

**ADOPTION INTENTION OF E-COMMERCE  
PLATFORMS BY UNORGANISED FMCG SECTOR  
VENDORS IN LUCKNOW REGION**

**Abstract of  
Thesis**

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## **Chapter Plan**

The final report of this study is divided into seven chapters. Each chapter meant to present relevant information so that, overall aesthetics of the report is maintained while relevant information is displayed at a suitable place. *Chapter one* gives an introduction of research work and embraces background and research context, research problem and questions driven out from the research problem, Research objectives, its significance and potential contributions of the study for existing body of knowledge and an outline of the complete thesis.

*Chapter two* covers an extensive review of available literatures and takes into account the general overview of the existing literature on e-commerce, its key concepts, theories, and frameworks relevant to the study, Critical evaluation of the literature and identification of gaps. By the end, the chapter summarizes the key findings and research questions.

In *Chapter Three* research methodology adopted for conducting this research is explained and justified. It discusses research design and approach, sampling procedures and gathering data, statistical analysis and interpretation techniques, ethical considerations, limitations and strengths of the methodology.

The *Chapter four* of this thesis data analysis part and results are presented which includes the software outputs after statistical operations, illustration of the results using tables, graphs, and charts, discussion on the results in the context of the questions, comparison of the findings with the existing literature

*Chapter five* of this thesis embodies discussion on obtained results its interpretations, discussion on the practical implications, reflection on the ability to generalize the findings, limitations and suggestions for future research endeavours in the subject.

Conclusion and recommendations for practice are compiled in *Chapter Six*. It includes summary of the main findings and contributions, reflection on the research process and outcomes, Implications for theory, practice, and policy along with suggestions for further research. At the end, a comprehensive list of all literature is enlisted as *References*. Any supplementary material such as interview transcripts, survey questionnaires, and statistical data is attached at the end as Appendices.

## **Introduction**

### **E-Commerce :**

E-commerce, normally mentioned as electronic commerce, pertains to the act of performing commercial activities over the internet enabled platforms. It offers facilities to place an order over the cyberspace, make payment at the convenience of buyer and receive the item at your doorstep. Using advanced technologies and devices such as computers, smartphones, and tablets, orders are placed and sophisticated logistics is adopted to serve the order. In the recent years, e-commerce has gained increased popularity as it offers great shopping experience at convenience of the buyer. Online shopping allows customers to browse and purchase products from anywhere round the clock, without actually visiting physical stores. For businesses, e-commerce facilitates wider reach to audiences, reduce overhead costs, and improve customer engagement and loyalty.

Depending upon the parties interacting over the internet for commercial activities, the e-commerce has been classified into many different types. When transaction happens between two businesses, it is referred as Business to Business (B2B) and when it happens between business and customer, typically referred as Business to customer (B2C). often economic transactions happen between two customers (C2C) and from

customer to business (C2B) in the event of reverse buying.

### **Market Potential :**

The expansion of electronic commerce in Indian retail industry was supplemented by increased availability of smartphones and internet connectivity. In a parallel line to rapid expansion of mobile internet, e-commerce platforms were able to reach a larger audience, particularly in small cities and rural areas. The entry and expansion of online marketers like Flipkart, Amazon and Snapdeal enforced and induced adoption of e-commerce by retailers as well as by buyers. The government of India has started numerous programs and facilities to encourage e-commerce adoption and digital payments, including the Digital India campaign and the Unified Payment Interface (UPI). As a result, e-commerce became an inseparable and integral constituent of the Indian economy and a significant contributor to job creation and economic growth. Today, electronic commerce is considered as a significant contributor for the Indian economy, with the market potential forecasted to touch \$200 billion by 2026. The advances in e-commerce have created new job opportunities and has also encouraged entrepreneurship and innovation in the retail industry. The India Brand Equity Foundation (IBEF) has published several reports on e-commerce in India, highlighting the growth and potential of the sector.

### **Unorganized Sector:**

The unorganized business sector, also known as informal sector, denotes to economic activities that are not regulated by the government and are not subject to formal taxation or monitoring. This sector is often made up of small businesses and self-employed individuals who operate beyond legal boundary of the formal economy. The unorganized sector can include diverse business activities, such as street vendors,

casual laborers, small-scale farmers, and other small business enterprises. These activities are often characterized by low levels of organization, limited access to credit, and a lack of formal legal protections. In developing nations, the unorganized sector characterizes a substantial portion of the economy and provides livelihoods for millions of people. However, it also poses challenges for governments in terms of collecting taxes, regulating economic activities, and providing social protections for workers in this sector.

In Indian economy, the unorganized economic activities contribute to a significant part of the economy as whole and includes activities, like agriculture, construction, small businesses, street vendors, and domestic work. According to estimates, among Indian workforce, around 90% are engaged in unorganized economic activities. The unorganized sector in India is characterized by low levels of organization, limited access to credit and social security, and a lack of formal legal protections. Workers in this sector often face poor working conditions, low wages, and job insecurity.

**Research Objectives :**

1. To understand the demographic profile of unorganized retail sector in context of their internet and e-commerce engagement.
2. To understand key points impacting adoption of E-Commerce for vendors operating in unorganized segment.
3. To understand the effect of business growth, annual sales and education on adoption of e-commerce among unorganized retailer vendors.
4. To Come up with recommendations & Model which can help in driving income/livelihood for millions of people involved in unorganized sector of vegetable & Kirana segment.

5. To list key recommendations for Policy framework related to E commerce.

### **Research Questions:**

1. What are the factors which impact on adoption of B2B commerce for unorganized FMCG vendors?
2. What is the importance of B2B commerce for unorganized vendors operating in fresh & unbranded products?
3. What is the effect of social commerce for unorganized vendors operating in Lucknow head quarter?
4. What are the challenges/future outlook for e commerce in Lucknow region?

### **Hypotheses Development:**

Based on objectives, following hypotheses has been formulated:

1. **H<sub>01</sub>**: There are no factors which affect the adoption Intention of E commerce for unorganized vendors operating in FMCG sector.  
**H<sub>a1</sub>**: There are some factors which affect the adoption Intention of E commerce for unorganized vendors operating in FMCG sector.
2. **H<sub>02</sub>**: There is no significant relationship between business growth of unorganized vendors and adoption of e commerce.  
**H<sub>a2</sub>**: There is significant relationship between business growth of unorganized vendors and adoption of e commerce.
3. **H<sub>03</sub>**: There is no relationship between sales and adoption intention for e-commerce  
**H<sub>a3</sub>**: Annual sales and adoption intention are positively correlated
4. **H<sub>04</sub>**: Vendor Education has no effect on adoption intention for e-commerce

**H<sub>a4</sub>**: Vendor education has positive impact on e-commerce adoption intention

5. **H<sub>05</sub>**: Adoption intention is same across product category

**H<sub>a5</sub>**: The adoption intention differs among product category

## **Research Framework**

### **Research Area:**

The challenges faced by unorganized retailers and opportunities available to leverage the benefits are distinct to different geographical areas. Unorganized retailers operate at niche level and they have their own challenges. It is not possible to conduct a comprehensive study and test the adoption mechanism and intention of e-commerce platform by unorganized retailers and hence, it was decided to conduct the study at niche level. Lucknow, the capital of Uttar Pradesh in India was chosen for conducting this study keeping the various research opportunities and constraints in mind.

### **Research Methodology:**

The planned research work is exploratory type intending to explore various factors which are responsible for slow adoption of unorganized retailers for e-commerce platforms. Also, the study aims to identify the potential and unique benefits that could be materialized by unorganized retailers in Lucknow. In addition, the study will look into and explore the various legal, social and financial constraints that hinders their adoption intention for e-commerce platforms and suggest how these retailers could be motivated and brought into the main stream of economy by adopting e-commerce.

### **Data:**

To collect necessary data used in this research work, structured questionnaire was used. The questionnaire was circulated in Hindi and English to prevent any linguistic bias and unorganized retailers were asked to provide their responses. Some of the retailers being illiterate were subjected to structured interview using the same questionnaire. Altogether, 500 questionnaires were circulated to different FMCG retailers in the city. In total, 423 responses complete in all respect were received and subjected to the analysis and interpretation. SPSS 25 and at instances Microsoft Excel Professional Pro 2019 was used for exploring through the data and reporting the findings.

### **Statistical Procedure:**

For delving deep through data and making inferences, with the help of SPSS statistical package, descriptive and inferential statistical methods were used. The descriptive method comprises graphical and numerical presentation of data, mainly data description and information related to demographics and major factors of adoption intention. For inferential purpose sophisticated statistical techniques like t-test, chi-squared tests were used. Exposing the data to more rigorous analysis, finding a pattern within data, reducing the dimension and identifying factors helpful for adoption intention were done with the help of Principal Component Analysis (PCA), Exploratory Factor Analysis, and correlational diagnostics (Pearson, Spearman, and Kendall's tau).

### **Discussion & Conclusions :**

For adopting and practicing electronic commerce, internet connectivity is very

important which requires an electronic device equipped with connecting facility. In our study, it was found that only 67.6% people were using a smartphone, 5.4% tablet, 9.45% laptop and 5.45% desktop. Smartphone users included all other device ownership. Also, these owning a smartphone were actually using internet services. This indicates low level of internet penetration among unorganized FMCG retailers in Lucknow region. In the absence of internet connectivity, it is impossible to practice e-commerce. However, it should be kept in mind, barely absence of internet connectivity doesn't indicate unwillingness to use e-commerce. There might be other reasons such as inability to operate due to lack of education, formal training etc.

Among internet users, 83.4% respondents agreed that they are using this facility for their normal business activity. However, mostly accepting online payments only and a very small fraction use it for other business activities like online selling (18.2%), online orders (13.2%) and online promotions (5.1%). It implies that, though online business activities are not entirely rare or absent among unorganized retailers in Lucknow, but it is being practiced at very small scale. Receiving or making online payments is just one small part and not the electronic commerce in its holistic sense. Though, it might be considered as the beginning and the first step in the adoption of electronic commerce. Most of the internet users have shown their interest and usage behavior for social media and online purchase for their personal needs. Hence, they are aware and acquainted to it. The only problem is to extend their knowledge and behavior for practicing them in their own business activity.

The trader's behavior for usage, adoption, difficulty in usage and perceptions were gauged on a seven-point scale. The data when passed through exploratory factor analysis applying principal component and Promax rotation and Kaiser normalization produced seven factors, including one, our target or outcome variable, intention to

adopt e-commerce. Among the six factors namely, Active Online, Internet Devices ownership, Technical Difficulty, Online Purchase, Trade Partner force, Fear was found significant impact and thus affecting adoption intention.

It was found that if the retailer is active in using internet irrespective of their need and usage behavior, whether it is for personal need, social media usage or entertainment and they own an electronic device equipped with internet connectivity, they are more likely to adopt electronic commerce. It means they are somewhat familiar with the procedure and only needed to replicate the process in their own business activity. Two factors of major concern are technical difficulty and Fear factor which were found negatively associated with adoption of e-commerce. The unorganized retailers have a perception that online selling is technically a difficult task and requires high level of technical expertise, which is actually not true. With the emergence of technology and evolving application programming interface, the use of communication devices has become much easier. Also, payment failure, payment float and payment stuck is being considered as hinderance to adoption of e-commerce. The retailers need a formal training for making them understand, how the system operates and their online payments are secure.

Competition though and important attribute did not show any appreciable and significant impact on adoption of electronic commerce. This might be due to the fact that, the customers of unorganized retailers are local and they are operating at niche level. Their customers are mostly fixed and regular. Also, they face localized competition. They do not perceive competition as a driving force to shift towards online retailing. However, they are not much considerate about expanding their business to a wide customer base and spread their reach.

Sales volume and e-commerce adoption intention are positively correlated ( $r = 0.588$ ,  $p\text{-value} = 0.000$ ). It indicates that, as annual sales increases, retailers are more likely to adopt electronic commerce. Those, operating at large scale are more likely to expand their sales volume which could be materialized if they increase their customer base through wide reach and serving area. This is possible only through showing presence at virtual network and practicing electronic commerce.

Vendor education and intention to adopt electronic commerce were also found positively correlated, however, the degree of association was moderate ( $r = 0.462$ ,  $p\text{-value} = 0.00$  and  $\tau = 0.34$ ,  $p\text{-value} = 0.000$ ). Though, it is not possible to provide a formal education to them due to reluctance and extended business hours, it is possible to provide a short-term training. If the unorganized retailers are trained about how e-commerce platforms work, how to receive online orders and how to interact and use logistics, they might shift to e-commerce platforms.

Looking at the adoption intention across product category, the mean value for e-commerce adoption intention was not same. It was found highest (mean = 0.6152389) among cosmetics retailers followed by grocery (mean = 0.5112532) and cooked food (mean = 0.3017735). All other product categories included like non-vegetarian cooking items, dairy products, fruits & Vegetables and locally packaged items showed negative inclination for adoption of e-commerce. Cosmetics and grocery items are mostly coming in brand packaging and non-perishable and hence, customers are confident about its quality and quantity and prefer online buying. Ready to eat foods are mostly ordered from known restaurants and hence, being ordered and served. In case of fruits, vegetables, seafood, chicken and other similar items, quality, quantity, freshness and other attributes are very important. They are perishable in nature and get spoiled quickly. So, buyers are very considerate about them and will

buy only when assured about its freshness, packing and logistics. On the other hand, items like local beverages, paan, tea etc. have their own difficulty in packing and transporting, hence, their online selling is not found practical.

### **Recommendations:**

When the idea of exploring adoption intention for electronic commerce was conceived, it was thought to identify factors which affects adoption of e-commerce by unorganized retailers in Lucknow region. After extensive review of literature, research direction was identified and relevant data was collected from retailers. Exploring through data and concluding and interpreting the results, the following observations and recommendations are proposed for increased adoption of e-commerce practices and expedited use of e-commerce.

1. Unorganized FMCG vendors should be trained for operating procedure as they lack technical expertise.
2. Retailers should be made aware of different e-commerce platforms and benefits of e-commerce such as increased service area, widespread customer base.
3. Fear factor about online payments like payment float, payment stuck and refund should be explained to them and make them understand that their money is safe in electronic transactions.
4. Education is a hinderance in adoption of electronic commerce. Application interface should be developed which is suitable to use by an uneducated retailer. This is possible through use of local and vernacular language, use of AI, voice command and graphical interface.
5. Sense of competition and wide reach of market should be explained to the unorganized retailers.