

Integration of E-Commerce in Handloom Sector: Consumer Perspective in Odisha, India

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ABSTRACT

Objective: The objective of this paper is to study and analyze the growth prospects of the handloom sector by the integration of e-commerce. Readers will also get clarification on customers and retailers' perceptions towards the launch of handloom products on the digital platform to increase customer base and extend their reach across the country.

Methodology: Descriptive Analysis of data that has been obtained through a personal interview with weavers and artisans as well as the circulation of questionnaires online to the residents of Odisha. Democratization test, Spearman Rank Order Correlation Coefficient Test and Factor Analysis was performed to understand the factors that may affect the sale of handloom products on the digital platform.

Results: The result obtained suggested that people perceived handloom products to be occasional as compared to power-loom products. However, the availability of these products on the digital platform may prove to be a game-changer for the sector. Improving factors like design elements, price, convenience, and variety of products have shown a positive response among consumers' decisions to purchase. On the digital platform, availability of products, user-friendly application features, transparency of product information and timely addressing consumer complaints are some of the most sought-after attributes that motivate customers to purchase any product.

Limitations: The sample size of 105 customers was low. An increase in sample size can produce varied and more accurate results for the study.

Keywords: Digital Platform, Rudimentary, Cultural Brilliance, Heritage, Digital Media, Social Networking, Innovation

Introduction:

Handloom is unparalleled in its flexibility and versatility, permitting experimentation and encouraging innovations. As compared to the power-loom sector the designs made

in handloom are authentic and innovative which can't be replicated or copied. Thus, handloom forms the part of the heritage of India and exemplifies the richness, culture and diversity of our country and the artistry of the weavers. Because of varieties of

handloom products that we get from different states, India has collected a precious wealth of innovation. Due to this India has been emerged as a country of rich culture. Indian handloom has been a pride of India's tradition and a representative of its cultural brilliance. The rudimentary explanation of the Indian handloom is creating designs by keeping traditions intact. And that's the reason the sector has always been in demand. In earlier days the weavers and artisans used to create innovation manually with their skills. But gradually due to its demand and progress, it gave birth to various machines that are meant to simplify the tasks of the weavers and artisans. The present outlook of Indian handloom says that it has carved a niche for itself in the world. However, the gap between the handloom sector and growing digital business platforms cannot be denied.

E-Commerce has transformed the landscape of Business in India. The comfort of getting things at the doorstep with minimal expenditure as well as the ease of it has gained popularity among the Indians like never before. Be it B2C or B2B, getting what you want with just a few clicks and minimum hassle is an idea that has won over a huge chunk of the population. Meanwhile, the technological advancement in one of India's largest employable sectors in rural areas, i.e., the handlooms, is comparatively far behind. The handlooms sector is responsible for employing around 13 million artisans of the country (Kumar & Srivastava, 2016). The handloom products have the potential of winning over the International Market but due to weak organizational aspects, decentralized nature of the business, poor marketing strategies and other similar reasons, the growth rate of this sector is steady.

Many companies came up with providing e-commerce facilities to bridge this gap between urban buyers and rural producers which includes FabIndia, Jharcraft, Flipkart, Limeroad, eBay, Go-Coop, Amazon, etc. With this brief background of need or sale of

handloom products in e-commerce, it is necessary to examine the issues of demand towards handloom products available in e-commerce offered by various brands. Further, it attempts to know the consumer acceptance level of handloom products in their day to day life to improvise the product in a broad and acceptable form. Although the demand for handloom has increased consistently, it is observed that people prefer to purchase those products only on special occasions. The clusters have traditional design intact yet, it has not gained popularity among the youth particularly of the age group of below 30-35yrs. Considering the factors affecting the technological interface between handloom clusters and the market along with an increase in the adoption of mobile technology in day to day activities during the pandemic, this research aims to provide an overview of the possibility of growth in handloom sector through E-Commerce.

Literature Review:

Current Status of Handloom Clusters in India

India is the second-largest exporter of handloom products valuing at 359 Million USD. The growth has been declining since the last five years due to an increase in competition from countries like Pakistan, Sri Lanka and Bangladesh (Kaushik, Khanna, & Sah, 2019). Processes in Handloom sectors in India were not following any suitable strategy or any organized flow of materials or products. Hence, a strategically planned structure is required to fill the gaps and increase the profit of the handloom sector. The need for promotion through digital media and online distribution channels was also felt to increase profitability (Rachana Goswami, 2014). There is also a lack of market information among the artisans of the handloom clusters. In addition to these issues, there exists no quality standardization which doesn't create an attractive point of sale for customers in terms of product features. Sustainable products of handlooms are missed out by

demanding customers due to inefficient marketing techniques reducing their sale potential. Setting up R&D centers, training and information centers that the weavers can have easy access to understand primary business needs and market demand to act accordingly (Rayapati Raveendra Nadh, 2015).

Marketing Challenges for Handloom Clusters

Knowing the customers is extremely essential to improve the marketing of handloom products by delivering what they want and exceeding their expectations to ensure their satisfaction. It can be done through effective design management and strategic marketing to highlight the exclusive handwork and craftsmanship of the artisans (Rakhin, 2015). In the existing handloom societies, aged ones have performed quite well by promoting their products through sales and cash rebates. However, many other sales promotion tools can be implemented to attract customers online and offline which include multi-use coupons, free complementary goods, etc. (K V Shamitha, 2018). Social Media in today's context is a mass promotion tool where handloom products can be marketed while keeping a record of their reach, impact and success. Marketers of handloom industries can monitor social networking sites to understand how people view their products as well as their competitors to work on strategies to increase their reach to more customers and business associates (Humbe, 2012). Branding also creates a trust factor among the customers in terms of quality and service. They also agree to pay more if a product is backed by credible Trademark and Quality Standard. Moreover, promotion through participation in International Events and setting up State-Level Apparel Parks creates an interaction point for the customers with the producers exposing them to the latest market trends, styles and sustainable products (Behera & Khandual, 2017).

Scope for Growth of Handloom Clusters

The ground factors which affect the growth of the handloom sector include lack of training facilities, transportation facilities, welfare measures, organizational strength and proper payment structure for the weavers. These require government intervention to be resolved and bring down the production and overhead costs. Technology up-gradation and spread of awareness among the artisans need to be done to raise the product quality level (Khattoon, 2016). Pricing Strategies also have an impact on gaining customer attention. Most of the Handloom Weavers Cooperative Societies follow a uniform Cost Based pricing strategy as per the cost of raw materials. Taking other parameters into consideration like intricate design, artistic appeal, nature of dye and quality of yarn in deciding the price of a handloom product would increase the value of the product (Rizwana, 2016).

E-Commerce in Handloom Clusters

The handloom weavers can be benefit by various schemes under EDP Programmes such as Marketing & Export Promotion Scheme (M&EPS), Handloom Weavers Comprehensive Welfare Scheme (HWCWS), Integrated Handloom Training Project (IHTP), etc. However, most of the handloom weavers are not aware of the schemes and programs of government and non-government institutions under EDP (Patra, 2016). India consists of a large number of Internet Users and potential buyers on digital platforms. Hence, e-commerce is an attractive option for the sale of Handloom products with extended reach as well as a business expansion platform for many handloom exporters. Small handloom enterprises can enjoy the benefits of increased efficiency, streamlined process flow, reduced costs and faster communication through e-commerce ensuring better service provision (Kumar & Srivastava, 2016).

Research Methodology:

The growth of e-commerce with an increasing number of e-commerce vendors dealing with handloom products from cluster to serve the purpose of promotion and sale are discussed. Our study in this paper has attempted to understand the views from local vendors of both government and private entities who are dealing with handloom products offline in Odisha and their course of strategy for selling the products in the e-commerce portal in tune with a steady rise of e-commerce vendors in national level. In this case, we approached four local vendors Boyanika, Utkalika, Sambalpur Bastralay and Mehers through telephonic interview and obtained their views which are highlighted in this study. Further, we have also involved the producers of handloom products i.e., the weaver-entrepreneurs and the master weavers to know about their willingness to shift to an online platform as well as the issues of those who were already into e-commerce with private players. While visiting three clusters namely Gopalpur, Nuapatna and Bargarh, some weavers and entrepreneurs shared their views which have been discussed. The clusters that have been taken are well established and have a national level of reputation under the domain of central government under the Ministry of Textile. The products from these clusters are catered largely to the domestic market and some extent to international markets. The weaver producers who have been interviewed are considered those who have more than 20 years' experience in handloom and have a good understanding of both the product and the market with the help of state government agencies and local cluster development executives.

Although there is an increasing trend of e-commerce integration with handloom business, researchers must gather opinions from consumers ultimately and find out the reasons for not buying from the portal, other issues and their suggestions for improvement. For that purpose, a primary

survey has been done with the sample respondents who are residents of Bhubaneswar city only. Although we had a plan to cover more samples, the total sample size is restricted to 105 with non-cooperation of the respondents and lack of time. For this, we have adopted a simple random sampling method. To assess the opinion of potential respondents on various parameters, appropriate assessment scales including dichotomies; Likert scale of measuring qualitative information has been used. Questionnaires for customers were used to elicit the required information related to their preferred handloom products, the occasion of their use, platforms of purchase, preference of handloom products purchase on the digital platform compared to offline channels and the key features that would motivate them to purchase handlooms more and their suggestions were included for the data collection process. Both for local retailers and weaver entrepreneurs, a one to one interview was conducted with them to gather the answers to the questions.

Besides, for weaver entrepreneurs, we discussed the duration of production, channels of sale of products, their understanding of e-commerce, acceptance of sale of handloom products on digital platforms, government schemes available to support them and the skills they possess and seek. We questioned weaver-entrepreneurs regarding – their involvement in e-commerce, their issues, the process of outsourcing products with different vendors, profit margins and support from the government. For local vendors, specific questions were posed to know their strategy for shifting online, if they had any liaison with online vendors, the issues that they faced. Moreover, we asked the local retailers with their online channels regarding the challenges and operational issues.

In this study, we have used the following statistical tools like the democratization of large-scale proportionate test, Spearman Rank Correlation and factor analysis. These tools have been used to analyze the

importance of these selected variables(attributes) to switch to an online mode of business. The test for democratization has been made for understanding the consumers' perception towards e-commerce with different factors that are useful to support online business. To ensure whether consumers' perception factors and Government ecommerce policy have given positive results, the large sample Z test has been applied. The method is as under:

$$z = \frac{\hat{p} - p_o}{\sqrt{\frac{p_o(1 - p_o)}{n}}}$$

\hat{p} = Sample Proportion

P= Hypothesized population proportion

S= Sample Size

The online firms are facing various problems ranging from quality of product to many other issues but we tried to identify few dominant factors deterring to harness their potential in selling online. So, we have used the factor analysis to find out important issues faced by consumers while browsing online or when they get the actual products. The factor analysis has been made on variables related to consumers' perceptions towards different factors as per their importance to increase selling attributes. The perceptions of consumers have been measured through the five-point Likert scale. We have used 1 stand for strongly disagree and 5 to strongly agree for different parameters determining the critical factors. Before using the factor analysis, the Cronbach's Alpha reliability on the variables

has been tested to see if there was a significant association amongst the variables.

Data and Analysis:

The data was analyzed with different approaches. The demographic profile of customers was obtained followed by respondent preference on attributes that encouraged them to purchase handloom products. The democratization test was performed to obtain respondent preference on purchasing handloom products based on parameters like quality, style, design, etc. The step-rank correlation was performed to check the attributes responsible for the maximum sale of handloom products compared to branded products. A factor analysis was performed to check respondent preference on various factors that would contribute to the growth of handloom through e-commerce integration.

Results:

The majority of the customers purchased handloom products for special occasions (57%) whereas others purchased it for business parties (40%) or as a fashion statement (38%). The democratization test suggested that quality, price, comfort, style, aesthetics, design elements, uniqueness, durability and advertising impact the purchase of handloom products by the customers with a positive perception of more than 40% (Table 1).

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Table 1. Democratization Test of Variables

Sl. No	Variables	Sample Proportion	Hypothesized Population Proportion	Critical Value of Z	Z=1.64 at 5% level of significance	Decision
1	Quality	0.97	0.4	12.12	>	R
2	Price	0.78	0.4	8.08	>	R
3	Comfort	0.95	0.4	11.7	>	R
4	Style	0.88	0.4	10.2	>	R
5	Aesthetics	0.95	0.4	11.7	>	R
6	Design Elements	0.82	0.4	8.93	>	R
7	Uniqueness	0.82	0.4	8.93	>	R
8	Durability	0.88	0.4	10.02	>	R
9	Advertising	0.54	0.4	2.97	>	R

The major reason for the difficulty in marketing handloom products was perceived to be a lack of proper marketing channels (31.7%). Middle-men or trading agents contributed to the difficulty in marketing (30%) whereas lack of domesticated market (23.3%) and poor consumer knowledge by handloom producers (15%) was perceived to be least responsible for it. Spearman Rank

Order Correlation Coefficient Test was conducted to obtain attributes that would promote handloom products over branded products. The rank obtained was – 1. Traditional Design, 2 – Trust Factor, 3 – Price, 4 – Convenience, 5 – Product Variety, 6 – Trend and Fashion Factor, 7 – Good Packaging and 8 – Good Shopping Experience (Table 2).

Table 2. Frequency Distribution for Rank Order of Attributes

Attributes	Rank 1	Rank 2	Rank 3	Rank 4	Rank Coefficient Test Value
					Convenience
Trust Factor	54	45	4	2	164
Price	45	44	9	7	168
Traditional Design	58	43	2	2	158
Product Variety	36	53	9	7	197
Trend & Fashion Factor	13	25	25	42	306
Good Packaging	14	23	25	43	307
Good Shopping Experience	11	19	25	50	324

By performing a Factor Analysis of customer’s data, seven components were found to be important for a handloom product which included – assured value for money, easy return policy, timely response to complaints, less compulsive shopping,

good packaging, easier comparison of the product price and good shopping experience. Three attributes that were found to encourage customers to purchase handloom products online included lower prices compared to conventional shopping, product

guarantee and availability of variety in products. The most important factor according to customers to sustain the business online was Product Information

Transparency as it would help them to stay informed, assured and confident in their decision making (Table 3).

Table 3. Important Factors Require to Integrate Handloom with E-commerce

Sl No.	Major Explaining Variables (Component) and their Score Values	Factors
1	a) Value for Money assured (.559) b) Easy Return Policy (.689) c) Timely Response to complain (.853) d) Less compulsive shopping (.871) e) Better shopping Experience (.894) f) Comparing Price is easier (.807) g) Good packaging (.829)	Better Shopping Experience with Best service
2	a) Permit to buy at a lower price compared to conventional shopping (.755) b) Product Guarantee (.748)	Affordability with quality
3	a) Delivery of items at right time (.543) b) Wide range of Choice (.841) c) Eliminating middleman (.705)	Proper Channel with a wider variety and Right time
4	a) Adequate Product Information (.959)	Product Knowledge

According to the manager of Boyanika(Government marketing agency), only 25 weaver entrepreneurs across all the handloom clusters in Odisha are involved in major e-commerce channels like Go-Coop, and Amazon for the last few years. The online vendors outsourced their products from the cluster through their local offices. The findings from the discussion with the weaver entrepreneurs suggested that they are involved with online platforms but their business is not moving fast. Some of them said that they want to continue but finding it difficult due to lack of time, encouragement and support. As the majority of the weavers and master weavers are not educated, lack of exposure, marketing knowledge, technical skills, fear factor and lack of sufficient support from government are the major hurdles they face to participate in e-

commerce channels. The most important concern that we extracted from them is that they are not getting identity either from the online vendor or from the market platform.

Through discussion with the local handloom marketing vendors, we found out that most of them don't have their website. However, they have tied up with the Go-Coop for selling handloom products but are planning to set-up their website soon. Besides, the State Government has been planning to tie up with Flipkart and more portals to promote the selling of handloom products. It is inferred from the discussion that both the central and the state governments are planning to align with major e-commerce portals for both handloom and handicraft clusters so that the livelihood of artisans could be improved.

Conclusion:

The current generation has become used to digital technology using online platforms for the purchase of every product starting from groceries to furniture. Indian population is a major part of it, handloom would certainly have a great opportunity by exploring this mode of business. There have been several private initiatives in bringing these products before customers online but a government initiative is yet to come into play.

Customers of Odisha have shown a positive response towards purchasing handloom products online due to the added advantage of browsing genuine products online, hassle-free billing process and doorstep delivery of products. Some added features in terms of price, availability, a user-friendly portal of purchase, etc. can prove to be a hit among the consumers as handloom products preserve the ingenuity as well as the indigenous culture of the local societies.

Coming to the benefits of retailers of handloom products, the cost of investment as compared to a brick and mortar shop is quite low. They will also be able to target more customers that they couldn't offline. Maintaining an attractive website along with ensuring proper movement of products and materials in the supply chain can work wonders in customer satisfaction and increasing their popularity among customers. It also allows them to interact with their customers in a better way and work towards customer retention by maintaining good relations with them.

Although the benefits are numerous, there are also several challenges associated with it. The retailers need to be thorough with digital rules and regulations to tackle cyber-crime. Initial marketing needs to be done to a great extent on an online platform to ensure maximum reach yet the output may not be as expected. Bigger brands invest a huge amount in sophisticated technology to win over digital customers whereas the handloom sector doesn't have enough

support from the government which is something that they need to start investing in. Help from the government in setting up R&D centers that work towards digitization of marketing and sales of handloom products would raise the growth rate benefitting all the stakeholders. Training should also be provided to the local artisans on using the basic applications on digital devices like mobiles and computers and also create awareness regarding the possible entrepreneurial opportunities available for them in e-commerce. Moreover, the pandemic virus as per WHO will prevail for long. Hence, the government must promote weavers to participate in online business and conduct a series of workshops to make them understand the importance of online business. We suggest each cluster is required to set up its website through the help of the government so that their visibility would become wider and the possibility of better business.

Limitations:

In preparing the report, sincere efforts have been made to avoid any discrepancies although there is always a chance for further improvement. The sample size considered for the study is limited to the localities of Odisha. Extending the research by involving people in other parts of the country can generate varied outputs. Furthermore, the literature available in this subject is very less to understand and analyze the factors affecting the digitization of the handloom sale process. Extended research on the transformation of the handloom sector over the past few years with deeper analysis on every small aspect that could affect their growth would help in the better formulation of strategies that could raise the level of handlooms to that of premium branded products while preserving their uniqueness at the same time.

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