internet connection in the business, knowledge and skills of owner/manager and employees about online business reflects a firm's technological capabilities. SMEs without such capacity will be less able to adopt e-commerce into their firms. Above data and discussion dictates that marketing and management is affected by technological factors.

CHAPTER IX

BUSINESS ENVIRONMENT AND PERCEIVED EASE OF USE

9.1 Technology as Prime Driver for Adoption of Digital Marketing

Influence of technology for the adoption of digital marketing is frequently asked question. In this research I asked the respondents whether they consider technological factors as a prime driver for adoption of digital marketing. Among 80 respondents, 54 respondents think technological factors as a prime driver for adoption of digital marketing. In percentage which is 67.50. And, 26 respondents do not think that. In percentage which is 32.50

Table 9.1 Technology as prime driver for adoption of digital marketing

Category	Frequency	Percent
Yes	54	67.50
No	26	32.50
Total	80	100.00

9.2 Development of More Targeted and Sophisticated Market

In a question whether the entrepreneurs believe or not technological factors can easily develop more targeted and sophisticated marketing campaigns, 47 among 80 think that technological factors can easily develop more targeted and sophisticated marketing campaigns. In percentage which is 58.75. And, 33 entrepreneurs do not think that. In percentage which is 41.25

Table 9.2 Development of more targeted and sophisticated market

Category	Frequency	Percent
Yes	47	58.75
No	33	41.25
Total	80	100.00

Creating target customers is one of the basic purposes for the entrepreneurs. To run the business smoother and more favorable the entrepreneurs naturally seek for the target and sophisticated customers. In this case, most of the respondents think that technological factors help create the target and sophisticated market. The above table shows that scenario.

9.3 Technological Factors as New Ways of Providing Goods and Services

The following table shows that 55 percent respondents think technological factors as new ways of providing goods and services in counter,45 percent respondents do not think that.

Table 9.3 Technological factors as new ways of providing goods and services

Category	Frequency	Percent
Yes	44	55.00
No	36	45.00
Total	80	100.00

Customers now a days are more tech-savvy. Many of them are now preferring to use the online services. So, most of the entrepreneurs take that under consideration. The above data exhibits that 55 percent respondents think technological factors as new ways of providing goods and services in counter,45 percent respondents do not think that.

9.4 Technological Factors as New Ways of Communicating with Target Markets

The following table shows that about 56.25 percent entrepreneurs trust technological factors as the new ways of communicating with target markets. In counter 43.75 percent entrepreneurs do not think that.

Table 9.4 Technological factors as new ways of communicating with target markets

Category	Frequency	Percent
Yes	45	56.25
No	35	43.75
Total	80	100.00

CHAPTER X

PROBLEMS OF DIGITAL MARKETING

10.1 Lack of Digital Media Knowledge

Lack of digital media knowledge is a major problem regarding the adoption of digital marketing in Bangladesh. In this study 35 respondents among 80 have the lack of digital media knowledge. That constitutes 43.75 percent. And 45 respondents have the fluency of digital media knowledge which constitutes 56.25 percent. The following table shows the scenario of digital media knowledge among the respondents.

Table 10.1 Lack of digital media knowledge

Category	Frequency	Percent
Yes	35	43.75
No	45	56.25
Total	80	100.00

Media knowledge is a very important concern regarding the adoption of digital marketing for the entrepreneurs. If they are skilled at digital technology, they can easily develop it in their business. Otherwise, it's not possible. The above table shows that most of the respondents have the literacy in digital media knowledge. In percentage it's about 56.25. Still, a very big portion of the population (43.75%) lack of digital media knowledge. Which is a big challenge. In a study titled, "Impact of digital marketing on sales growth of small and medium enterprises in Nairobi, Kenya." Olonde et al. (2017) found that digital media knowledge was the biggest challenge for SMEs to adopt digital marketing. This was indicated with a 31.8% (N=55) of the responses.

10.2 Lack of Digital Marketing Knowledge

Lack of digital marketing knowledge is a major problem regarding the adoption of digital marketing in Bangladesh. In this study 37 respondents among 80 have the lack of digital marketing knowledge. That constitutes 46.25 percent. 43 respondents have the fluency of digital marketing knowledge which constitutes 53.75 percent. The following table shows the scenario of digital marketing knowledge among the respondents.

Table 10.2 Lack of digital marketing knowledge

Category	Frequency	Percent
Yes	37	46.25
No	43	53.75
Total	80	100.00

Digital Marketing knowledge is also a very important concern regarding the adoption of digital marketing for the entrepreneurs. If they are skilled at digital marketing knowledge, they can easily develop it in their business. Otherwise, it's not possible. The above table shows that 53.75 percent of the respondents have the literacy in digital marketing knowledge. But, still 46.25 percent lack of digital marketing knowledge.

10.3 Lack of Finance

Lack of finance is another crucial problem to advance the adoption of digital marketing in Bangladesh. The following table dictates the scenario of that particular issues. About 35 percent entrepreneurs have the lack of finance. And 65 percent entrepreneurs do not have the lack of finance of adopting digital marketing.

Table 10.3 Lack of finance

Category	Frequency	Percent
Yes	28	35.00
No	52	65.00
Total	80	100.00

Finance is very important and a major tool for the adoption of digital marketing. In the above scenario, we can see most of the entrepreneurs have the solvency to adopt digital marketing in compare to the insolvent. This could lead the adoption of digital marketing as well.

10.4 Lack of Relevant Digital Marketing Technique

Lack of relevant digital marketing technique is also a major problem regarding the adoption of digital marketing in Bangladesh. In this study 30 respondents among 80 have the lack of relevant digital marketing technique. That constitutes 37.5 percent. 50 respondents have the fluency of digital marketing technique which constitutes 62.5 percent. The following table shows the scenario of the relevant digital marketing technique among the respondents.

Table 10.4 Lack of relevant digital marketing technique

Category	Frequency	Percent
Yes	30	37.50
No	50	62.50
Total	80	100.00

10.5 Lack of Time for Planning and Implementation

Lack of Time for Planning and Implementation is another serious problem to advance the adoption of digital marketing in Bangladesh. The following table dictates the scenario of that particular issues. About 41.25 percent entrepreneurs have the lack of Time for Planning and Implementation. And 58.75 percent entrepreneurs do not have the Lack of Time for Planning and Implementation of adopting digital marketing.

Table 10.5 Lack of time for planning and implementation

Category	Frequency	Percent
Yes	33	41.25
No	47	58.75
Total	80	100.00

Time is a very crucial factor for planning and implementation of anything. The researcher asked the respondents if they have any lack of time regarding planning and implementation. About 41.25 percent respondents said yes, and 58.75 percent respondents said they don't have the lack of time regarding planning and implementation.

10.6 Lack of Trust in Digital Marketing

Lack of Trust in Digital Marketing is another vital problem to advance the adoption of digital marketing in Bangladesh. The following table exhibits the scenario of that particular issues. About 56.25 percent entrepreneurs have the Lack of Trust in Digital Marketing. And 43.75 percent entrepreneurs do not have the Lack of Trust in Digital Marketing of adopting digital marketing.

Table 10.6 Lack of trust in digital marketing

Category	Frequency	Percent
Yes	45	56.25
No	35	43.75
Total	80	100.00

Trust in digital marketing is a vital issue to advance the adoption of digital marketing in Bangladesh. The above table exhibits the scenario of that particular issues. About 56.25 percent entrepreneurs have the Lack of Trust in Digital Marketing. And 43.75 percent entrepreneurs have no Lack of Trust in Digital Marketing of adopting digital marketing.

10.7 Laws and Policies Regarding Digital Marketing

Laws and policies are another key factor regarding the adoption of digital marketing in Bangladesh. The following table shows the scenario of that particular issues. 19 respondents out of 80 respondents think laws and policies as a barrier for the adoption of digital marketing. In percentage which is 23.75. In counter, 61 respondents out of 80 respondents do not think laws and policies as a barrier in Bangladesh for the adoption of digital marketing. In percentage which is 76.25.

Table 10.7 Laws and policies regarding digital marketing

Category	Frequency	Percent
Yes	19	23.75
No	61	76.25
Total	80	100.00

Laws and policies are also very important factors regarding the adoption of digital marketing. But, in Bangladesh laws and policies regarding digital marketing is still very soft and favorable for the entrepreneurs. They face very minor problem regarding laws and policies regarding digital marketing.

CHAPTER XI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter focuses on the summary in the light of the discussion made in the earlier chapters. Conclusion has been made on the basis of experimental result. Policy recommendations has been made on the basis of conclusion as a part of the present study. This chapter exhibits the summary of findings, conclusions and recommendations of the study.

Summary of Findings

The major findings of the study are summarized below:

Total respondents were 80. Female comprises 52.50 percent and male 47.50 percent respectively. The age of the respondents has been varied from 18 to 52 years with a mean and standard deviation of 31.12 and 7.44 respectively. The age of the respondents was classified into three categories namely young, middle aged and old aged. The middle-aged entrepreneurs comprised the highest proportion (75%) followed by young-aged (22.5%) and the lowest proportion were made by the old-aged (2.5%). The entrepreneurs under graduation level comprises the highest proportion (46.25%) followed by the higher secondary level (40%). The average year of schooling is 13.92 and the minimum year of schooling is 8 whereas maximum 22. On the other hand, secondary level and post graduate level respondents are very less in number. Experience less than 5 years comprises the most number 54 which in percentage 67.50 followed by the the years less than 10 years are 15 in number comprises 30percent. Minimum experience has been found out 1 years and maximum 11 years. The average years of experience is 4.61 and Standard deviation is 5.34. 60 percent received training on entrepreneurial activities and 40 percent did not receive training on entrepreneurial activities. 39 among 80 respondents adopted digital marketing which comprises 48.75 percent. And 41 respondents did not adopt it, in percent which is 51.25. Mean is 2.8 and standard deviation is 2.21.

49 respondents are in sole proprietorship business. In number they are about 61.25 percent. And 31 out of 80 are doing partnership business. In number they are about 38.75 percent. The mean of the employee is 4.41 and standard deviation is 4.27.

Minimum employee is 1 and maximum employee is 30. Minimum annual turnover before digital adoption is 1.50 lakh and the maximum is 250.00 lakh. Here mean is 46.66 and the standard deviation is 47.44. The minimum annual turnover after the digital adoption is 2.00 lakh and the maximum is 300.00 lakh. Here mean is 60.00 and the standard deviation is 59.92. 54 respondents follow e-mail marketing which dictates 67.50 percent have adopted e-mail marketing where as 32.50 percent does not adopt it. 47.50 percent respondents use mobile marketing strategy where as 52.50 percent does not use it. 86.25 percent respondents adopt social media marketing strategy where as 13.75 percent does not adopt it. 28.75 percent respondents use search engine optimization strategy where as 71.25 percent does not use it. 27.50 percent respondents use Pay-per-click strategy where as 72.50 percent does not use it. 60 percent respondents use online advertising strategy where as 40 percent does not use it. 86.25 percent respondents are aware of the relative advantage of the digital marketing. Only 13.75 percent does not aware of it. 76.25 percent respondents are aware of the practices of the digital marketing. Only 23.75 percent does not believe in it. 62.50 percent entrepreneurs think digital marketing helps assessing customer behavior. On the other hand, about 37.50 percent does not think that digital marketing helps assessing customer behavior. 57.50 percent entrepreneurs think that technological factors affect marketing and management. On the other hand, about 42.50 percent entrepreneurs does not think that technological factors affect marketing and management. Among 80 respondents, 54 respondents think technological factors as a prime driver for adoption of digital marketing. In percentage which is 67.50. And, 26 respondents do not think that. In percentage which is 32.50. 47 among 80 think that technological factors can easily develop more targeted and sophisticated marketing campaigns. In percentage which is 58.75. And, 33 entrepreneurs do not think that. In percentage which is 41.25. About 56.25 percent entrepreneurs trust technological factors as the new ways of communicating with target markets. In counter 43.75 percent entrepreneurs do not think that. 35 respondents among 80 have the lack of digital media knowledge. That constitutes 43.75 percent. And 45 respondents have the fluency of digital media knowledge which constitutes 56.25 percent. 37 respondents among 80 have the lack of digital marketing knowledge. That constitutes 46.25 percent. 43 respondents have the fluency of digital marketing knowledge which constitutes 53.75 percent. 35 percent entrepreneurs have the lack of finance. And 65 percent entrepreneurs do not have the

lack of finance of adopting digital marketing. About 41.25 percent entrepreneurs have the lack of time for planning and implementation. And 58.75 percent entrepreneurs do not have the lack of time for planning and implementation of adopting digital marketing. About 56.25 percent entrepreneurs have the lack of trust in digital Marketing. And 43.75 percent entrepreneurs do not have the lack of trust in digital marketing of adopting digital marketing. 19 respondents out of 80 respondents think laws and policies as a barrier for the adoption of digital marketing. In percentage which is 23.75. In counter, 61 respondents out of 80 respondents do not think laws and policies as a barrier in Bangladesh for the adoption of digital marketing. In percentage which is 76.25.

Conclusion

Findings of the study and the logical interpretations of their meaning in the light of other relevant facts provoked the researcher to draw the following conclusions:

Age and year of schooling has an important influence on the adoption of DM in Bangladesh. Age up to middle aged covers more than ninety five percent of the entrepreneurs. Also, education level shows that entrepreneurs having graduation degree are more willing to adopt DM in Bangladesh.

Sole proprietorship is also a potential factor regarding this study. Most of the entrepreneurs are running sole proprietorship business which actually helping them to make any decision independently. In addition, comparison of annual turnover before digital adoption and after digital adoption is also influencing them. Annual turnover after digital adoption is high.

Technological factors like email, mobile, social media, Pay-per-click, SEO, Online advertising is directly provoking them to adopt DM. They can easily reach the customers through this media. This media also helping them to study customers as well as change of strategy if necessary.

Entrepreneurs are believing in the practices of DM. They also believe that, new customers are more comfortable of using digital technology.

Agri-entrepreneurs also believe that DM helps assessing customer behavior. In addition, marketing and management can be affected eventually.

Agri-entrepreneurs have a firm believe that technology is the prime driver of adoption of DM. Technology facilitates the new ways of providing goods and services, communicate with the customers and also paves the way of procuring sophisticated and target customers.

The study also has found some problems like some of the entrepreneurs have the lacking of media and marketing knowledge, financial problems. Some of them have the lack of time for planning and implementation. And, some of them have the lack of trust in DM.

Recommendations

- a) The first recommendation is that there should be proper sensitization and training to Agri-entrepreneurs on available digital marketing options and how it can be done. The government and NGOs should come up with programs to help grow Agri-entrepreneurship which would help the economy grow.
- b) The findings of the study reveal that training on entrepreneurship helps the productivity of the entrepreneurship. So, government can attribute on arranging some SME fair and entrepreneurship programme.
- c) Findings of the result reveals that sole proprietorship is a triumphant march regarding this study. And in doing so, some of the entrepreneurs face the lack of financial problem. Government should leverage them loan facilities with minimal interest. It will boost up the economy.
- d) Other factors that affect sales growth and profitability of the agri-entrepreneurs should also be analyzed since it is known that sales are not affected only by marketing or digital marketing, but a combination of both internal and external factors to an organization. The government should also come up with favorable policies to digital marketing so as not to restrict them when they use them.
- e) Other analytical techniques apart from that used by the study should be done by researchers to determine how digital marketing affect sales growth in an organization.

Recommendations for Further Study

The study is conducted with a small scale (80) respondent. Further study can be conducted with a large-scale respondent.

Comparative study on technology adoption for urban and rural site can be done separately in future to get an overall view for better understanding.

The further research should also focus on how digital marketing affect other aspects of a business such as brand loyalty and customer relationship management since the organization is more than sales and profits.

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DEPARTMENT OF DEVELOPMENT AND POVERTY STUDIES

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APPENDIX

An Interview Schedule for the Study Entitled

ADOPTION OF DIGITAL MARKETING BY AGRICULTURAL ENTREPRENEURS IN SOME SELECTED AREAS OF BANGLADESH

Serial number:

Date:

Dear Respondent,

All of your information will be kept confidential and will be used for research purpose only. Please provide the following information.

A. General information

Name of the respondent:

.....

Name of the enterprise:

.....

Position of the respondent at the enterprise:

.....

Address:

.....

Area..... Mobile:

B. Socio-economic information

1. Age of the respondent: years
2. Gender: Male (1) / Female (0)
3. Year of schooling: years
4. Highest schooling year in the family: years
5. Agricultural entrepreneurial/business experience: years
6. Training received on entrepreneurial/business activities (put \surd mark): Yes/No
If yes: How many days? number
7. Training received on adopting digital marketing in entrepreneurial/business activities

(put √ mark): Yes / No

If yes: How many days? number

8. Membership on entrepreneurship development club (put √ mark): Yes/No
9. Membership on entrepreneurial / business association (put √ mark): Yes/No

C. Descriptive Characteristics of Agri-enterprise

10. Type of business (put √ mark): Sole proprietorship / Partnership
11. Number of employees: number
12. Annual turnover before digital adoption: tk.
13. Annual turnover after digital adoption:tk.
14. How long has your business been in operation? years
15. Does your business/company have a formal marketing section? (put √ mark):
Yes/No

D. Digital marketing tools usage related information

16. Do you know about digital marketing? (put √ mark): Yes/No
If yes, answer the following questions. If no, ...please move on to the question no 29.

17. Do you adopt the following digital marketing tools for the development of your enterprise?

- a) Emails marketing (put √ mark): Yes/No
- b) Mobile marketing (put √ mark): Yes/No
- c) Social media marketing (put √ mark): Yes/No
- d) Search engine optimization (SEO) (put √ mark): Yes/No
- e) Pay-per-click (PPC) (put √ mark): Yes/No
- f) Online advertising (*websites, blogs etc.*) (put √ mark): Yes/No

18. Does your company aware of the relative advantage of the digital marketing? (put √ mark): Yes /No

19. Does your company believe in the practices of digital marketing for coping up with new business era? (put √ mark): Yes /No

20. Does your company think relative advantage of digital marketing as more profitable? (put √ mark): Yes /No

21. Do you think that new customers are more comfortable in using digital technology? (put \surd mark): Yes /No
22. Does your company consider technological factors as a prime driver for adoption of digital marketing? (put \surd mark): Yes /No
23. Does your company believe technological factors can easily develop more targeted and sophisticated marketing campaigns? (put \surd mark): Yes/No
24. Do you believe digital marketing helps assessing customer behavior? (put \surd mark): Yes /No
25. Do you believe digital marketing helps assessing customer behavior? (put \surd mark): Yes /No
26. Does your company think that technological factors affect marketing and Management? (put \surd mark): Yes /No
27. Does your company trust technological factors as the new ways of providing goods and services? (put \surd mark): Yes /No
28. Does your company trust technological factors as the new ways of communicating with target markets? (put \surd mark): Yes/No

E. Problems and Prospects of Digital marketing related information

29. What are the factors that hinder adoption of digital marketing by Agri-Entrepreneurs in Bangladesh? (*Tick all that apply*)

a. Lack of digital media knowledge?

(put \surd mark): Yes /No

b. Lack of digital marketing knowledge?

(put \surd mark): Yes /No

c. Lack of finances?

(put \surd mark): Yes /No

d. Lack of relevant digital marketing technique for business?

(put \surd mark): Yes /No

e. Lack of time for planning and implementation?

(put \surd mark): Yes /No

f. Lack of trust in digital marketing?

(put \surd mark): Yes/No

g. Laws and policies regarding digital marketing?

(put \surd mark): Yes /No

What are the prospective opportunities that encourage you to adopt digital marketing in your enterprise?

- a.
- b.
- c.
- d.
- e.

.....
Signature of the Interviewer

