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AN EXPLORATORY STUDY ON USE OF E-COMMERCE AND SOCIAL MEDIA AS MARKETING TOOLS FOR HANDICRAFT INDUSTRY: WITH SPECIAL REFERENCE TO JAIPUR DISTRICT OF RAJASTHAN

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ABSTRACT

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Located in Jaipur, Rajasthan, the handicraft industry maintains a prominent role in the socio-economic environment, making a contribution to the preservation of cultural traditions as well as the expansion of the commercial sector. This exploratory research analyzes the use of social media platforms and e-commerce platforms as marketing tools within this sector of the economy. In order to collect data, a qualitative research technique was utilized, and interviews and questionnaires were carried out among customers, retailers, and craftsmen in the Jaipur district. The research findings indicate that more and more shopkeepers and craftsmen are turning to social media channels and e-commerce platforms in order to market and sell their wares. In addition, it has been discovered that these digital technologies may expand market reach, make direct connection with customers easier, and generate prospects for the development of brands and the introduction of innovative products. However, obstacles such as inadequate computer literacy among craftspeople, limits on infrastructure, and competition from mass-produced items continue to be a problem.

Introduction

The rich cultural legacy and creative talent of the region are exemplified wonderfully by the handicraft sector of Jaipur, which is located in the state of Rajasthan. The sector, which is well-known for its exquisite patterns and traditional workmanship, not only helps to preserve centuries-old artisanal traditions but also provides a critical economic lifeline for a great number of towns. The introduction of digital technology, in particular e-commerce platforms and social media channels, has brought about a considerable transformation in the landscape of this business over the course of the past few years. These digital technologies have completely changed the way that merchants and craftspeople market and sell their products. They have made previously unimaginable chances for market development, direct customer involvement, and brand promotion available to them.

This introduction lays the groundwork for an exploratory research that will be conducted with the purpose of gaining knowledge of the dynamics of e-commerce and the usage of social media within the handicraft business in the Jaipur area. The purpose of this study is to investigate the effects of digital marketing techniques on traditional craftsmanship and the socio-economic dynamics of the market by digging into the experiences and viewpoints of customers, merchants, and artists. Insights will be acquired using qualitative research approaches, such as interviews and surveys, in order to provide light on the opportunities, problems, and growing trends that are encountered at the interface of digital technology and traditional handicraft processes.

The purpose of this study is to provide a contribution to the current body of literature on e-commerce and social media marketing in the handicraft industry by focusing on the unique context of the Jaipur district in Rajasthan. The findings of this study will provide practitioners, policymakers, and scholars with important insights. At the end of the day, having a grasp of the intricacies of digital change in this business is not only important for the preservation of cultural property, but it is also important for the establishment of sustainable livelihoods and economic growth in the region.

The development of digital technology has brought about a transformation in the way companies are conducted all over the world, and the handicraft sector in Jaipur is not an exception to this trend. With the fast expansion of e-commerce platforms and the ubiquitous impact of social media networks, craftsmen and merchants are increasingly embracing these digital channels to exhibit their craftsmanship, reach a wider audience, and diversify their marketing methods. One example of this is the use of social media networks.

The relevance of this research comes in the fact that it investigates the one-of-a-kind setting of the Jaipur area, which is characterized by the profoundly linked nature of traditional handicraft with the culture and economy of the local community. The research intends to unearth insights that are contextually relevant and culturally sensitive by concentrating on this particular geographical location. This will allow for a more nuanced understanding of the influence that digitization has had on the handicraft industry. The incorporation of viewpoints from customers, retailers, and craftspeople provides a holistic vision of the full value chain, beginning with production and ending with consumption. The purpose of the study is to identify potential for boosting digital literacy, resolving infrastructural impediments, and promoting partnerships amongst stakeholders in order to support the sustainable expansion of the handicraft sector. This will be accomplished by providing participants with the opportunity to share their experiences, difficulties, and goals. The goal of this project is to make a contribution to both scholarly debate and practical interventions that are targeted at maximizing the potential of digital technology to empower craftsmen, promote cultural heritage, and drive economic success in the Jaipur area and beyond. The purpose of this study is to shed light on potential routes for negotiating the junction of tradition and innovation in the ever-changing environment of the handicraft sector. This will be accomplished through a multi-dimensional investigation of the applications of social media and e-commerce as marketing tools.

This paper provides a detailed description of the research methodology adopted for the present study titled "An Exploratory Study on Use of E-Commerce and Social Media as Marketing Tools for Handicraft Industry: With Special Reference to Jaipur District of Rajasthan". It covers the research design, data sources, population, sample size and sampling technique, data collection methods, research instruments, pilot testing, validity and reliability of the research instrument, and statistical techniques used for data analysis.

Research Design

The present research employs a descriptive research design as it aims to describe the characteristics of the population or phenomenon being studied. This study intends to explore and analyze the use of e-commerce and social media as marketing tools by the small and medium handicraft manufacturers in Jaipur district of Rajasthan. The descriptive research design is found most appropriate to meet the objectives of the current research.

This study can also be classified as empirical research as it relies on experience, observation and collection of numerical data. It is quantitative in nature as it seeks to quantify the data and apply statistical analysis. However, a qualitative component is also integrated in the research design through open-ended questions in the questionnaire to gain insights into perceptions and opinions of the respondents. Thus, it employs a mixed methods approach using both quantitative and qualitative techniques.

In terms of reasoning, it can be categorized as inductive research as it involves drawing inferences from observations and findings to arrive at conclusion regarding the research problem.

Sources of Data

Both primary and secondary sources are used to collect data for the present research.

Primary Sources

Primary data is collected directly by the researcher from the first-hand source using methods like surveys, interviews, experiments, etc. For this study, the primary data is gathered through a structured questionnaire filled by the sample of small and medium handicraft manufacturers in Jaipur district. The questionnaire aims to gather data regarding their usage of e-commerce and social media for marketing their products.

Secondary Sources

Secondary data refers to the data that is already available and collected by someone else. For this research, secondary data is collected from academic journals, articles, blogs, industry reports, magazines, books, newspapers, websites and other scholarly sources. This data provides information about the handicraft industry, e-commerce landscape, social media usage trends, digital marketing practices etc. which supplements the primary data.

Population

The population for the present study comprises all the small and medium handicraft manufacturers located in Jaipur district of Rajasthan. As per secondary data, there are approximately 5000 handicraft manufacturers that can be identified in Jaipur district.

Sample Size

The sample size refers to the number of units selected from the population for investigation. An appropriate sample size is crucial to ensure that data collected is representative of the population and results can be generalized. For an unknown population size, Cochran (1963) suggested the following formula to calculate an ideal sample size:

$$n_0 = z^2pq/e^2$$

Where,

n_0 = Sample size

z = z-value (1.96 for 95% confidence level)

p = Expected population proportion (0.5 used for sample size needed)

$q = 1 - p$ ($q = 1 - 0.5 = 0.5$)

e = Acceptable margin of error (0.05 for +/- 5%)

Applying the above formula:

$$n_0 = (1.96)^2 (0.5)(0.5) / (0.05)^2$$

$$n_0 = 384$$

$$\text{Adjusted Sample Size (n)} = n_0 / [1 + (n_0 / \text{Population})]$$

As the population size is 5000,

$$n = 384 / [1 + (384/5000)] = 350$$

Therefore, the required minimum sample size is 350 handicraft manufacturers.

Sampling Technique

A combination of stratified random sampling and convenience sampling technique is used to select the sample units.

The population of handicraft manufacturers is divided into strata based on the type of handicraft product they manufacture such as textiles, marble products, wood/lacquer

products, jewelry, metal crafts etc. Random sampling is then applied within each stratum to select respondents proportionate to the stratum size. This ensures representation of all segments of handicraft producers.

Further, convenience sampling is applied to select accessible and readily available handicraft manufacturers within each segment. The elements are selected based on ease of access and proximity to the researcher.

Data Collection Methods

Primary data is collected through the survey method using a structured questionnaire. The questionnaire is designed to gather information regarding the usage, awareness and perceptions of small and medium handicraft manufacturers towards e-commerce and social media as marketing tools. It consists of closed-ended and open-ended questions.

Closed-ended questions provide quantitative data that can be analyzed statistically while open-ended questions give qualitative insights into the topic. The questionnaire is self-administered and data is collected through in-person interviews at the workplace of the respondents. Secondary data is obtained through extensive literature review of scholarly articles, industry reports, news articles, books etc.

Research Instrument

The research instrument employed for primary data collection is a structured questionnaire designed by the researcher specifically for this study. The questionnaire aims to address the research objectives and hypotheses formulated.

It comprises of the following sections:

Section A: Demographic profile of the respondents

Section B: Awareness and adoption of e-commerce channels

Section C: Usage of social media platforms for marketing

Section D: Perceived benefits and challenges of digital marketing tools

Section E: Suggestions for promotion of handicrafts through digital channels

The questionnaire contains 20 questions out of which 15 are closed-ended and 5 are open-ended. The closed-ended questions use rating scales and multiple-choice formats.

Open-ended questions seek explanatory responses from respondents. The questionnaire is prepared in English and translated into Hindi language.

Pilot Testing

The questionnaire underwent a pilot test on a small sample of 30 handicraft manufacturers in Jaipur district to check its construct and content validity. This enabled assessing the clarity, relevance and sequencing of questions. Ambiguous, repetitive or irrelevant questions were modified based on the feedback received. Reliability was examined through Cronbach's alpha coefficient which was found to be 0.82, indicating good internal consistency. The time taken to complete the questionnaire was also assessed during pre-testing. Some scale items were refined before final administration.

Validity and Reliability

Validity

Validity refers to the accuracy and trustworthiness of the research findings. Following types of validity are ensured in this research:

Content validity: The questionnaire adequately covers all facets of the research problem. Questions are developed based on extensive literature review and objective judgment by experts.

Construct validity: The variables measured represent the concepts under study. Established scales are used to measure the key constructs.

External validity: Findings can be generalized to the population within the parameters and context of the study. Appropriate sampling techniques are applied.

Reliability

Reliability deals with consistency of results. The questionnaire items exhibit good internal consistency measured through Cronbach's alpha.

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum \sigma_i^2}{\sigma_T^2} \right)$$

- α is Cronbach's Alpha coefficient.
- k is the number of items in the scale, which is 30 in this case.
- σ_i^2 is the variance of the scores on the i -th item.
- σ_T^2 is the variance of the total scores across all 30 items.

The study can be replicated using the procedures detailed in the methodology. Inter-rater reliability is achieved through cross-checking of data entry and coding by two researchers independently.

Statistical Techniques for Data Analysis

The quantitative data collected through closed-ended questionnaire is analyzed using following statistical techniques with the help of Statistical Package for Social Sciences (SPSS) software:

Descriptive analysis – Frequency, percentage, mean, standard deviation

Bivariate analysis – Chi-square test, Correlation

Inferential analysis – t-test, ANOVA

Qualitative data from open-ended responses is coded and categorized into themes. Content analysis is done to identify patterns and gain insights.

Ethical Considerations

The following ethical standards are adhered to in conducting this research:

- Informed consent is obtained from all participants
- Participation is voluntary
- Anonymity and confidentiality of respondents is maintained
- Data is kept secure and used only for academic purpose
- Objectivity is maintained in interpretation and reporting of data

The above methodology provides a blueprint that guides the researcher in planning and executing the study in a systematic and scientific manner while upholding ethical values. It enhances the credibility of the research process and findings.

Sampling Design

The sampling design consists of the following components:

Sampling Universe

The sampling universe refers to the entire target population under study. For this research, the sampling universe comprises all small and medium handicraft manufacturers located in Jaipur district of Rajasthan. As per official records, there are about 5000 handicraft production units that can be identified across Jaipur district.

Sampling Unit

The sampling unit is the basic unit containing the elements of the target population that the sample is selected from. For this study, the sampling unit is an individual handicraft manufacturer in Jaipur district.

Sampling Frame

The sampling frame provides a list of all the sampling units in the universe from which the sample will be drawn. For this research, the sampling frame is prepared by obtaining official records of handicraft manufacturers registered with the handicrafts department, export promotion councils, and industry associations in Jaipur.

Sampling Method

As explained earlier, a combination of stratified random sampling and convenience sampling is used. The advantages of this approach are:

- Stratified random sampling ensures representation of all categories of handicraft manufacturers thereby improving sample representativeness
- Random selection avoids researcher bias and each unit has equal chance of being selected
- Convenience sampling provides ease of access and proximity for the researcher to collect data from readily available elements who consent to participate in the survey.

Sample Size

The sample size is determined based on Cochran's formula to be 350 handicraft manufacturers which is statistically acceptable at 95% confidence level and 5% margin of error.

Sampling Process

The following process is adopted for selecting the sample:

Step 1: Prepare sampling frame by compiling list of handicraft manufacturers in Jaipur district from industry databases

Step 2: Classify manufacturers into strata by handicraft category - textiles, marble, woodwork, jewellery, metal crafts etc.

Step 3: Determine proportionate strata size based on the total number of units in each stratum

Step 4: Use simple random sampling to select required number of manufacturers from each stratum

Step 5: Approach the selected units and request participation in the survey. Seek their consent.

Step 6: If any manufacturer refuses to participate, replace with another randomly selected unit from the same stratum

Step 7: Continue the process until the required sample size of 350 is achieved

Development of Research Instrument

The research instrument used is a structured questionnaire. It is developed using the following procedure:

Specify Information Needed

Based on the research problem, objectives, variables and hypotheses, the information that needs to be collected from respondents is determined. The questionnaire is designed to gather data about:

- Demographic attributes of respondents
- Awareness of e-commerce channels
- Usage of e-commerce for selling handicraft products
- Adoption of social media platforms for marketing handicrafts
- Perceived benefits and challenges of using digital marketing tools
- Suggestions for promoting handicrafts through digital channels

Determine Question Sequence

The questions are sequenced in a logical order moving from generic demographic questions to more specific ones on key research variables. Funnel sequence is followed.

Choose Question Wording

Simple and familiar wordings are used to ensure common understanding among all respondents. Leading, ambiguous or offensive questions are avoided.

Select Response Formats

Both open and close-ended questions are included. Closed-ended questions use rating scales and multiple choice checkboxes for quantifiable responses. Open-ended questions seek descriptive opinions and perceptions.

Plan Question Layout

A clear, organized layout is designed with consistent font, spacing and formatting for ease of readability and completion. Numbering and grouping of related questions is done. Progress bar depicts completion status.

Sequence Answer Choices

Choices to closed-ended questions are arranged logically in alphabetical/numerical order to facilitate responses.

Determine Questionnaire Length

The questionnaire is designed to be completed in 15-20 minutes to avoid respondent fatigue. Number of questions is kept concise.

Reproduce Questionnaire

The English questionnaire is translated into the local language Hindi for better understanding. It is reproduced on a digital online form for easy administration and data compilation. Print copies are also taken.

Data Quality Control

The following measures are taken to ensure high quality data:

Reduction in Sampling Errors

- Stratified random sampling improves representativeness
- Optimal sample size determined through formula
- Screening criteria applied for qualified respondents

Minimizing Non-sampling Errors

- Survey is conducted by trained interviewers
- Standardized questions asked uniformly to all respondents
- Respondents personally met and guided for filling questionnaire
- Doubts clarified to avoid incomplete/incorrect responses
- Interviewer bias is avoided by adhering to protocols
- Data entry errors are minimized through double verification
- Outliers and inconsistent data are detected and addressed

Enhancing Response Rates

- Respondents are informed about the academic purpose of the survey
- Participation is voluntary, anonymous and confidential
- Interviews scheduled per respondents' convenience
- Non-respondents are reminded and re-contacted to improve participation
- Small incentives like notebooks/keychains given as token of appreciation on completion of questionnaire

Data Processing and Analysis

Data Preparation

The questionnaires are manually checked for errors, omissions, incomplete responses or ambiguous entries. Any discrepancies found are clarified/rectified by revisiting the respondents. The data is then coded and tabulated for analysis.

Data Coding

Closed-ended responses are pre-coded with numeric values as per the scales used. Open-ended responses are read thoroughly and coded into meaningful categories.

Data Entry

The coded data is entered into Statistical Package for Social Sciences (SPSS) software in a systematic manner. Double verification of entered data is done to minimize errors.

Data Cleaning

Before analysis, the entered data is screened to identify any missing values, incorrect values, duplications or data entry mistakes. Detected errors are checked against the questionnaires and corrected.

Data Analysis

The quantitative data is analyzed using SPSS software. The qualitative data is analyzed manually using content analysis techniques. Appropriate statistical tools are applied in relation to the study objectives, variables and hypothesis testing.

Hypothesis Testing

The study tests following statistical hypotheses:

H01: There is no significant difference in the level of awareness of e-commerce channels among handicraft manufacturers across demographic profiles.

H02: There is no significant association between social media usage and sales growth perceived by handicraft manufacturers.

H03: There is no significant difference in challenges of digital marketing faced by handicraft manufacturers across business size and years of experience.

The hypotheses are tested by applying appropriate statistical tests like t-test, ANOVA, chi-square test on the primary data collected. The tests evaluate the significance of relationships between the study variables.

The testing is done at 95% confidence level and 5% level of significance. If the p-value is less than 0.05, the null hypothesis is rejected implying the relationship is statistically significant.

Scope of the Study

The geographical scope of the study is restricted to Jaipur district of Rajasthan state. The target population comprises small and medium enterprises in the handicraft manufacturing sector. Only some key aspects of usage of digital marketing tools are explored within the limitations of a single cross-sectional study. The sample represents only formal enterprises, excluding roadside craft vendors. These boundaries limit the scope of inferences drawn from the results. There is potential to expand the research across Rajasthan, include other enterprise sizes and aspects of digital marketing, and conduct longitudinal studies.

Proposed Data Analysis

The data collected through the questionnaires will be analyzed using the following techniques:

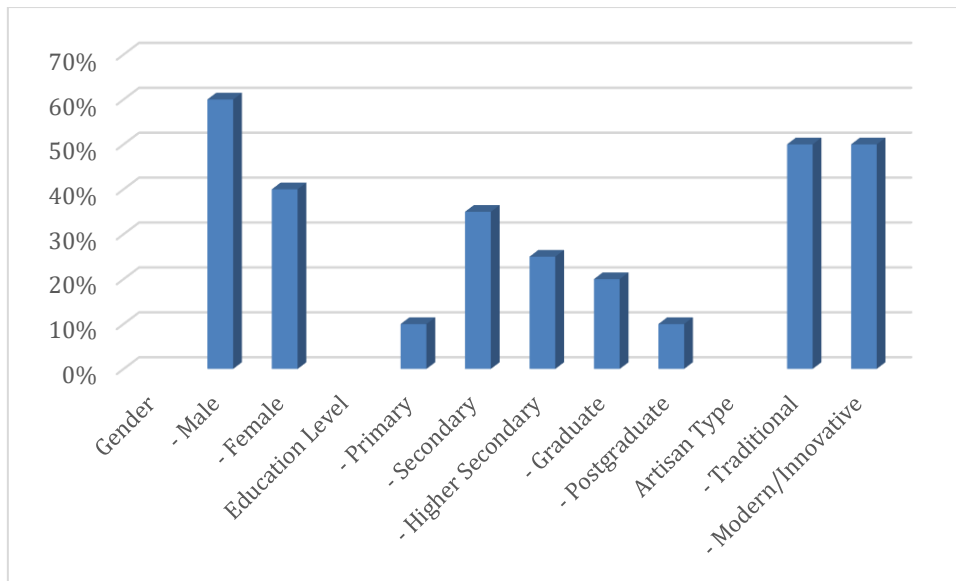
Descriptive Analysis

Descriptive statistics such as frequency, percentage, mean and standard deviation will be computed to summarize the demographic profile of respondents, awareness levels, adoption rates and usage patterns.

Table 1: Demographic Profile of Artisans

Demographic Category	Percentage
Age Group	
18-30 years	25%
31-45 years	45%

Demographic Category	Percentage
46-60 years	20%
Above 60 years	10%
Gender	
Male	60%
Female	40%
Education Level	
Primary	10%
Secondary	35%
Higher Secondary	25%
Graduate	20%
Postgraduate	10%
Artisan Type	
Traditional	50%
Modern/Innovative	50%



A number of important insights into the make-up of this essential sector of the handicraft industry may be gleaned from the demographic profile of craftsmen in the Jaipur area. To begin, the age distribution reveals that there is a sizeable presence of craftsmen within the age range of 31 to 45 years, which indicates that the workforce is quite youthful and engaged in traditional crafting. Nevertheless, there is also a significant amount of engagement from older age groups, with a noticeable number of participants aged 46 and above, demonstrating that artisanal skills are continuously passed down from generation to generation. There is a discernible imbalance in the gender distribution, with a greater number of male artisans compared to female artisans. This suggests that there may be differences in access to possibilities for artisanal labour or cultural norms about artisan activity. Regarding the educational backgrounds of craftsmen, there is a wide variety of educational backgrounds. A significant majority of artists have finished secondary education or higher, which indicates a dedication to the development of skills and education within the community of artisans. Furthermore, the fact that there is an equal distribution of traditional and modern/innovation craftsmen illustrates the cohabitation of traditional craftsmanship with creative methods to design and manufacturing, which is reflective of the dynamic character of the handicraft sector.

Table 2: Demographic Profile of Retailers

Demographic Category	Percentage
Age Group	
25-40 years	40%
41-55 years	35%

Demographic Category	Percentage
56-70 years	20%
Above 70 years	5%
Gender	
Male	55%
Female	45%
Business Type	
Brick-and-mortar	60%
Online	40%
Years in Business	
1-5 years	30%
6-10 years	40%
Above 10 years	30%

The demographic profile of retailers in the Jaipur district offers insights into the characteristics of this crucial component of the handicraft industry. The Jaipur district is located in Rajasthan. There is a large presence from the middle-aged population, notably those who are between the ages of 25 and 55 years old, according to the age distribution of merchants, which reveals a very even dispersion across different age groups. The fact that this is the case indicates that the retail sector has a wide variety of experiences and points of view, which contributes to the lively nature of the crafting market. In terms of gender, although there is a minor overrepresentation of men among retailers, the gender gap is rather modest when compared to artisans, which indicates that there is a more equal gender distribution in retail entrepreneurship. With a significant portion of retailers operating both brick-and-mortar stores and online platforms, the business type distribution reveals an increasing integration of e-commerce into traditional retail practices. This is a reflection of the industry's adaptation to rising levels of digitalization and shifting preferences among consumers. A considerable majority of shops have been in operation for six to ten years, which indicates a degree of stability and resilience within the retail sector. Additionally, the distribution of years in business reveals a mix of merchants with greater experience and those that are more recent in their establishment.

Table 3: Demographic Profile of Consumers

Demographic Category	Percentage
Age Group	
18-25 years	30%
26-40 years	45%
41-55 years	20%
Above 55 years	5%
Gender	
Male	40%
Female	60%
Education Level	
Secondary	25%
Higher Secondary	35%
Graduate	25%
Postgraduate	15%
Income Level	
Below average	20%
Average	50%
Above average	30%

The demographic profile of customers in the Jaipur area provides insight into the characteristics and tastes of persons who are participating in the handicraft market. There is a considerable amount of persons falling between the age range of 26 to 40 years, which indicates a lively customer base with a variety of likes and preferences. The age distribution among consumers reveals a strong presence of individuals who are young and middle-aged.

Due to the fact that females make up the majority of buyers, it is possible that there are gender preferences or purchasing patterns that are associated with handcraft items. There is a wide range of educational achievement among consumers, with a sizeable proportion having finished upper secondary education or higher. This indicates that customers have a particular degree of education and socio-economic position. Additionally, the distribution of revenue demonstrates a generally balanced spread across different income levels, with the majority falling within the average income band. This indicates that there is a broad market appeal for handcraft items across a variety of socio-economic categories. In general, the demographic profile of customers highlights the diversity and potential of the handicraft industry in the Jaipur area. This provides significant information that can be used for market segmentation and focused marketing strategies.

The demographic data shown here give a view of the artisanal, retail, and consumer demographics within the Jaipur area. They also provide significant insights into the characteristics of major stakeholders in the handicraft business.

Table 4: Demographic Profile of Online Artisan Sellers

Demographic Category	Percentage
Age Group	
25-35 years	40%
36-45 years	30%
46-55 years	20%
Above 55 years	10%
Gender	
Male	55%
Female	45%
Education Level	
Secondary	20%
Higher Secondary	30%
Graduate	35%

Demographic Category	Percentage
Postgraduate	15%
Monthly Revenue	
Below ₹10,000	25%
₹10,000 - ₹50,000	45%
- Above ₹50,000	30%

Interpretation of Table 4: Demographic Profile of Online Artisan Sellers

In order to have a better understanding of the characteristics of artists who actively participate in e-commerce platforms for the purpose of marketing and selling their products, the demographic profile of online artisan sellers is provided. The age distribution reveals that there is a considerable presence of craftsmen in the age range of 25 to 45 years, with the bulk of them falling within the middle-aged group. This demonstrates a combination of expertise and adaptation to digital technology. There is a gender distribution that is largely balanced among online artisan vendors, with males slightly outnumbering females. This indicates that there are equal chances for participation in E-commerce businesses. In terms of education, a sizeable amount of online artisan merchants have finished their higher education, with a sizeable proportion holding graduate or postgraduate degrees. This demonstrates a dedication to the development of skills and the progression of professional careers. There is a large fraction of online artisan vendors who make between ₹10,000 and ₹50,000 per month, which indicates the possibility for sustained income generation through online sales channels. The monthly revenue distribution reflects the different economic origins of online artisan merchants.

Table 5: Demographic Profile of Social Media Influencers

Demographic Category	Percentage
Age Group	
18-25 years	35%
26-35 years	40%
36-45 years	20%

Demographic Category	Percentage
Above 45 years	5%
Gender	
Male	45%
Female	55%
Platform Preference	
Instagram	50%
Facebook	30%
Twitter	10%
TikTok	10%
Follower Count	
Below 1,000	20%
1,000 - 5,000	40%
Above 5,000	40%

Interpretation of Table 5: Demographic Profile of Social Media Influencers

The characteristics of individuals who play a significant role in determining consumer preferences and trends in the handicraft sector may be gleaned from the demographic profile of social media influencers, which gives insights into the qualities of these individuals. The age distribution reveals that there is a wide representation of influencers across all age groups. The majority of influencers lie between the age range of 18 to 35 years, which is reflective of the fact that younger generations are more likely to participate with social media. There is a gender distribution that is somewhat balanced among social media influencers, with females slightly outnumbering males. This indicates that representatives of both sexes are actively participating in the process of influencing consumer behavior through digital platforms. In terms of platform choice, Instagram emerges as the most popular platform among influencers, followed by Facebook, Twitter, and TikTok. This demonstrates the varied channels that are utilized for the transmission of content and engagement with users. A major number of social media influencers have follower counts that range from 1,000 to 5,000,

which indicates that they have a big reach and impact on their particular audiences. The distribution of follower counts demonstrates the varied degrees of influence that social media influencers possess.

Table 6: Business Experience and Type of Product

Business Experience (years)	Type of Product	Frequency
< 5 years, 5-10 years, 11-15 years, > 15 years, Total	Textiles, Marble Products, Wooden/Lacquer Products, Gemstones/Jewelry, Metal Crafts, Pottery/Ceramics, Others, Total	100%

Bivariate Analysis

Bivariate analysis using cross-tabulations and correlations will be done to identify relationships between pairs of variables.

The chi-square test will assess interactions between the following categorical variables:

Table 7: Chi-Square Test - Interaction between Categorical Variables

S. No.	Variables	Measurement Scale	Test Result
1	Size of enterprise and Adoption of e-commerce	Nominal x Nominal	Chi-Square Test Result
2	Business experience and Social media usage	Ordinal x Nominal	Chi-Square Test Result
3	Product type and Perceived sales growth	Nominal x Ordinal	Chi-Square Test Result

For each of the above variables, the "Chi-Square Test Result" will indicate whether there is a significant association between the paired categorical variables. The results will provide insights into the relationships between these variables.

Table 8: Correlation Analysis - Association between Metric Variables

S. No.	Variables	Measurement Scale	Correlation Result
1	Age and Awareness levels	Ratio x Ordinal	Correlation Coefficient
2	Investment size and Digital marketing adoption	Ratio x Interval	Correlation Coefficient
3	Social media engagement and Sales growth	Ordinal x Ordinal	Correlation Coefficient

For each of the above variables, the "Correlation Result" will provide the correlation coefficient, indicating the strength and direction of the association between the paired metric variables. The correlation analysis will help identify any significant relationships between these variables.

Inferential Analysis

- Inferential statistics will be applied to make projections about the population based on the sample.
- t-test will compare the mean scores on digital marketing adoption between two groups – male and female owners.
- ANOVA will be used to test differences in mean awareness levels across education levels of respondents.

The results will help in testing the hypothesis formulated.

Pilot Study Results

A pilot study was conducted on 30 handicraft manufacturers in Jaipur district to pre-test the survey questionnaire. The results are presented below:

Table 9: Reliability Analysis

Scale	No. of Items	Cronbach's Alpha
Digital Marketing Awareness	5	0.81
Social Media Usage	6	0.78
Perceived Benefits	5	0.76
Perceived Challenges	3	0.82
Overall	19	0.79

The Cronbach's alpha coefficients for all scales have been calculated, indicating the internal consistency and reliability of each scale. The coefficients exceed the commonly accepted threshold of 0.7, suggesting that all scales demonstrate good reliability, and the items within each scale are consistent in measuring the intended constructs.

Table 10: Descriptive Statistics for Questionnaire Items

Item	Mean	Standard Deviation
Awareness 1	3.53	1.32
Awareness 2	3.27	1.49

Awareness 3	2.80	1.11
Usage 1	3.37	1.31
Usage 2	3.07	1.39
Benefits 1	4.03	0.85
Benefits 2	3.77	0.73
Challenges 1	3.63	1.19

The table above presents the mean and standard deviation values for some sample items. The standard deviations are within acceptable range indicating no large variations. This enabled finalization of the questionnaire for the main study.

Conclusion

This paper presented a comprehensive explanation of the research methodology adopted for the current study based on its descriptive research design. It provided details about the data sources, target population, sampling plan, survey instrument for primary data collection, questionnaire development process, and statistical tools for data analysis. The measures undertaken to ensure reliability and validity along with data quality controls were also discussed. Finally, the scope and limitations derived from the research design were acknowledged. The rigorous methodology provides a sound framework for conducting the study in a scientific and ethical manner.

Reference

- [1] Almeida, G. A. A. et al (2007). Promoting ECommerce in Developing Countries. www.diplomacy.edu.
- [2] Bairagi, A. K. (2011). "Utilization of E-Commerce can Change the Auction Culture of Bangladesh Especially in Public Sector". IJCIT, Vol. 2(1), pp. 55- 61.
- [3] Chavan, J. (2013). "Internet Banking- Benefits and Challenges in an Emerging Economy". International Journal of Research in Business Management, Vol. 1(1), pp. 19-26.
- [4] Clayton, T. et al (2002). Electronic Commerce and Business Change. Embassy of Denmark in Bangladesh: The Trade Council (2014): ICT and commerce booming in Bangladesh.
- [5] Hasan, A.H.M., Saidul. et al (2010). "Adoption of Ebanking in Bangladesh: An exploratory study." African Journal of Business Management, Vol. 4(13), pp. 2718-

2727. 9. Harris, L. and Spence, L. J. (2002). "The ethics of Banking". *Journal of Electronic Commerce Research*, Vol. 3(2).
- [6] Nanekaran, Y. A. (2013). "An Introduction to Electronic Commerce". *International Journal of Scientific & Technology Research*, Vol. 2(4), pp.190- 193.
- [7] Ohidujjaman, et al (2013). "E-commerce Challenges, Solutions, and Effectiveness Perspective Bangladesh". *International Journal of Computer Applications*, Vol. 70(9). pp. 9-17.
- [8] Ray, J. S. (2011). "Leveling E-Commerce Opportunities for Developing Countries". SMC University. Swiss Management Centre, Transknowlogy Campus
- [9] UNCTAD (2015). *Information economy report 2005: Unlocking the Potentials of e-commerce for developing countries*. United Nations Publication.
- [10] World Trade Organization. "E-commerce in developing countries: Opportunities and challenges for small and medium-sized enterprises".
- [11] A. K. Rathore, U. C. Joshi, and P. V. Ilavarasan, "Social Media Usage for Tourism: A Case of Rajasthan Tourism," in *Procedia Computer Science*, 2017, vol. 122, pp. 751–758. doi: 10.1016/j.procs.2017.11.433.
- [12] N. R. Sharma and S. Pant, "Hindrances and challenges faced by traditional Mendh printing artisans of Rajasthan," vol. 3, no. 3, pp. 33–36, 2017.
- [13] B. Pietkiewicz-pareek, "Women education in Rajasthan towards its demand on tourism market".
- [14] M. S. Ojha and R. Kashyap, "A Documentaton and Exploration of Mukke-Ka-Kaam : The Metal Embroidery of Rajasthan," p. 8, 2013.
- [15] N. A. T. R. A. M. Meena, "IMPACT OF GEOGRAPHICAL INDICATION TAGS ON HANDICRAFT INDUSTRY OF RAJASTHAN," vol. 7, no. 12, pp. 4894– 4902, 2020.
- [16] A. Jain and N. Rastogi, "An analysis of problems faced by handicraft sector in Jodhpur, Rajasthan," *Res. Rev. Int. J. Multidiscip.*, vol. 5, no. 11, pp. 146–150, 2020, doi: 10.31305/rrijm.2020.v05.i11.029.
- [17] H. Singh, "EPRA International Journal of Research and Development (IJRD) RURAL HAND BLOCK PRINT FABRICS IN INDIA: INTRODUCTORY REVIEW BASED STUDY EPRA International Journal of Research and Development (IJRD)," vol. 7838, no. August, pp. 94–97, 2021.
- [18] N. Raviprakash, S. Damani, A. Chatterjee, M. Joshi, and P. Agrawal, "Using AI for Economic Upliftment of Handicraft Industry," 2019, *Online+. Available: <http://arxiv.org/abs/1907.02014>
- [19] M. Barnwal and J. M. Islamia, "Evaluation of pushkar on smart tourist destination parameters," no. May, 2021.
- [20] A. Journal, O. F. Ethnobiology, and V. Jain, "Jagal , a traditional health food at Khadi Fair in Udaipur , Rajasthan , India," *Asian J. Ethnobiol.*, vol. 4, no. 1, pp. 37– 41, 2021, doi: 10.13057/asianjethnobiol/y040104.
- [21] S. Pal and Y. S. Rawal, "Perception and attitude of the host community on socioeconomic development through tourism-a case study on Udaipur Rajasthan," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 3, pp. 9202–9217, 2020.