

# Design & Development of Internet Based E-Commerce Portal for Swadeshi Products

Shubhangi Tukaram Lokhande

Computer Science & Engineering Department  
SVRI's College of Engineering, Pandharpur, Pandharpur, India

Prof. V. D. Jadhav

Computer Science & Engineering Department  
SVRI's College of Engineering, Pandharpur, Pandharpur, India

**Abstract**— In the rapidly evolving digital economy, businesses of all sizes are increasingly shifting towards e-commerce. With the widespread use of smartphones, online shopping has become a major trend in India. However, many local artisans and handicraft producers, operating at small or medium scale, lack access to global markets and online platforms to sell their products. This has significantly impacted their livelihoods. Currently, there is no dedicated Swadeshi e-commerce portal in India to support these artisans. This paper proposes the development of a Swadeshi portal aimed at empowering local artisans by providing them a digital platform to showcase and sell their products, thereby promoting self-reliance and boosting the local economy.

**Keywords**- Swadeshi Products, Swadeshi website, Swadeshi products online, E-commerce portal for swadeshi products.

## I. INTRODUCTION

The rise of internet accessibility and smartphone usage in India has significantly contributed to the growth of e-commerce over the past decade. While this digital shift has gained considerable traction among urban populations—especially within the 30% of the population residing in cities—the expansion of e-commerce across broader demographics remains limited. One major challenge is the narrow range of standardized products available online, which often restricts consumer choice and confidence. Most e-commerce platforms predominantly feature branded items, offering reassurances related to quality, cost-effectiveness, and post-sale services—factors critical to consumer trust. However, the growth of this sector also hinges on several socioeconomic variables, including financial literacy, living standards, infrastructure, digital payment adoption,

and the scalability of manufacturing units. Despite the popularity of local and daily-use products, their representation in online marketplaces remains minimal due to limited resources and lack of platform access. This paper explores these challenges and presents the development of a Swadeshi e-commerce portal as a strategic solution to support and empower local artisans and small-scale producers.

## II. LITERATURE REVIEW

The ever changing marketing scenario and heightened competition over the globe has amplified the role of brand at unparalleled level. Every person is a consumer of different brands at the same time. The choice and usage of a particular brand by the consumer over the time is affected by the quality benefits offered by the brand especially when it comes to brand of eatables and cosmetics. Consumer satisfaction is derived when he compares the actual performance of the product with the performance he expected out of the usage. Philip Kotler (2008) observed that satisfaction is a person feelings of pressure or disappointment resulting from product perceived performance (outcome) in relation to his or her expectations. If the perceived benefits turned out to be almost same as expected, customer is highly satisfied and that is how the company achieves loyalty of the customer towards the products

Practically e-commerce in India started becoming popular when the internet users and smart phone sales was gaining prominence. But over the years there is no doubt the e-commerce has become popular among roughly 30% of the population living in the cities but due to limited scope of product variety and standardization the sale through e-commerce is not increasing at faster pace. Only limited but branded items are on sale because of the limitations of selection and reassurance to customers

that their buying is cost saving with a priory condition that after sale service and product quality is guaranteed by e-commerce. The growth of e-commerce is dependent on factors like the financial literacy, standard of living, nature of habitation, payment system i.e digital vis-à-vis cash and more importantly on up-scaling of manufacturing enterprises. It appears that daily used products are least common in the e-commerce mode and only the most branded and customized but with standardization are more popular on e-commerce mode.

The E-Commerce market is thriving and poised for robust growth in Asia. There are players who made a good beginning. Their success depends on their understanding of the market and offering various types of features. This paper gives an overview of the future of E-Commerce in India and discusses the future growth segments in India's E-Commerce. Also find out various factors that would essential for future growth of Indian E-commerce. And represent the various opportunities for retailers, wholesalers, producers and for people. In this paper we found that the Overall E-Commerce will increase exponentially in coming years in the emerging market of India.

Over the last decade, Internet have changed the language of E-Commerce transactions for customer towards purchase and sell of good and service. M-Commerce (through E-Commerce) has transform the shopping experiences of customer of India. Emergence of latest technology bring paradigm shift from E-commerce to M-Commerce in online business scenario. According to Data Via Statista source E-Commerce sales graph showing a rising trend and expected to cross a mark of USD 4.878 billion sales growth by the end of year 2021. E-commerce offers wide range of products, choice and convenient delivery options whereas M Commerce offers platform for online transaction through mobile phone. The research objective is to analyze the present status of e-commerce business, its issues & challenges for business growth in India. It is an explanatory and conceptual Paper based on the market study and customer response towards M/E-Commerce transaction.

This paper addresses the struggle of rural micro-entrepreneurs in the Global South in utilizing e-commerce to reach wider markets. This research paper looks at the adoption of e-commerce as a sustainable marketplace by the micro-entrepreneur sellers from the lower socio-economic rural communities in India, a booming digital economy in the Global South. 'Sustainability' here refers to a model for sustainable economic development sustaining the e-commerce as business model for the rural micro entrepreneurs to flourish. This paper explores rural development by dismantling the factors that shape the ways technology and trade impact micro-entrepreneurs. The aim is to offer recommendations and solutions to contribute building the e-commerce as a sustainable marketplace for rural micro-entrepreneurs. Recent information and economic policy changes in India, along with the expansion of mobile infrastructure and a growing user base in rural regions makes this research timely and important. By scrutinizing the infrastructure and auditing the information needs and challenges of users, this research will illuminate the

gaps that are leading to a lack of sustainable economic development, and information asymmetries discouraging the rural micro entrepreneurs from selling online. The purpose of the paper is to find hurdles in the sustainable development of e-commerce as a business solution.

E-swadeshi is an E-commerce website where you can buy all the pottery products, handy crafted products, uniquely designed products from people living in remote areas. The main purpose of making this E-Commerce website is to help the people who are living in rural area and to give them opportunity to come up with their amazing and beautiful craft work and show across the world. People of India as well as of other countries love traditional craft works of India, so this website will be more helpful for the people looking for best craftworks across India. Handicrafts is a sector which is always explored by the people because of its creative and unique work but the maker of this beautiful craft works are facing lot of problems. People engaged with the work of craftsmanship either are illiterate or poorly educated which makes them hard to upgrade their skills and to know the market strategies. This makes the craftsmanship dying in their town.

Retailing center is already quickly becoming an e-commercial center. Anything from needle to ship can be bought on the internet. With new and new players, today players and new competitors have a common idea of creative systems to offer their goods and services. Electronic trading is more than just another means of helping or enhancing established industries. Or even e-commerce brought disruptive business shifts. It is a problematic invention that changes the conventional method of doing business dramatically. Ecommerce paves the way for our nation's huge business development. Rising web customers have contributed to their growth. Ecommerce has brought the online travel industry to increase in numerous ways and included another corporate sector in our nation, through the online retail industry. The current study attempts to portray today scenario and e-commerce facilitators in India, dissect the present e-commerce patterns and examine e-commerce obstructions in India.

E-Commerce or E-Business is the largest application of computers and information technology in keeping and managing business and financial records. It helps in transaction of any amount of money from any part of the world to other. We can purchase anything online with the help of debit and credit cards. Application of ecommerce are billing to customers, tracing payments received and payments to be made and tracing supplies needed and items produced, stored, shipped, and sold, etc.

### III. RESEARCH GAP

Most existing studies on e-commerce in India focus on growth trends, challenges, and consumer behavior, with little attention to platforms promoting Swadeshi products. There is a lack of research on the design and development of dedicated e-commerce portals for indigenous goods. Additionally, the use of learning-based approaches to enhance user experience and platform performance remains underexplored. This study addresses these gaps by developing a smart, internet-based e-commerce portal specifically for Swadeshi products.

### IV. PROJECT SCOPE AND LIMITATIONS

#### Project Scope

This system uses for selling swadeshi (Local) products online and Create awareness of swadeshi products.

### V. LIMITATIONS

1. Internet Connectivity: You may face to loss of money if some time if website goes low it can take hours to get back to track, fixation may take time, this may at time make potential customer to stop from buying online, if they receive any error message. And possibly communicate to their family and friends.

#### Challenges Affecting Growth

Some of the major impediments that literature consistently flags include:

- Quality Assurance: The difficulty in guaranteeing product quality, especially when buyers cannot physically inspect items before purchase.
- Security and Fraud: Trust issues around payment security, online fraud history, and data protection hinder adoption.
- Customer Expectations & Performance Gap: Unmet expectations—whether due to delayed delivery, misrepresented product descriptions, or poor service—lead to dissatisfaction.
- Resources & Capabilities of Artisans: For local and rural artisans, gaps in skill, education, exposure to market trends, and marketing strategy limit their ability to compete.

### VI. PROBLEM STATEMENT

Build and implement swadeshi E-commerce portal for selling local products online and awareness of purchasing local products.

### VII. MOTIVATION

India relies heavily on imports for many goods, which makes it important to focus on increasing local production and boosting exports. Promoting and selling locally made products in global markets can strengthen the economy and support local artisans in sustaining their livelihoods. With this in mind, we chose to work on the design and development of an internet-based e-commerce portal dedicated to Swadeshi products. This project aims to create a platform that helps local products reach a wider audience and contribute to the country's economic growth.

### VIII. OBJECTIVES

- To Study the existing mechanism of ecommerce website to sell swadeshi products
- To Design & Development of Internet based E-commerce portal for Swadeshi products

### IX. METHODOLOGY OF PROBLEM SOLVING

#### a. Scoping and Planning

This initial phase focuses on defining the overall direction for the Swadeshi E-commerce portal project. Key activities include setting the project scope, determining objectives, and establishing timelines. The primary outcome of this phase is the Design Plan, which guides the entire project.

#### b. Conceptual Design and Research

During this phase, the conceptual framework for the methodology is developed. In addition, research is conducted on existing methodologies, primarily by reviewing studies and reports from independent research organizations. This helps ensure that the new methodology builds on proven approaches.

#### c. Development of Methodology

This is the core phase where the actual methodology is created. Each step within the methodology is carefully documented, covering objectives, required inputs, approaches, relevant models, tools and techniques, expected outputs, and references. The documentation is prepared in a user-friendly format such as a Word document or HTML pages to allow easy access and understanding.

#### d. Implementation of Methodology

Once developed, the methodology is implemented in collaboration with a client. This phase also includes marketing the e-commerce strategy development services and finalizing the sale. After the agreement, the methodology is put into action, applying the defined strategies to real-world scenarios.

#### e. Revision of Methodology

The final phase involves reviewing and refining the methodology based on the insights gained from the client project. Necessary revisions and improvements are made to ensure its effectiveness. Additionally, sample reports and supplementary references are added to enrich the methodology documentation.

### X. CONCLUSION

In conclusion, developing an e-commerce platform dedicated to selling Swadeshi products both in India and internationally will provide a valuable opportunity for artists and artisans to reach a wider audience. This initiative will also support women entrepreneurs by giving them a dedicated space to showcase and sell their products. Ultimately, this platform will contribute to strengthening the country's economy by promoting local craftsmanship and encouraging sustainable business growth.

## XI. REFERENCES

- [1] [https://www.academia.edu/43317388/E\\_Swadeshi\\_A\\_Web\\_Based\\_E\\_Commerce\\_Project\\_for\\_Underprivileged\\_Creative\\_Section](https://www.academia.edu/43317388/E_Swadeshi_A_Web_Based_E_Commerce_Project_for_Underprivileged_Creative_Section)
- [2] [https://www.researchgate.net/publication/334390615\\_Global\\_Journal\\_of\\_Management\\_and\\_Business\\_Research\\_E\\_Marketing\\_Customer\\_Perception\\_towards\\_Brand\\_A\\_Study\\_on](https://www.researchgate.net/publication/334390615_Global_Journal_of_Management_and_Business_Research_E_Marketing_Customer_Perception_towards_Brand_A_Study_on)
- [3] <http://www.jcreview.com/fulltext/197-1592664760.pdf>
- [4] <http://www.researchmanuscripts.com/isociety2012/7.pdf>
- [5] <http://www.ijstr.org/final-print/dec2019/E-commerce-M-commerce-Growth-Issues-Challenges-In-India.pdf>
- [6] <https://arxiv.org/ftp/arxiv/papers/2108/2108.09759.pdf>
- [7] [https://www.academia.edu/43317388/E\\_Swadeshi\\_A\\_Web\\_Based\\_E\\_Commerce\\_Project\\_for\\_Underprivileged\\_Creative\\_Section](https://www.academia.edu/43317388/E_Swadeshi_A_Web_Based_E_Commerce_Project_for_Underprivileged_Creative_Section)
- [8] <http://ignited.in/I/a/293248>
- [9] <https://www.jetir.org/papers/JETIR2105217.pdf>
- [10] <https://rtsprofessionalstudy.com/kvics-e-market-portal-touches-new-milestone-gives-a-big-push-to-swadeshi/>
- [11] <https://ijert.org/papers/IJCRT2007513.pdf>