

Building a Conceptual Framework to Study Factors Influencing E-commerce Adoption by Handloom Weavers

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Abstract

The handloom sector in India holds economic importance owing to its lower capital investment needs, substantial value-addition ratio, eco-friendliness, capability to employ women and marginalized communities, and considerable potential for export and foreign exchange revenue. However, in actuality, the handloom weavers receive considerably low compensation and appreciation for the exceptional craftsmanship, leading to the decline of the handloom sector and discouraging subsequent generations from pursuing this profession. Adopting e-commerce can expand the market reach of handloom weavers, appropriately valuing their craftsmanship, thus improving their economic status and increasing employment in this sector.

This study employs the foundation of the Unified Theory of Acceptance and Use of Technology (UTAUT) model to investigate the many drivers and barriers affecting e-commerce adoption among handloom weavers. UTAUT incorporates social and psychological elements, enhancing its predictive and explanatory power; hence, it helps in examining factors that influence e-commerce adoption among handloom weavers. The preliminary qualitative investigation aimed to develop a framework that would offer essential insights for the economic advancement of handloom weavers. The research participants involved in the research work were questioned about their perceptions regarding the adoption of e-commerce. The analysis of the qualitative interviews revealed nine factors that play an influential role in the adoption of e-commerce, namely effort expectancy, social influence, performance expectancy, children's support, relative advantage, institutional support, behavioral beliefs, and perceived risk. The nine variables may exert either a positive or negative influence on the "Actual Adoption" of e-commerce by handloom weavers. The adoption will impact the "Business Performance" of handloom weavers in two ways: market performance and financial performance. Thus, a correlation is established between the constructs

of the UTAUT theory and the business performance of handloom weavers through the actual adoption of e-commerce. The research concludes with recommendations for policymakers and industry stakeholders, highlighting the need for digital literacy programs, conducive infrastructural arrangements, development of weaver-centric digital solutions, and operational assistance to support e-commerce adoption among weavers.

Keywords: E-commerce, technology adoption, handloom weavers, UTAUT, qualitative study

Introduction

The Indian handloom showcases the rich cultural heritage, artistic skill, and ingenuity of the craftsmen who intricately weave designs onto a blank canvas. In terms of creativity and modernity, the Indian handloom has seen a great change, but it is still one of the most unorganized sectors after agriculture and is crucial to rural and semi-rural communities' way of life. There are several states in the nation where handloom weaving is practiced, albeit it is declining significantly in some of them. The weavers are abandoning the sector en masse due to lack of equal opportunity.

The handloom sector is a gold mine that can significantly contribute to making "Skill India" and "Make in India" efforts successful (Ghosh, 2016). This sector has the potential to grow owing to its inherent sustainability and eco-friendly attributes. Furthermore, there is growing awareness of handloom products among both domestic and international consumers. Thus, researchers have identified that adaptation of e-commerce can resolve many problems associated with this sector (Mishra and Mohapatra, 2019). An e-commerce platform can act as a 'technology-enabled marketing-intermediation platform,' which can enable weavers to gain access to a larger market through a more efficient supply chain.

However, the literature review indicates that substantial research is necessary for the technological dimension of the handloom sector (Mishra and Mohapatra, 2019; Sarkar, 2016). It is essential to identify drivers and barriers that affect e-commerce adoption (non-adoption) among handloom weavers. This finding can significantly impact the improvement of livelihoods for a large segment of society, as the handloom sector contributes to both direct and indirect employment for 35.22 lakh weavers and allied workers (Ministry of Textiles, 2022). Therefore, this research aims to develop a theoretical conceptual model that examines the factors influencing e-commerce adoption among handloom weavers.

Literature Review

Indian handloom denotes a diverse cultural ethos ranging from exquisite fabrics, which take months to weave, to popular items of mass production for daily use. The key strengths linked with this sector include cheap labor, less capital investment, local resources, and unique craftsmanship, in addition to high appreciation and preferences by urban and international customers (Mishra and Mohapatra, 2019). However, with changing market demands, globalization, and industrialization, the handloom sector is plagued with concerns like stiff competition from power looms, less innovation, and product diversification (Hada and Chaturvedi, 2018; Misra, 2019). The Indian handloom sector is an individual-centric, weaver-driven activity; thus, it is very fragmented and usually a small-scale undertaking. Being a traditional sector, the skill of weaving is passed down from generations, so there is no formal education, and therefore they are not introduced to modern technology and infrastructure (Sabarinathan and Velamuri, 2020). The challenges of the traditional supply chain translate into less profit for the handloom weaver, leading to financial crises, the inability to buy good-quality raw materials (Misra, 2019), and the younger generation being reluctant to adopt weaving as a profession (Hada and Chaturvedi, 2018). Handloom products are also mostly available in government-organized fairs and local markets, thereby reducing the frequency of purchase by urban buyers (Majestic Mrs, 2016).

Varaganti (2017) states that the handloom sector has huge potential in terms of revenues and employment, and it is highly environmentally friendly, with one of the lowest carbon footprints. Likewise, the demand and appreciation of Indian handloom products in the global market calls for looking at various channels to reach a wide audience. In recent times, the internet has transformed businesses, rendering e-commerce an essential requirement for all the industries. Despite its infancy, the e-commerce market in India is the fastest-growing in the world. With a population of more than 1.4 billion and a fast-growing economy, the number of online shoppers is predicted to increase to 427 million by 2027. Consequently, the booming e-commerce industry is estimated to be worth over 300 billion U.S. dollars by 2030 (Minhas, 2024). Several research studies propose e-commerce adoption (Mandal, 2015) and use of social media (Humbe, 2014) for the benefit of the handloom weavers and to educate the masses about the handloom sector. The adoption of smarter marketing channels, like e-commerce, can help the weavers to reach geographically distant customers, enhance the brand value of handloom, increase sales, and thus improve their lifestyles (Venkatesh and Kumarswamy, 2016).

Therefore, it is essential to evaluate the readiness and receptiveness of handloom weavers towards the adoption of new technologies, as individuals accept or reject technology based on several criteria. Technology adoption means the acceptance,

integration, and embracing of new technology. Technology acceptance, the initial phase of technology adoption, constitutes an attitude towards technology and is shaped by numerous factors (Granic, 2023). The adoption of new technologies by users can be analyzed using many established theoretical frameworks. This research utilizes the theoretical underpinning of the Unified Theory of Acceptance and Use of Technology (UTAUT) framework (Figure 1) developed by Venkatesh et al. (2003).

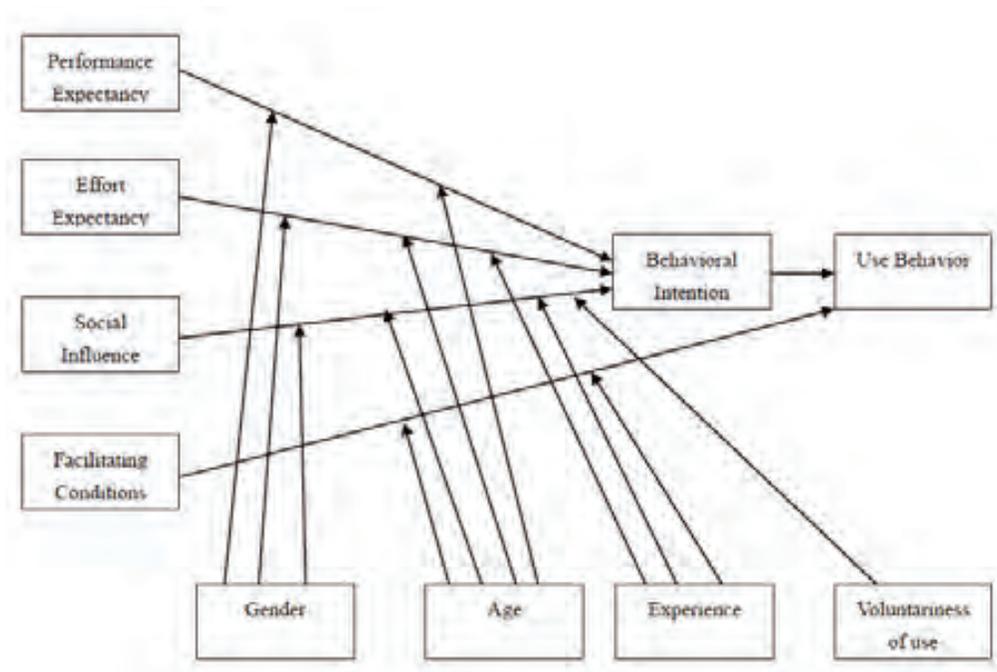


Figure 1: The UTAUT framework

Source: Venkatesh et al., 2003

The UTAUT framework, which includes constructs like “Performance Expectancy,” “Effort Expectancy,” “Social Influence,” and “Facilitating Condition,” is considered suitable for analyzing the dynamic and reciprocal interactions among individual, social, and technological systems of handloom weavers. In this study, it is crucial to comprehend the specific elements and intricate social dynamics of the handloom sector in order to effectively implement e-commerce and achieve its potential advantages. UTAUT incorporates both the social and psychological parameters, which increases its predictability and explanatory capacity and thus helps in comprehending the factors that affect the adoption of e-commerce by handloom weavers.

Methodology

The research study follows a qualitative methodology utilizing face-to-face interviews to collect data from handloom weavers. The semi-structured interview schedule was given

to participants, and they were encouraged to elaborate on responses with pertinent and engaging details. Interviews were carried out in Gujarati (the local language) for an approximate duration of 45-60 minutes. The purposive sampling technique was utilized to allow the researcher to select participants that were in sync with the purpose, aim, and objective of the research undertaken (Campbell et al., 2020). It is an effective technique, as the study aims to generate a theory.

The researcher employed data saturation to determine the sample size, seeking information on the issue until no further insights could be gathered (Aldiabat and Le Navenec, 2018). A total of twelve people were considered eligible for the proposed study and were contacted individually. Following the ninth interview, no further information was acquired; hence, the sample size remained limited to nine respondents.

Data Analysis and Results

Data analysis was performed using two methods, the “Word Cloud” technique and the Grounded Theory methodology.

Word cloud

Data Visualization is an important tool used in contemporary science, facilitated by computers for qualitative research involving the collection of a large volume of textual data. The graphical depiction of data is essential for data visualization, allowing researchers to obtain structured and categorized data, which aids in the identification of underlying trends and the discovery of clusters essential for further analysis (Westby, 2022). The prominent terms in the “Word cloud” are those that have been reiterated multiple times. As the size of the words decreases, their frequency of recurrence in the analyzed documents lowers (Lohmann et al., 2015). Figure 2 illustrates the analysis of interview data from handloom weavers through a “Word Cloud.”

The word cloud in Figure 1 suggests that the term “e-commerce” is the boldest, suggesting it was used most frequently and served as the primary focus in the textual analysis of the interview data. The other most repeated terms in the analyzed texts include “online,” “media,” “adoption,” and “social,” which imply that the interviews revolved around the adoption of diverse e-commerce platforms for business and marketing. Numerous other terms, like “children,” “return,” “support,” “mode,” and “product,” regularly emerge, underscoring the necessity for assistance in embracing e-commerce and emphasizing the involvement of the younger generation in this venture. The relatively infrequent terms such as “customer,” “better websites,” “payment,” “challenges,” and “courier” suggest that participants perceived e-commerce websites as effective for engaging numerous customers, yet they lacked understanding of the processes involved in

payment receipt and accurate product delivery to customers. Several additional terms, including “performance,” “connectivity,” “design,” “selling,” “problems,” and others, were common; nevertheless, their representation in a lighter and smaller font indicates a reduced frequency of occurrence. The data reveals that participants discussed and cited variables related to e-commerce adoption and integration.



Figure 2: Word cloud

Source: Yadav, 2023

Grounded theory

The second method adopted for the analysis of the qualitative data is the grounded theory approach. Grounded theory is defined as “a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area” (Glaser, 2016). The coding and analysis of the transcribed codes was done utilizing the NVivo software and Microsoft Excel. The grounded theory is also referred to as thematic analysis, as the technique enables the formation of themes, similar to the critical analysis of the participant replies. This research employed thematic analysis to categorize the data according to various overlapping factors. This thorough analysis of the acquired data rendered the grounded theory technique effective for investigating the research subject at hand. Grounded theory has four stages: open coding, axial coding, selective coding, and theme integration, culminating in the formulation of theory (Yadav, 2023). Figure 3 illustrates the theoretical generation methodology employed in this research study.

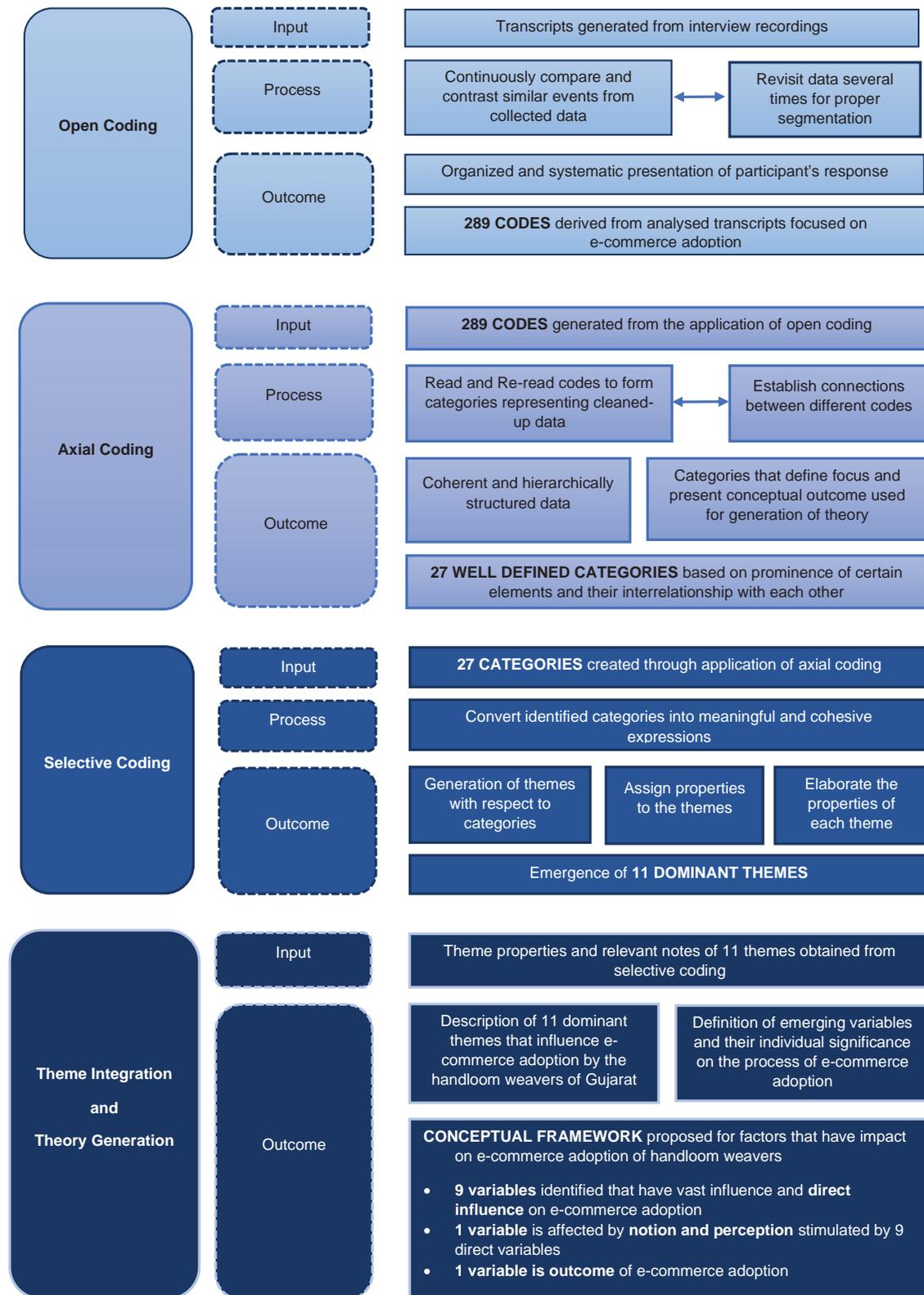


Figure 3: The coding process and codes generated

Source: Shubhangi Yadav

Results

The axial coding generated 27 categories, which were subsequently refined through selective coding, leading to the emergence of 11 dominant themes. Table 1 presents 26 categories and 10 themes: of these, 9 themes exhibit a significant and direct influence on the adoption of e-commerce; one theme, “Business Performance”, represents the outcome of e-commerce adoption; and the other theme, “Actual Adoption of E-commerce by Handloom Weavers”, has emerged as a dependent variable shaped by the perceptions and notions of the independent variables.

Table 1: Codes, Categories and Themes

S.No.	Codes	Categories	Themes
1.	Challenges of <ul style="list-style-type: none"> - Distinct inventory management for online and offline products. - Return problem due to variation in color. - Customers sometimes lie about the return. 	Challenge of online customer management	Barriers to Adoption
2.	<ul style="list-style-type: none"> - Limited literacy, less knowledge. - Low proficiency in English. - The younger generation is disinclined to pursue a career in weaving. 	Personal challenges	
3.	<ul style="list-style-type: none"> - Reliance on IT specialist. - Engaging with local courier for “Amazon” delivery. - The courier service presents significant challenges in certain rural areas. 	Infrastructural challenge	
4.	<ul style="list-style-type: none"> - Challenges of communication in English. - Challenge of effective communication, especially when engaging with international consumers. - Challenges in drafting product description, etc. 	Language challenges	
5.	Recurring expenses associated with e-commerce: <ul style="list-style-type: none"> - Professional photography services. - Annual budget for maintenance of website and server. - Purchase of IT equipment like computer, printer, etc. - Requirement of smart phone for selling on social media. 	Financial challenges	
6.	<ul style="list-style-type: none"> - Insufficient technical expertise for online platforms and product promotion. - Inability to click quality photographs. - Challenges of internet connectivity in rural parts. 	Technological challenges	

7.	<ul style="list-style-type: none"> - Children help with product photography and writing emails to the customer. - Children assist in e-commerce adoption. - Children operate and manage the online business. - Children embrace new technology and help to adopt it. 	Helping hand of children	Children Support
8.	<ul style="list-style-type: none"> - We face challenges in online payment: “COD” reduces the risk associated with digital transactions. - Consumers are requested to transfer money to my account prior to dispatch. - The courier person is asked to hold the delivery until we confirm receipt of payment. - We are concerned that e-commerce mode is unsuitable for a cooperative society. - We are apprehensive about online security and associated risks. - We are apprehensive about frauds associated with internet-based platforms. 	Risk of receiving money online	Perceived Risk
9.	<ul style="list-style-type: none"> - “Design Piracy” poses significant security concern: Handloom sari of Rs. 24,000/- is reproduced on power loom and sold at Rs.4,000/-. - Design plagiarism poses significant challenge with e-commerce and Instagram. - Designs are readily replicated. 	Threat of design piracy	
10.	<ul style="list-style-type: none"> - Major returns arise due a discrepancy in color between the original item and the online image. - Potential chance of getting a damaged product upon return owing to “Amazon” 15-day return policy. - Minimal return attributable to “delay in delivery”. - Customers infrequently report product flaws: <ul style="list-style-type: none"> - Attributed to the fact that the items are handwoven. - Advise them beforehand on the color discrepancies between the photograph and the actual product. - Minimal returns in home textiles and bath towels as <ul style="list-style-type: none"> - Greater tolerance for shortcomings in this category. - These are typically meant for household use. - There exists a risk of damage to products due to negligence by unprofessional transportation service. 	<p>Risk of return;</p> <p>Risk of return of damaged product</p>	

11.	- Adopting social media platforms such as “WhatsApp” yields superior outcomes and is more widely accepted.	Use of social media	Relative Advantage
12.	- Prior e-commerce knowledge is not essential. When connected with other digital marketplaces. - Challenging to maintain and sell through proprietary e-commerce platform. - In contrast to social media, the adoption of e-commerce incurs an annual recurring expense of Rs.30,000 to 40,000. - Weavers continually compare e-commerce with social media marketing.	Comparison Between social media and e-commerce	
13.	- Embracing social media for sales is quite straightforward. Prior e-commerce knowledge is not essential. It can be regarded as the starting phase of e-commerce adoption. - No investment or expenses associated with selling using social media applications. - Promotion using Facebook is more economical. - Customers usually never engage in deceit while purchasing over social media.	Advantage of social media	
14.	- E-marketplaces offer superior advantages compared to maintaining individual websites. - It is sufficient to own a smartphone for selling on e-marketplace.	Advantage of e-commerce over own website	
15.	- Trust concerns associated with Facebook and Instagram.	Disadvantage of social media	
16.	- I need to allocate more resources to improve the packaging for offline distribution.	Advantage of being online	
17.	- The government is advocating online marketing and e-payment methods; yet, there is a lack of governmental backing or legislation facilitating the adoption of e-commerce. - Adoption should be facilitated through training. We are confident that with proper guidance, we will successfully do online business. - The Weaver’s Service Centre (WSC) acquainted us with e-commerce sales. - WSC registered us for the government portal and informed us about the advantages of social media.	Government support	Institutional Support
18.	- A login and password for e-commerce websites have been given to us. - “Amazon” does product photography at no additional cost.	B2B support	

19.	<ul style="list-style-type: none"> - Customers purchasing via online channels tend to be knowledgeable. They recognize the irregularities inherent in handmade products and hence exhibit greater tolerance for imperfections. - Have not encountered “returns”. - Moreover, gained awareness of new payment options. - Certificates of authenticity foster trust. The “Handloom Mark” instils confidence in clients purchasing online. 	Factors supporting adoption for better performance	Behavioral Beliefs
20.	<ul style="list-style-type: none"> - Importance of education: I lack the ability to adapt due to insufficient literacy. - Courier services are distant from our village, almost 20 km away. - The customer wishes to physically touch and feel the product 	Factors hindering performance	
21.	<ul style="list-style-type: none"> - I learnt English to compose descriptions and producing videos for authenticity and trust. Initially it was challenging, but became manageable when got used to it. I used to aspire to work at this level, specifically selling on e-commerce. - Had we conceded earlier, we would have achieved more online sales. - Youth participation will improve performance. - I contacted “Jaypore.com,” which initiated my venture into e-commerce sales. 	Activities performed for better outcomes	Effort Expectancy
22.	<ul style="list-style-type: none"> - Community support and derived inspiration from peers with their websites. - It required almost 1.5 years for me to be persuaded to embrace e-commerce and establish own website. - No one in the vicinity who has embraced e-commerce. - I was aware of e-commerce and observed others in my vicinity engaging in online business. - I joined “Facebook,” “WhatsApp,” and “Instagram” and inspired and motivated many others (possibly over 50) to embrace these platforms. - I continue to motivate and demonstrate to other weavers how to use online sales methods. 	Influence of people from own/different working community	Social Influence
23.	<ul style="list-style-type: none"> - Reduced workload and reduced physical exertion. - Enhanced lifestyle. - More time for design development and product innovation with diverse yarns and colors. 	Expected benefits	Performance Expectancy

	<ul style="list-style-type: none"> - Recognition and improved valuation for the craft. - Facilitated product promotion. - Optimal customer reach, direct engagement with clientele, broader consumer base. 		
24.	<ul style="list-style-type: none"> - Reduced travel expense. - Reduced marketing expenditure; eliminate commission to intermediaries. - Additional costs like website maintenance, etc., incurred. The extra cost is less bothersome, as I am compensated. - I anticipate that e-commerce sales will rise in 1-2 years, which will lead to increased profits and a decrease in wholesale business. - My primary sale was to wholesalers; thus, no marketing cost was incurred. - We have engaged approximately 10-20 weavers due to the adoption of e-commerce; we now purchase more from other individual weavers. 	<p>Financial performance</p> <p>Market performance</p>	Business Performance

Source: Yadav, 2023

Interpretation and Discussion

Table 1 depicts the conversion of the interview transcripts categorized with open coding into categories and dominant themes that emerged in the final phase.

The first theme was designated as “Barriers to Adoption.” According to Wen, Harold and Pierrette (2019), the barriers to adoption refer to the limitations or constraints that are encountered by the individuals in transition to e-commerce. The study’s findings suggest multiple barriers to e-commerce adoption, including technological constraints, where the weavers struggle to understand technology; linguistic barriers, where they cannot comprehend the operational language of e-commerce websites; financial barriers, where the weavers lack seed capital necessary for e-commerce investment; and infrastructural shortcomings, where they are unable to obtain the essential infrastructure for e-commerce adoption.

Certain codes were created that referenced children and highlighted how support from younger family members facilitated weavers in sending photos to customers, composing emails, and engaging in communication with them. Consequently, the category of children’s assistance was classified under the theme of “Children Support,” highlighting the importance of children in e-commerce adoption. When the weavers’ offspring can implement technological advancements, the likelihood of shifting to e-commerce rises.

Gur and Turel (2022) assert that children's comprehension of technology can benefit the family business, as it enables them to readily acquire and exhibit technological proficiency.

The interview participants indicated various categories of risk, comprising concerns regarding online monetary transactions, security threats from online frauds, potential for design piracy, and the risk of customers returning damaged goods. This resulted in the emergence of a theme termed "Perceived Risk." Nguyen and Huynh (2018) assert that perceived risk and trust associated with e-commerce adoption are critical detrimental factors affecting individuals' intentions to engage in e-commerce adoption.

The interview responses featured multiple comparisons between social media and e-commerce adoption, resulting in the emergence of the fourth theme, termed "Relative Advantage." This theme emphasizes the comparison of social media with e-commerce, the advantage of social media relative to e-commerce websites, and the advantages and disadvantages of being online. Li and Ku (2018) define relative advantage as a motivating factor for the business owners to adopt e-commerce.

Multiple participants acknowledged the necessity for support in transitioning to and adopting e-commerce. Kraus, Kraus, and Osetskiy (2020) emphasize that expert support is crucial for the acceptance of new technology. Handloom weavers requested training and technical assistance from institutes such as NIFT, along with B2B support from e-marketplaces, to enhance their handloom businesses on e-commerce platforms, thereby easing the adoption process. This code was categorized under the category "Institutional Support."

Several codes identified certain attitudes among the participants regarding factors that promote or hinder the e-commerce adoption. For instance, the participants indicated that online shoppers are educated and exhibit a greater appreciation for handloom products. Conversely, they also perceived that lack of tactile interaction with the handloom fabric becomes a barrier to purchase. Darsono et al. (2019) defines behavioral belief as a conviction that a specific activity can result in a particular outcome or experience; thus, these codes were classified as "Behavioral Beliefs."

The participants discussed the activities they engaged in, such as acquiring proficiency in English or Hindi and mastering photography for online posting, to enhance e-commerce performance in their firm and achieve superior results. These acts pertain to the perceived level of effort required by the user to embrace e-commerce. The weavers

may require increased efforts to integrate e-commerce due to their poor literacy levels, which hinder effective communication and abilities (Renu and Anupama, 2018). These discussions resulted in the formulation of the subject, “Effort Expectancy.”

Roethke et al. (2020) assert that expectations and perceptions of family and friends have an impact on an individual’s actions and decisions. When asked about weavers’ reasons for transitioning to e-commerce, participants cited the influence of e-commerce adoption on fellow handloom weavers within the community, exposure to urban environments, and assistance from family and friends. Therefore, the theme was designated as “Social Influence.”

The “Performance Expectancy” emerged as the ninth theme wherein the participants discussed the anticipated advantages of adopting e-commerce, such as reduced workload, enhanced lifestyle, increased time for design development, and reduced physical labor. According to Rahi et al. (2019), performance expectancy is the term used to describe activities that are carried out with the anticipation of achieving improved results. These are the favorable results and benefits that are recognized by the individual and would inspire the user to adopt e-commerce (Cui et al., 2019).

The research study by Alsaad, Mohamad and Ismail (2018) revealed that the choice to adopt e-commerce is shaped by individuals’ perceptions and attitudes regarding the associated risks, as well as their attitudes towards technology. This can be assessed by evaluating the time duration the handloom weaver dedicates to e-commerce activities. Therefore, the nine variables defined above have a significant impact and a direct correlation with the variable of “Actual E-commerce Adoption.”

The interviews also addressed the business performance following the adoption of e-commerce. The business performance is predominantly an outcome of e-commerce adoption, rather than a determinant that restricts or improves the e-commerce practices of handloom weavers. The business performance is affected by two factors—financial performance and market performance.

Numerous studies on e-commerce adoption have been evaluated for financial performance by analyzing criteria such as a higher sales percentage (Clayton and Criscuolo, 2002), sales growth, reduced transaction costs, and profit gains (Rahayu and Day, 2017). Consequently, the financial performance of the business will elucidate its capacity to generate money and financial returns for handloom weavers. Enhanced reach leads to improved revenue generation, which directly impacts the overall business performance.

The performance of businesses that have embraced e-commerce has been evaluated based on the growth of international and domestic markets, improved customer relationships (Clayton and Criscuolo, 2002), and some additional criteria. The market performance of a handloom weaver's business is dependent on the extent of their market presence and the degree of awareness about their handloom craft. It also affects the access of handloom weavers and their ability to provide handmade crafts to consumers worldwide.

Consequently, these emerging variables assist in the formulation of a conceptual model illustrated in Figure 4.

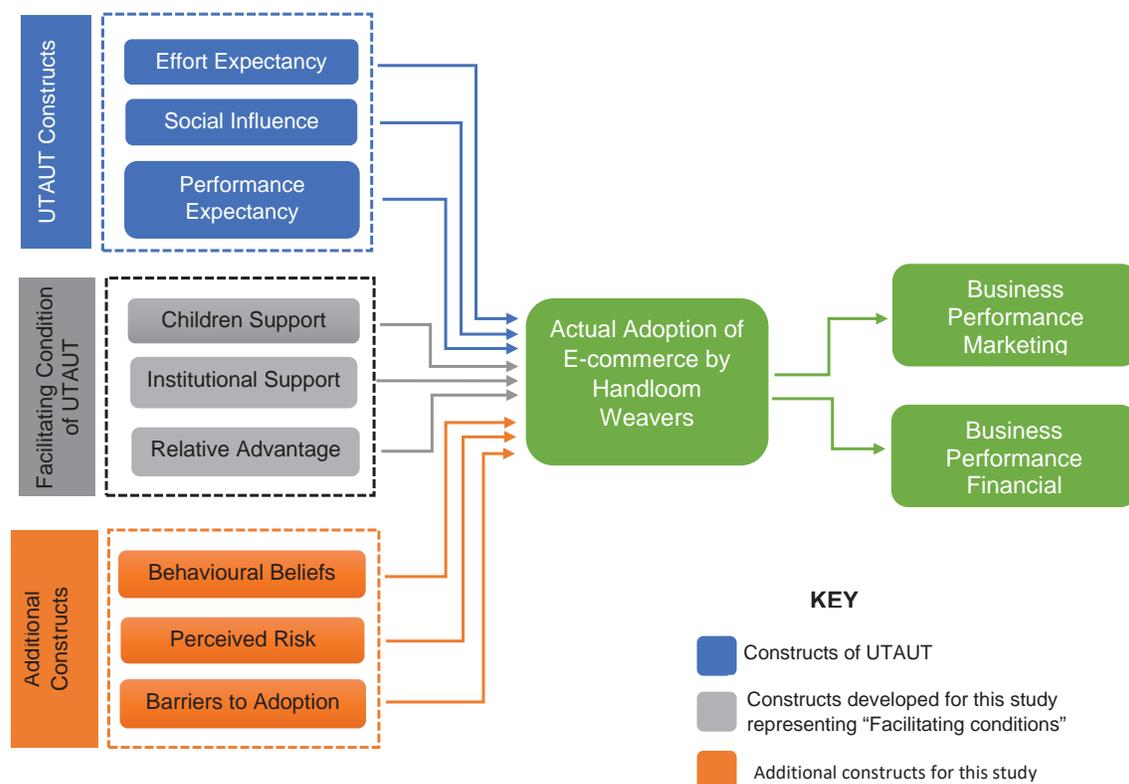


Figure 4: The conceptual framework

Source: Yadav, 2023

Conclusion

Figure 4 illustrates that nine variables strongly impact the "actual adoption of e-commerce by handloom weavers" (Yadav, 2023). The three original constructs of the UTAUT model are effort expectancy, social influence, and performance expectancy. Furthermore, three variables, children support, institutional support, and relative advantage, have emerged from this qualitative research and illustrate the "facilitating conditions" construct of the UTAUT model. Additionally, the remaining three constructs,

behavioral beliefs, perceived risk, and barriers to adoption, have evolved in this study and are incorporated into the UTAUT model for assessing the e-commerce adoption of handloom weavers. These nine variables may exert either a positive or a negative influence on the “actual adoption” of e-commerce by the handloom weavers. The “Actual Adoption” in turn will influence the business performance of the handloom weavers in two aspects: the market performance and the financial performance. Consequently, a correlation is established between the components of UTAUT theory and the “Business Performance” of handloom weavers via “Actual E-commerce Adoption” (Yadav, 2023).

Implications

This research study makes a significant theoretical contribution by developing a conceptual framework that helps understand the factors influencing e-commerce adoption among handloom weavers, based on the UTAUT theory and enriched with themes from grounded theory and qualitative observations. By identifying 11 dominant factors—spanning both positive and negative impact—this study not only validates the relevance of existing UTAUT constructs but also proposes three context-specific constructs tailored to the unique socio-economic and technological environment of the handloom sector.

The implications of this study are multifaceted. For policymakers, the research points out the requirement for targeted digital literacy programs, infrastructural support, and trust-building mechanisms to encourage digital adoption among weavers. The inclusion of context-specific constructs like “children support,” “institutional support,” and “relative advantage” can guide the development of nuanced and culturally sensitive policy interventions. For industry stakeholders, the findings present an actionable framework for designing weaver-centric digital solutions. By recognizing both the technological and human aspects influencing adoption, businesses can co-create tools, marketplaces, and services that align better with the operational realities and value systems of traditional handloom weavers’ communities. For academia, this research article presents findings from a qualitative strand of the author’s doctoral research, restructured to advance a focused argument that contributes independently to the scholarly discourse. Further, this research can open new pathways in interdisciplinary research by extending the UTAUT framework to culturally rooted and informal economies.

To summarize, this study advances both theory and practice by offering a grounded, inclusive, and empirically informed understanding of digital adoption in the handloom sector, with the potential to drive sustainable growth and digital equity in India’s craft economy.

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