

Unlocking the Influence of Digital Marketing Strategies on Startup Performance: A Case Study in Bangladesh

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Abstract

This study investigates the impact of different digital marketing tools on the growth and sustainability of startups in Rangpur City, Bangladesh. With the proliferation of digital technology, entrepreneurs in Rangpur are increasingly employing strategies such as social media marketing, search engine optimization (SEO), e-mail marketing, and social networking to augment their exposure and compete in local and global markets. The research aims to analyze different digital marketing methods, and identify challenges that impacts on business performance in Rangpur city. A survey of 132 startup entrepreneurs and business professionals indicates that digital marketing, mainly social media marketing and social networking, substantially impacts business success by explaining 75.3% of the variance in performance outcomes. The findings suggest enterprises with less than 10 years of Operation should emphasize digital marketing specifically social media marketing to leverage the expanding digital trend, particularly in the restaurant, retail, and textile industries. Despite its diminished effectiveness, e-mail marketing continues to be a technique that warrants optimization. The findings offer substantial insights for entrepreneurs, marketers, and policymakers, emphasizing the essential function of digital marketing in facilitating corporate growth and economic development in emerging countries like Bangladesh. This study contributes to the existing literature by highlighting the importance of digital marketing tools for startups in growing regions like Rangpur City. It provides practical recommendations for enhancing digital marketing tactics to promote business success and growth.

Keywords: Digital Marketing, Search Engine Optimization, Social Media Marketing, Social Networking, Startup Business, Business Performance.

1. INTRODUCTION

In the dynamic global economy, digital marketing has become essential for businesses of all sizes seeking to expand their reach, engage consumers, and achieve growth. Startups find this a necessary evil because it is cheaper and can be targeted to specific groups. The Internet has made traditional ideas obsolete and opened new doors for startups to compete with established companies [1]. Startups find this a necessary evil because it is cheaper and can be targeted to specific groups [2]. The Internet has made traditional ideas obsolete and opened new doors for startups to compete with established companies.

Over the last few decades, there has been a significant increase in the number of startup businesses in Rangpur, a city in northern Bangladesh. The city's entrepreneurs are rewriting the economic story by breaking barriers to entry into the conventional marketplace through a digital economy. Furthermore, social media marketing [3], search engine optimization (SEO) [4], e-mail marketing [5], and various other marketing techniques have been reportedly used by many organizations to make themselves known to the local and global markets, even when they have little resources to work [6].

The city's economy is evolving rapidly due to the capabilities of the new generation of innovators who have emerged and can circumvent traditional barriers to entry through digital marketing channels. Though many of these businesses have limited financial means, they can reach established audiences and create a brand through search engine optimization, e-mail marketing, social networks, and other technologies [6]. In many ways, the effect of different digital marketing tools on the startup organizations in Rangpur City is a topic of great interest. For one, it gives a clear sense of the manner in which digital means ensure equal economic opportunities in a developing economy [7]. Furthermore, it illustrates the barriers faced and opportunities seized by entrepreneurs in a place with very different socio-economic conditions[8]. After all, knowing this effect can help guide entrepreneurs and policymakers in creating a better environment for digital innovation. In the contemporary corporate landscape, digital marketing has emerged as an essential instrument for startups seeking to develop and enhance their online presence. In places like Rangpur, where the atmosphere for entrepreneurship is rapidly growing, it is very necessary to have a solid understanding of the significance and influence of digital marketing[9]. In order to reach the target market, it may be helpful to have a solid grasp of digital marketing tools and to use them appropriately [10]. This not only helps to increase profits but also ensures the company's long-term viability. Many studies have been done on how digital marketing tactics are used in Bangladesh. Still, none have explicitly looked at digital marketing tools that measure the success of new businesses in Rangpur City. So, there is a need for further extensive research to be conducted to explicitly evaluate the benefits digital marketing strategies offer new businesses in Rangpur, despite these strategies becoming increasingly popular.

It is the disparity between the potential advantages of digital marketing and the actual execution of this strategy and the impact it has on organizations operating in this industry that constitutes the problem. This study aims to fill that vacuum in knowledge by providing key insights into the effect of digital marketing on the growth and sustainability of startup enterprises in Rangpur City [10].The overall analysis will likely help startup businesses identify their primary objectives while analyzing the various digital marketing tools used, which will overarchingly answer what these companies do today. Finally, it will evaluate how Digital marketing has

helped startups gain a competitive edge and penetrate markets in the changing economic environment. Current literature indicates that this research aims to fill a gap by showing the importance of digital marketing in emerging markets, specifically Rangpur City [10]. This study will also help future entrepreneurs, marketers, and policymakers with helpful information on how they can apply digital marketing tools to grow into becoming able to grow their businesses and the economy [11]. However, the literature examined highlights the relevance of digital marketing with various models in building the current company landscape. It also highlights the dynamic interaction between market forces, technological advancements, and new businesses. Even though several studies have been conducted on digital marketing in various domains and on the difficulties and possibilities that startups in the current world face, there is a dearth of debate concerning the combined influence of the three models on the growth of startups in the Rangpur region. With the combination of the effect assessment model [11], the technology acceptance model [12], and the adoption and usage model [13], there is a need for research to be conducted on how digital marketing impacts new firms that are just getting started in the Rangpur region.

Despite digital marketing is becoming more and more important for startups, few studies especially looking at how it affects newly founded companies in Rangpur City, Bangladesh. Although research on digital marketing techniques in other settings has been conducted, they have not specifically examined how these approaches support the expansion and longevity of companies in this new entrepreneurial center.

Moreover, many studies conducted on importance of digital marketing on business performance but lacks of studies conducted how the use of different digital marketing tools like social media marketing, search engine optimization (SEO), e-mail marketing and social networking can influence the startup performance in Rangpur city. Furthermore, under consideration are several ways in which many models such as the effect assessment model, the technological acceptance model, and the adoption and usage model together affect startup performance in this area. By assessing the function of digital marketing tools in enabling startups to enter markets, get a competitive edge, and attain long-term viability in Rangpur's changing economic environment, this paper seeks to close these gaps. To fill the void and contribute to our understanding of how different digital marketing strategies impact startups, the research objectives are given as follow.

- 1) RO 1: To examines different digital marketing strategies utilized by startups in Rangpur.
- 2) RO 2: Determine which digital marketing methods affect startup performance most.
- 3) RO 3: Analyze Digital Marketing's Social, Technological, and Economic Effects on Startups.

To guide the research, the following questions will be addressed:

- 1) What digital marketing strategies are commonly adopted by startups in Rangpur City?
- 2) What digital marketing tools impact more to gain startup business success?
- 3) How can entrepreneurs improve digital marketing with best practices in Rangpur City?

2. RELATED WORKS

The Internet is actually the most effective business instrument [14]. Businesses can achieve a better competitive advantage in the market by using this instrument. The Internet is the fundamental digital marketing platform that enables organizations to have global reach, precise targeting, and real-time engagement [15]. Different authors have researched digital marketing and the pattern of startup businesses in the modern world. Some of the literature is reviewed as follow.

2.1. Digital Marketing

Many authors define digital marketing in their works. Digital marketing encompasses exchanging information and engaging firms with their customers through digital platforms[16]. Another well-known definition Smith provides is that promoting goods and services through digital platforms is digital marketing [17]. In another definition, by highlighting the role of advertising, the author describes digital marketing [2]. Moreover, digital marketing uses technologies to enhance marketing efforts and customer understanding by aligning with customers' specific needs [18]. It has expanded beyond its original meaning to encompass any approach that leverages digital technology to boost sales, establish brands, engage customers, and advertise goods and services [6]. Actually, digital marketing is a flexible framework that helps businesses and customers work together to create, distribute, and maintain value [19]. Without understanding the fundamentals of digital marketing, it is impossible to gain business success [20]. With the help of E-commerce, SEO, SEM, E-mail, and Social Media Marketing tactics, businesses may gain theoretical and practical insights into making a solid online presence [21]. Moreover, understanding the advantages and disadvantages of digital marketing might expand the growth of any business [22].

The research highlights the importance of digital marketing for business success through information and communication technology. Electronic media plays a vital role in promoting products and engaging customers for companies and marketers[23]. Digital communication is essential for travelers' behavior and tourism competitiveness, focusing on social media, smartphone apps, and electronic word-of-mouth (eWOM) [24]. The impact of digital, web, and electronic referral marketing on consumer purchase intention is explained and helps

businesses catch up with the market share [25]. Another researcher said that customer knowledge and digital platforms help consumers make purchasing decisions that support business growth [26]. Overall, purchase decisions are influenced by digital channels [6]. So, this study reveals that consumers know digital marketing and prefer purchasing electronic goods and shopping through digital channels. Based on the analysis of 132 respondents, this study underscores the substantial impact of digital marketing on business success [27]. The literature indicates that digital marketing has become a crucial component of contemporary marketing strategy. It underscores the importance of engagement and accurate information flow, influencing consumer behavior and corporate performance.

2.2. Startup Business

Startups are commonly described as recently created enterprises that strive to introduce groundbreaking products or services to the market. They are human organizations formed to develop new goods or services in highly unpredictable contexts [28]. The Key characteristics of startups include a scalable business model, growth potential, and a focus on continuous innovation [29]. Startup appears to promise new, better, and modern kinds of work [30], organized around a love of work [31], passionate attachments to that work [32], schedules that we create for ourselves [33], and new urban environments and ways of living[34]. The formation and growth of startups can be depicted through various studies. The study on the synthesized framework for forming a startup explains that a startup's formation depends on key actors like incubators, financial suppliers, universities, and companies [35]. By analyzing 63 documents, this study provides a comprehensive and advanced understanding of startup innovation ecosystems. In studying expanding digital marketing's influence on startup growth, we investigate how new technology affects digital marketing in B2B and B2C models[36]. According to the report, digital marketing is a powerful intermediary between digital engagement and company expansion. To understand the importance, some studies primarily investigate the significance of establishing a digital startup business[37], with a particular emphasis on the obstacles such as limited technology, management, and leadership that impede the progress of incubators[38].

The study utilized qualitative techniques, observational research, and literature assessment to determine that government funding is essential for incubators to promote technical and company progress. Some significant patterns, topics, and impactful contributions elucidate the function of technology in fostering innovation and the expansion of startups [39]. This study introduces fundamental ideas, including open innovation, digital transformation, disruptive innovation, and emerging themes. The Stock Exchange is characterized as a crucial source of finance for rapidly expanding enterprises in Indonesia, favorably influencing the

national economy [40]. Digital marketing is essential for the success of businesses, offering a platform for global outreach, accurate targeting, and immediate interaction. Startups face many obstacles, such as access to finance, technology adoption, market competition, and regulatory complexities [27]. Strategic approaches that startups can engage in to overcome those obstacles to gaining growth and innovation through digital marketing are leveraging social media, utilizing data analytics, collaborating with support organizations, and using customer-centric methods.

2.3. Impact Assessment Model

Digital marketing for startups has been a hot topic in developing markets and cities like Rangpur. Digital marketing includes many promotional activities like social media marketing, content marketing, SEO, and online advertising, which contribute to the overall growth of startups [41]. Many methods and frameworks have been developed to measure this impact. The impact assessment model is one of the frameworks used to measure the impact of digital marketing on startups [42]. The impact assessment model measures the effectiveness of digital marketing by many indicators like reach, engagement, conversion, and retention [43]. Besides this, the Impact Assessment Model also provides the basis for a startup business's economic, social, and technological impact.

2.4. Economic Impact

Digital marketing plays a vital role in boosting the economic performance of startups by lowering marketing expenses and driving revenue growth[2]. It enhances the financial sustainability of these businesses by increasing income while minimizing costs [44]. Tools like search engine optimization (SEO), e-mail marketing, social media, and various digital marketing platforms allow organizations to connect with potential customers at a minimal cost [43]. This is especially important for startups in Rangpur City, which often face budget limitations. By targeting specific demographics and monitoring their return on investment (ROI), startups can refine their marketing strategies, resulting in increased sales and improved conversion rates [45].

2.5. Social Impact

The social impact of digital marketing on startup businesses includes increased brand awareness and enhanced customer engagement [46]. Some papers highlight the positive effects of online social networking platforms on startups, emphasizing their role in facilitating direct interaction with consumers and building a strong sense of community and loyalty [47]. Startups in Rangpur City can create a solid local presence and improve customer interactions through social media marketing.

Additionally, digital marketing allows for customer feedback and reviews, which are crucial for product and service development and maintaining a positive brand reputation [48].

2.6. Technological Impact

From a technological standpoint, digital marketing drives innovation and boosts startup competitiveness [49]. By leveraging digital platforms and tools, these businesses can automate their operations, analyze consumer data, and tailor their marketing efforts [50]. In Rangpur, where the technological infrastructure is rising, startups can harness these technologies to secure a competitive edge [51]. Adopting advanced digital marketing technologies like AI (artificial intelligence) and extensive data analysis can significantly improve decision-making and operational efficiency [52].

2.7. Technology Acceptance Model

If you look at the Technology Acceptance Model (TAM), perceived utility (PU) and perceived ease of use (PEOU) are two of the most important things that affect how people accept new technology [53]. Many people have used this model to look at how people adopt different technologies, especially digital marketing tools, which are increasingly important for new businesses [54]. It is more successful and costs less to use digital marketing techniques like SEO (search engine optimization), content marketing, e-mail marketing, and social media marketing instead of old-fashioned ones. This gives new businesses an edge over competitors [55]. Actually, digital marketing is helpful because it raises brand awareness, customer interaction, and sales [56]. People in places like Rangpur are choosing digital channels and other tools that are easier to use. There is evidence that the Technology Acceptance Model is valuable, which shows that startups are likelier to use e-marketing if they think it is useful and easy to use [57]. Local factors like connecting to the Internet and knowing how to use technology are vital to consider [50]. The Technology Acceptance Model can help improve the acceptance of digital marketing and support company growth in Rangpur City.

2.8. Adoption and Utilization Model

As digital technologies grow more critical in the modern world, much attention has been paid to how digital marketing impacts startup businesses [58]. Using the Adoption and Utilization Model, it might be possible to understand how startups can leverage digital marketing for growth. Rogers' Diffusion of Innovations theory explains that startups are attracted to digital marketing because of its cost-effectiveness and broad reach [59]. Tools like social media, Search engine optimization, and e-mail marketing provide inexpensive engagement compared to

traditional marketing techniques [6]. The execution of the adoption and utilization model underscores that in developing regions, startups use digital marketing to overcome financial and geographical constraints [60]. For instance, social media is inexpensive for maintaining customer relationships and building brand awareness [52]. However, the success of digital marketing relies on a combination of factors, including the level of digital literacy within the Organization and supportive infrastructure and regulations [61]. The adoption and utilization model provides a complete framework that allows for a better understanding of the influence of digital marketing efforts on the expansion of startups [2].

3. METHODOLOGY

The methodology section provides an overview of the methodical approach and procedures utilized in data collection, analysis, and interpretation for the research [62]. It also provides an overview of the approach taken to investigate the impact of digital marketing on startup success. The following section comprehensively explains the research design, sampling approaches, collecting methods, and data processing procedures. The study aims to ensure the results' validity, reliability, and generalizability by utilizing a robust methodological framework.

3.1. Research Design

This research employs a quantitative methodology to analyze the effects of digital marketing on startup enterprises in Rangpur City. The quantitative approach facilitates objective analysis and extensive extensions using descriptive and correlational approaches. The survey-based approach guarantees precise assessment and significant insights for entrepreneurs and stakeholders.

3.2. Sampling

In the research context, the term "population" refers to the complete group of persons, objects, or things with similar features pertinent to the study's aims[63]. The study focuses on startup owners, founders, marketing managers, and digital marketing experts from Rangpur City. The researchers also include those who work in sales and marketing for these new businesses.

Methods such as non-probability convenience sampling were utilized to collect quantitative data[27]. Within this quantitative inquiry, the sample selection method is restricted. The method makes sample selection straightforward, easiest, cheapest, and fastest. Likert scales were used to create a survey[64]. First, respondents score traits from strongly disagree to agree numerically, 1 to 5 strongly. The number ranking is 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree[65].

The researcher collected data from a cohort of 132 startup proprietors, founders, marketing managers, and digital marketing specialists in Rangpur City for this quantitative study. We employed a questionnaire survey to gather the requisite information. The survey encompassed inquiries regarding several aspects, facilitating the acquisition of vital insights and the generation of suggestions.

3.3. Data Collection

In the context of research, the term "data collection method" refers to the methodical process of collecting information from a variety of sources in order to accomplish study objectives [62]. For this research, the researcher made a list of questions to learn from people in Rangpur City. With the help of the Likert scale, the researcher tries to find the list of choices to rate how digital marketing affects their new businesses because it is easy to gather the response and less time-consuming [65]. The researcher asked 132 people, including owners, founders, and marketing, to rate how digital marketing affects their new businesses. The data collection was conducted through both online and in-person methods. The info was gathered over four weeks, and we sent more messages to those who had not replied. After that, the researcher put all the information together to study it.

The data was collected from startup owners, founders, marketing managers, and digital marketing professionals in Rangpur City through surveys, questionnaires, interviews, and focus groups. The secondary data collection involved a thorough literature review, scrutiny of newspaper articles, and analysis of company websites about the topic[66]. In addition to providing quantitative data, surveys and questionnaires supplied insights from a subjective standpoint. Using secondary data sources and providing tangible examples from academic and real-world contexts enhanced the study's efficacy. This all-encompassing method made an in-depth investigation of the subject of the inquiry possible.

3.4. Data Analysis Techniques

This research employs descriptive and inferential statistics to increase the accuracy and reliability of the investigation. Descriptive statistics aggregate and arrange data to explain the dataset's characteristics through mean, median, and standard deviation, which assist researchers in the dispersion of the data[67]. On the other hand, inferential statistics is used to examine relationships between variables and analyze variance[62]. Using descriptive and inferential statistics, the researcher tries to find the best outcome from the investigation.

This study uses descriptive statistics (mean, median, and standard deviation) to delineate the demographic features of the sample group and the responses about digital marketing techniques, including expenditure levels, employed platforms,

and perceived efficacy. An analysis of the statistical data yields a comprehensive insight into the current digital marketing techniques among startup enterprises in Rangpur City.

The research uses statistical analysis to examine the influence of digital marketing on startups. The Pearson correlation evaluates the association between digital marketing exposure and the expansion of startup enterprises. Multiple regression analysis determines the digital marketing variables that exert the most substantial influence on startups. ANOVA assesses the impact of digital marketing across different demographic segments.

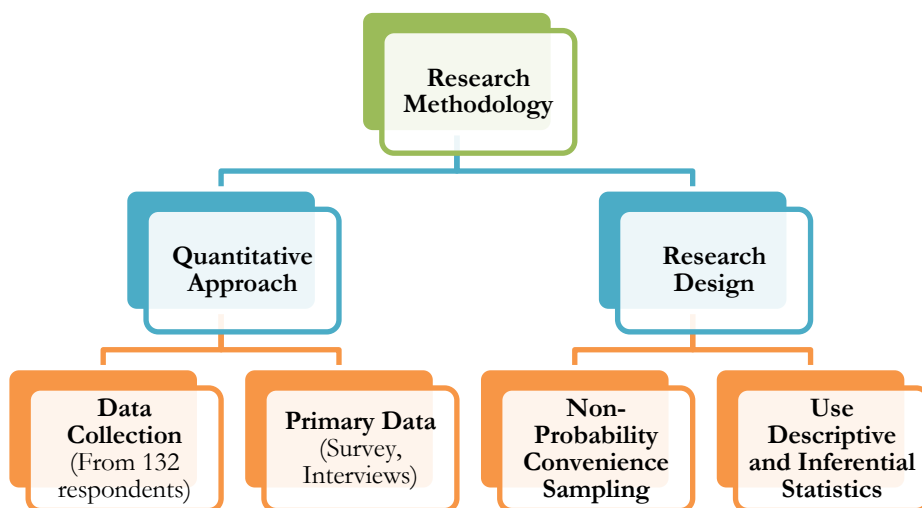


Figure 1. Research Methodology

As can be seen in the Figure 1, this study places a significant amount of attention on quantitative research approaches. Specifically, the authors determine the impact that digital marketing has on the success of startups in Rangpur City. By doing an analysis of the prospective replies of 132 respondents, quantitative data offers a clear picture of the many elements that contributed to the outcome[66]. The researcher obtains data by means of a questionnaire based on a Likert scale[65] from business owners, marketing managers, and experts in order to make the analysis more pertinent to this field. This is accomplished through the use of the non-probability convenience sampling approach[66]. Primary data are gathered through the use of surveys and interviews conducted over a period of four weeks, while secondary data are gathered through the utilization of relevant literature and a website that is currently valid. With a collected data from different people included in startup business, researchers try to formalize all these data into analysis software. With the help of SPSS data are synthesis on the basis of the questionnaire requirement. Descriptive statistics were used to assemble the data[68], and

inferential statistics were used to investigate the relationship between the success of startups and digital marketing strategies. Secondary data from company websites, media reports, and literary reviews were also analyzed in addition to primary data. However, within the framework of the overall methodological technique, the research is organized in a methodical manner that not only assists the researcher in working on the appropriate flow, but also makes it easier for the audience to comprehend the research procedure.

4. RESULTS AND DISCUSSION

4.1. Respondent Characteristics

1) Age

Respondent age denotes the age of startup business owners, marketing managers, and experts involved in this research. Age is a vital element in comprehending how different generations interpret and employ digital marketing methods. Younger entrepreneurs tend to be more proficient in technology and favor social media marketing, whereas elder business owners may depend on conventional approaches. So, in this study the data collection from different age group respondent might be provides a thoughtful insight into the startup ecosystem in Rangpur City.

Table 1: Respondent Age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
> 20 years	14	10.6	10.6	10.6
21 to 30 years	49	37.1	37.1	47.7
>30 years	69	52.3	52.3	100.0
Total	132	100.0	100.0	

The age distribution of respondents (Table 1) indicates that the predominant group is over 30 years old, comprising 52.3% of the total respondents. Individuals aged 21 to 30 represent 37.1%, while the remaining 10.6% are below 20 years old. The cumulative fraction indicates that 47.7% of respondents are 30 years old or younger, and 52.3% are older than 30. The dataset has 132 respondents, guaranteeing equitable coverage across all age demographics.

2) Gender

Comprehending gender distribution facilitates the analysis of disparities in digital marketing uptake and efficacy [31]. Male and female entrepreneurs may adopt distinct strategies in employing digital marketing technologies, and customer tastes may vary according to gender[64]. So, the researcher identifies patterns or inequalities in digital marketing tactics and their effects on startup performance by

analyzing respondent gender. According to the gender distribution of respondents (Table-2), men make up the majority, accounting for 74.2% of all respondents. The remaining 25.8% are women. All 132 respondents are included in the cumulative percentage, which reveals a notable gender disparity, with over three-quarters of the respondents being men.

Table 2. Respondent Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	98	74.2	74.2	74.2
Female	34	25.8	25.8	100.0
Total	132	100.0	100.0	

3) Position

Respondent Position in Business denotes the job or title of the participants inside their respective startups. This research encompasses business proprietors, managers, marketing executives, and personnel who affect or execute digital marketing tactics. Comprehending their roles aids in evaluating how decision-making power and duties influence the adoption and efficacy of digital marketing. It is necessary to examine data based on the various positions of individuals in startup businesses to understand their differing perspectives.

Table 3. Respondent Position in Business

Position	Frequency	Percent	Valid Percent	Cumulative Percent
Employee	18	13.6	13.6	13.6
Founder	8	6.1	6.1	19.7
Manager	23	17.4	17.4	37.1
Marketing	10	7.6	7.6	44.7
Owner	73	55.3	55.3	100.0

According to the data regarding respondents (Table 3), in "business positions," the majority, 55.3%, are business proprietors, underscoring their predominant representation in the sample. Managers constitute 17.4% of the workforce, while subordinates constitute 13.6%. The proportions of marketing experts and founders are lesser, at 7.6% and 6.1%, respectively. The cumulative percentages suggest that 44.7% of respondents are in positions other than ownership, while over half are owners. This indicates that the respondent group places a significant emphasis on leadership roles. A total of 132 individuals comprises the sample.

4) Years of Operation

Respondents' Years of Operation denotes the length of time of respondent participating in startups and perform operations. This component is essential for

comprehending how both established and emerging enterprises implement and get advantages from digital marketing tactics. Established startups may possess experience in both conventional and digital marketing, whilst newer enterprises may depend predominantly on online channels. So, the analysis of data based on respondents' years of operation may enhance comprehension of the study's findings.

Table 4. Respondents Years of Operation

Position	Frequency	Percent	Valid Percent	Cumulative Percent
< 5 years	71	53.8	53.8	53.8
6 to 10 years	22	16.7	16.7	70.5
11 to 15 years	10	7.6	7.6	78.0
16 to 20 years	11	8.3	8.3	86.4
> 20 years	18	13.6	13.6	100.0
Total	132	100.0	100.0	

According to the data (Table 4) collected on the years of Operation of the respondents, more than half of the enterprises, or 53.8%, have existed for less than five years. Those companies that have been in business for six to ten years make up 16.7% of the total, while those that have been in operation for eleven to fifteen years make up 7.6%. The remaining 8.3 percent have been in Operation for 16 to 20 years, while 13.6 percent have been in business for more than 20 years of continuous Operation. The cumulative statistic indicates that 70.5% of enterprises have been operational for ten years or less. Moreover, all examined firms fell within the specified timeframes. The total number of companies included in the sample is 132.

5) Industry Sector

This research examines startups across several industries, including retail, technology, healthcare, education, and hospitality. Determining the industrial sector facilitates the analysis of variations in digital marketing tactics among diverse business kinds. Some industries may depend significantly on digital marketing, but others may utilize it to a lesser extent. So, to understand this variation, this study examines the sector-specific influence of digital marketing on company success in Rangpur City.

Table 5. Name of Industry Sector

Position	Frequency	Percent	Valid Percent	Cumulative Percent
Agribusiness	9	6.8	6.8	6.8
ICT and Software Development	12	9.1	9.1	15.9
Pharmaceuticals	18	13.6	13.6	29.5

Position	Frequency	Percent	Valid Percent	Cumulative Percent
Restaurant	37	28.0	28.0	57.6
Retail and Consumer Goods	28	21.2	21.2	78.8
Textile and Handicraft	28	21.2	21.2	100.0
Total	132	100.0	100.0	

The distribution of respondents by industry sector (Table 5) indicates that the restaurant sector comprises the highest proportion, accounting for 28.0% of respondents. Together with the textile and handicraft industries, the retail and consumer products sectors account for 21.2% of the respondents. Comprising 13.6%, the pharmaceuticals sector is followed by ICT and software development at 9.1%. With 6.8%, the least represented group falls in the "Agree business" category. The cumulative percentage reveals that over half (57.6%) of the respondents belong to the restaurant, retail consumer goods, or textile and handicraft industries, with a total sample size of 132.

4.2. Descriptive Analysis

Descriptive statistics is utilized in this paper to show information on respondent demographics, company traits, and utilization of digital marketing. The general distribution of variables like respondent age, gender, years of operation, and industrial sector may be better understood by means of measures including mean, median, frequency, and percentage[68]. Descriptive statistics help the research to clearly and succinctly present the data, therefore facilitating the interpretation of the influence of digital marketing on startup success in Rangpur City.

The survey (Table 6), derived from responses from 132 participants, underscores a robust acceptance of digital marketing techniques, with Technology Acceptance (mean = 4.91) and Social Networking (mean = 4.92) attaining the highest average ratings, signifying extensive consensus and adoption. Social Media Marketing (mean = 4.66) and Business Performance (mean = 4.75) received high scores, indicating their perceived significance. Conversely, E-mail Marketing (mean = 3.88) had the lowest average, indicating a relatively moderate preference or efficacy. The uniform ratings for most factors, evidenced by low standard deviations (e.g., 0.16 for Technology Acceptance and 0.13 for Business Performance), suggest consensus among participants. In contrast, marginally more significant variability was observed in factors such as Search Engine Optimization (mean = 3.99, SD = 0.51). The findings highlight the participants' considerable involvement with digital marketing methods, especially in the social and technological dimensions.

Table 6. Descriptive Statistics

N	Search Engine Optimization	Technology Acceptance	Digital Marketing	Social Networking	Social Media Marketing	E-mail Marketing	Business Performance
Valid	132	132	132	132	132	132	132
Missing	0	0	0	0	0	0	0
Mean	3.9924	4.1417	4.9078	4.9167	4.6629	3.8814	4.7542
Median	4.0000	4.2667	5.0000	5.0000	4.6667	3.8333	4.7500
Std. Dev.	.50981	.60935	.16256	.16539	.26490	.52329	.13081
Range	2.67	2.67	.67	.67	1.17	2.67	.81

The Model Summary offers a concise assessment of the statistical model's adequacy in fitting the study's data [66]. It encompasses significant measures such as R-squared, which signifies the extent to which the variance in the dependent variable (e.g., startup success) can be elucidated by the independent variables (e.g., digital marketing techniques). An elevated R-squared value indicates that the model accounts for a greater portion of the data's variability. The Model Summary evaluates the model's accuracy in forecasting or elucidating the elements affecting startup performance, providing a greater understanding of the correlation between digital marketing and company success.

The model summary (Table 7) reveals that the predictors (E-mail Marketing, Social Media Marketing, Digital Marketing, Technology Acceptance, Search Engine Optimization, and Social Networking) exhibit a robust association with the dependent variable, evidenced by a correlation coefficient (R) of 0.868. An R Square score of 0.753 indicates that these predictors account for around 75.3% of the variation in the dependent variable. The Adjusted R Square, marginally reduced to 0.741, considers the number of predictors and their impact on the model, yielding a more precise assessment. The standard error of the estimate is 0.06659, signifying that the average variation of observed values from projected values is minimal, suggesting a strong model fit.

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868 ^a	.753	.741	.06659

Predictors: (Constant), E-mail Marketing, Social Media Marketing, Digital Marketing, Technology Acceptance, Search Engine Optimization, Social Networking

The regression study's ANOVA (Table 8) demonstrates that the model is statistically significant in forecasting "Business Performance." The model indicates that the independent variables "E-mail Marketing, Social Media Marketing, Digital Marketing, Technology Acceptance, Search Engine Optimization, and Social Networking" significantly explain a considerable portion of the variance in Business Performance, as evidenced by a p-value of 0.000, which is below the significance threshold of 0.05. The considerable F-value of 63.427 substantiates the model's strength, demonstrating that the predictors significantly impact the dependent variable. The residual variance (0.554) is relatively small compared to the explained variance (1.687), indicating that the model adequately fits the data. Thus, the regression analysis confirms that these attributes influence business performance.

Table 8. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.687	6	.281	63.427	.000 ^b
Residual	.554	125	.004		
Total	2.241	131			

a. **Dependent Variable:** Business Performance

b. **Predictors:** (Constant) E-mail Marketing, Social Media Marketing, Digital Marketing, Technology Acceptance, Search Engine Optimization, Social Networking

Coefficients Analysis is utilized to determine the strength and direction of the relationship between variables in a statistical model [69]. This approach may provide a comprehensive knowledge of which independent factors exert the greatest influence on the dependent variable [70]. A positive coefficient indicates that an increase in the variable leads to improved corporate performance, whilst a negative coefficient suggests the opposite. This analysis is conducted to comprehend the influence of many independent factors on the dependent variable.

The regression analysis (Table 9) sheds light on the connection between the many different aspects of digital marketing and the Organization's performance. The model's constant is 1.369, and the t-value is 6.113, which is statistically significant ($p < 0.001$). As one of the independent variables, Search Engine Optimization (SEO) has a substantial impact on the performance of the firm ($B = 0.132$, $t = 2.513$, $p < 0.001$), as shown by a standardized coefficient (Beta) of 0.164. Additionally, the factor of Technology Acceptance ($B = 0.021$, $t = 2.421$, $p = 0.032$) has a favorable impact, as seen by its Beta value of 0.236. There is a significant positive impact ($B = 0.170$, $t = 11.859$, $p = 0.013$) associated with digital marketing, and the beta value for this impact is 0.663. With a Beta value of 0.350, the statistical analysis reveals that Social Networking ($B = 0.277$, $t = 5.311$, $p < 0.001$) has a significant impact. Similarly, the significance of Social Media

Marketing ($B = 0.150$, $t = 6.747$, $p < 0.001$) is also noteworthy, as indicated by the Beta value of 0.304. However, the study's results suggest that e-mail marketing does not substantially contribute to the firm's performance ($B = 0.001$, $t = 0.039$, $p = 0.639$). Based on these findings, search engine optimization (SEO), technology adoption, digital marketing tactics, social networking, and social media marketing are all essential for enhancing business performance. On the other hand, e-mail marketing does not have more of an influence.

Table 9. Coefficients Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.369	.224		6.113	.000
Search Engine Optimization	.132	.052	.164	2.513	.000
Technology Acceptance	.021	.010	.236	2.421	.032
Digital Marketing	.170	.014	.663	11.859	.013
Social Networking	.277	.052	.350	5.311	.000
Social Media Marketing	.150	.022	.304	6.747	.000
E-mail Marketing	.001	.014	.002	.039	.639

a. Dependent Variable: Business Performance

4.3. Discussion

The results of the survey present a compelling picture of the current digital marketing landscape among startups. Notably, the highest-rated strategies were “Technology Acceptance” (mean = 4.91) and “Social Networking” (mean = 4.92), highlighting a strong inclination toward technological adaptation and online social engagement. These findings suggest that businesses are increasingly leveraging digital tools and platforms to connect with consumers and streamline operations. “Social Media Marketing” (mean = 4.66) and “Business Performance” (mean = 4.75) also scored highly, emphasizing their critical roles in building brand presence and measuring success.

Conversely, “E-mail Marketing” recorded a lower average score (mean = 3.88), indicating that while still used, it may not be as impactful or preferred as other digital strategies. Interestingly, despite its longstanding presence in digital campaigns, the moderate enthusiasm for email marketing might reflect shifting consumer behaviour and a preference for more dynamic, real-time engagement platforms [21]. The consistency in responses was especially notable for

“Technology Acceptance” and “Business Performance,” which displayed minimal variation, suggesting widespread consensus among the surveyed entrepreneurs. However, responses for “Search Engine Optimization” showed slightly higher variability, which could be attributed to differences in expertise, application, or perceived effectiveness across industries. The findings underscore the growing importance of digital and social strategies in driving business outcomes. In particular, the high ratings for social and technological components reinforce their status as essential pillars of a modern marketing approach, especially for startups aiming to build a strong digital presence and compete in crowded markets.

The regression model provides substantial explanatory power, demonstrating the collective impact of digital marketing variables on business performance. The predictors E-mail Marketing, Social Media Marketing, Digital Marketing, Technology Acceptance, Search Engine Optimization, and Social Networking jointly account for 75.3% of the variance in the dependent variable ($R^2 = 0.753$). This high R Square indicates that these factors are deeply interconnected with business performance outcomes [66].

Moreover, the model exhibits a strong correlation ($R = 0.868$), affirming the strength of the relationship between the independent variables and business success. The Adjusted R Square value of 0.741 provides a more conservative yet still impressive estimate of model fit, adjusting for the number of predictors involved. The standard error of the estimate (0.06659) is relatively low, which implies that the predicted values closely match the observed outcomes—reinforcing the model's accuracy and reliability.

These results validate the hypothesis that digital marketing tools and strategies are vital for achieving sustainable business performance, especially within the context of emerging startups. The ANOVA test ($F = 63.427$, $p < 0.000$) reveals that the model is statistically significant and offers a strong explanatory framework for understanding business performance. The high F-value, coupled with a relatively low residual variance (0.554), confirms that the independent variables collectively contribute to explaining a substantial portion of the outcome variable [66]. The p-value of 0.000 further asserts that this result is not due to chance and strengthens the model's validity.

An in-depth examination of the coefficients reveals that most digital marketing strategies, except for e-mail marketing, significantly influence business performance. Social Networking stands out with a Beta value of 0.350 ($B = 0.277$, $t = 5.311$, $p < 0.001$), followed by Social Media Marketing (Beta = 0.304, $B = 0.150$, $t = 6.747$, $p < 0.001$), and Digital Marketing (Beta = 0.663, $B = 0.170$, $t = 11.859$, $p = 0.013$). These findings highlight the powerful role that social platforms and digital outreach have on enhancing visibility and engagement. Search Engine

Optimization also has a notable effect (Beta = 0.164, B = 0.132, $t = 2.513$, $p < 0.001$), as does Technology Acceptance (Beta = 0.236, B = 0.021, $t = 2.421$, $p = 0.032$), showing that companies that adopt new technologies tend to perform better. However, E-mail Marketing (B = 0.001, $t = 0.039$, $p = 0.639$) was not statistically significant, suggesting that its influence on business performance is minimal in comparison to other digital strategies [69], [70].

These results affirm the importance of modern, adaptive, and interactive marketing techniques in achieving measurable business results. Companies should recognize the shifting dynamics of consumer engagement and continue investing in high-impact areas such as social networking and media outreach. Implications The insights derived from this study underscore the essential role of social networking, social media marketing, and overall digital strategy in boosting startup performance. For startups—particularly those in early stages of growth and operating in industries like food, retail, and textiles—these digital avenues represent not just opportunities but necessities for competitive survival and growth [51].

The correlation between digital strategies and business success highlights that technological engagement is no longer optional. Entrepreneurs who embrace these tools can expect a stronger market presence and increased performance [6]. While email marketing may lag behind in direct influence, it should not be completely neglected. With enhanced personalization and targeted promotions, it can still serve as a valuable component of a comprehensive digital marketing strategy [21]. Interestingly, the restaurant industry seems especially well-positioned to benefit from digital tools, possibly due to its customer-centric and service-driven nature. The ability to engage consumers through social platforms, accept online orders, and utilize customer feedback loops enhances visibility and profitability in this sector.

Ultimately, the study confirms that startups willing to invest in the right digital tools and more importantly, use them effectively can dramatically improve performance and sustainability in the digital age. Based on the study's outcomes, it is strongly recommended that startups prioritize investments in digital marketing, particularly focusing on social media marketing and social networking, to drive business performance [71]. These strategies offer high impact, especially for younger businesses operating in consumer-facing sectors like food, retail, and textiles. Although E-mail Marketing showed a weaker association with business success, it still holds potential when executed strategically. Businesses should consider enhancing the effectiveness of email campaigns through better segmentation, interactive content, and automation tools to boost engagement rates [6].

The predominance of firms under 10 years old in the survey sample indicates that younger enterprises are leading the charge in digital adoption. This demographic trend should encourage policy-makers, incubators, and support organizations to provide tailored resources and training focused on advanced digital strategies. For startups in emerging markets like Rangpur City, the thoughtful use of social media and digital engagement tools can offer a significant competitive edge. While email may not deliver instant attention, well-designed promotions via this medium can still contribute to consumer retention and loyalty. Therefore, digital marketing should be viewed as a holistic ecosystem where each channel supports the broader goal of sustainable business growth

5. CONCLUSION

This study reaffirms the crucial impact of digital marketing on the performance and sustainability of startups in Rangpur City, especially in sectors like restaurants, retail, and textiles. These industries show strong adaptability to strategies such as social media marketing and social networking, which significantly enhance customer engagement and profitability. While e-mail marketing appears less effective, it still presents potential when optimized. However, the study is not without its limitations. The use of convenience sampling and a relatively small sample size may limit the generalizability of the findings. Self-reported data and a short data collection window could also introduce bias or overlook long-term trends. These factors should be considered when interpreting the results. Looking forward, expanding the research to other regions and exploring the role of emerging technologies like AI could offer deeper insights. Comparing different industry sectors and analyzing long-term impacts would further enrich understanding. Overall, the findings provide a strong foundation for future exploration and practical applications in startup development through digital marketing.

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