



ADOPTION OF E-COMMERCE TECHNOLOGY AMONG WOMEN ENTREPRENEURS IN COIMBATORE DISTRICT: A UTAUT 2 PERSPECTIVE

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ABSTRACT

The COVID-19 pandemic has significantly accelerated the adoption of e-commerce technology across various sectors, including among women entrepreneurs. Many women entrepreneurs have shifted their businesses online to adapt to changing consumer behaviors and restrictions on physical retail during the pandemic. This shift has been particularly evident in sectors such as retail, fashion, food, and handicrafts. This study focuses on E-commerce Technology adoption by women entrepreneurs in Coimbatore district, Tamilnadu. The questionnaire was framed based on The Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) framework to analyze the acceptance and use of e-commerce technology among women entrepreneurs and to study various constructs that encouraged women entrepreneurs to adopt and use e-commerce. It is seen the construct- behavioral intention to use technology and facilitating conditions were found to have a significant influence on women entrepreneurs to use e-commerce applications and all other constructs have influence on one another and have an greater impact on women entrepreneurs to adopt and use e-commerce technology.

KEYWORDS: UTAUT 2, Women entrepreneur, E-commerce, Technology

INTRODUCTION

India has 63 million micro, small, and medium enterprises (MSMEs), of which around 20% are women-owned. By accelerating women's entrepreneurship, India could generate more than 30 million women-owned enterprises, potentially creating 150 to 170 million jobs. In recent years, the entrepreneurship landscape has undergone a significant transformation with the advent of e-commerce technology. Coimbatore, a bustling industrial city in Tamil Nadu, India, renowned for its entrepreneurial spirit, has seen a surge in women entrepreneurs embracing digital platforms to drive their businesses forward. This study investigates the extent of e-commerce adoption by women-owned Small and Medium Enterprises (SMEs) in Coimbatore District, Tamil Nadu, India.

OBJECTIVES OF THE STUDY

- To study about the different factors that influence the adoption of e-commerce among women entrepreneurs.
- To study about the different Behavioral Intention to Use Technology by women entrepreneurs.
- To identify the facilitating conditions for the use of e-commerce technology by women entrepreneurs.
- To analyze the different constructs of UTAUT 2 that influence women entrepreneurs to use technology and their correlations.

REVIEW OF LITERATURE

A similar study was conducted by Ananya Goswami, Sraboni Dutta, (2016), E-Commerce Adoption by Women Entrepreneurs in India: An Application of the UTAUT Model, Business and Economic Research, Vol. 6, No. 2 showed that the women entrepreneurs have accepted that e-commerce applications can enhance the productivity and profitability of their businesses and therefore, it is acting as a positive influence on their intention to use e-commerce.

P. Manimalathi, (2013), Women entrepreneurs in Coimbatore district, Shanlax International Journal of Economics, states that women entrepreneurs in Coimbatore get enough opportunity to start a business but they had to overcome some problems to sustain their business and their status in society had also been improved due to entrepreneurship.

E-commerce Technology Adoption

E-commerce technology encompasses a broad spectrum of digital tools and platforms that facilitate online buying and selling of goods and services. For women entrepreneurs leveraging e-commerce presents an opportunity to reach a wider audience, streamline operations, and enhance competitiveness in the marketplace. India, with its rapidly growing Internet user base,



has witnessed significant e-commerce adoption. Mobile commerce, in particular, has contributed to this growth, with 41% of e-commerce sales occurring via mobile platforms

The Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) emerged as a result of efforts to consolidate and integrate various models and theories related to technology acceptance. The history of UTAUT can be traced back to the early 2000s when researchers Viswanath Venkatesh, Fred D. Davis, and others recognized the need for a unified framework to understand the complex factors influencing individuals' acceptance and adoption of new technologies.

Prior to UTAUT, several models and theories existed to explain technology acceptance, including the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), and Innovation Diffusion Theory (IDT). While each of these models offered valuable insights, they also had limitations and focused on specific aspects of technology acceptance.

In response, Venkatesh, Davis, and their colleagues sought to develop a comprehensive framework that could integrate the key constructs from existing models and provide a more holistic understanding of technology acceptance. Their goal was to create a model that could account for the influence of various factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions on individuals' behavioral intentions and actual usage of technology.

The UTAUT framework was first proposed in a seminal paper titled "User Acceptance of Information Technology: Toward a Unified View" published in the journal MIS Quarterly in 2003. Since then, UTAUT has been widely cited and adopted by researchers in the fields of information systems, management, and psychology. It has also undergone further refinement and validation through empirical research and has been applied in various contexts to study the acceptance and use of different types of technologies, including mobile devices, social media, and enterprise systems.

UTAUT identifies four key constructs that influence technology acceptance:

- **Performance Expectancy:** This refers to the degree to which an individual believes that using the technology will help them perform their tasks more effectively or efficiently.
- **Effort Expectancy:** It reflects the perceived ease of use associated with using the technology. If individuals believe that using the technology will be easy and require minimal effort, they are more likely to adopt it.
- **Social Influence:** This construct captures the impact of social factors, such as norms, opinions, and support from others, on an individual's decision to adopt the technology. The influence of peers, colleagues, and other social networks can significantly affect technology acceptance.
- **Facilitating Conditions:** This refers to the extent to which individuals perceive that the necessary resources, support, and infrastructure are available to facilitate the use of the technology. Factors such as technical support, training, and access to necessary equipment can influence facilitating conditions.

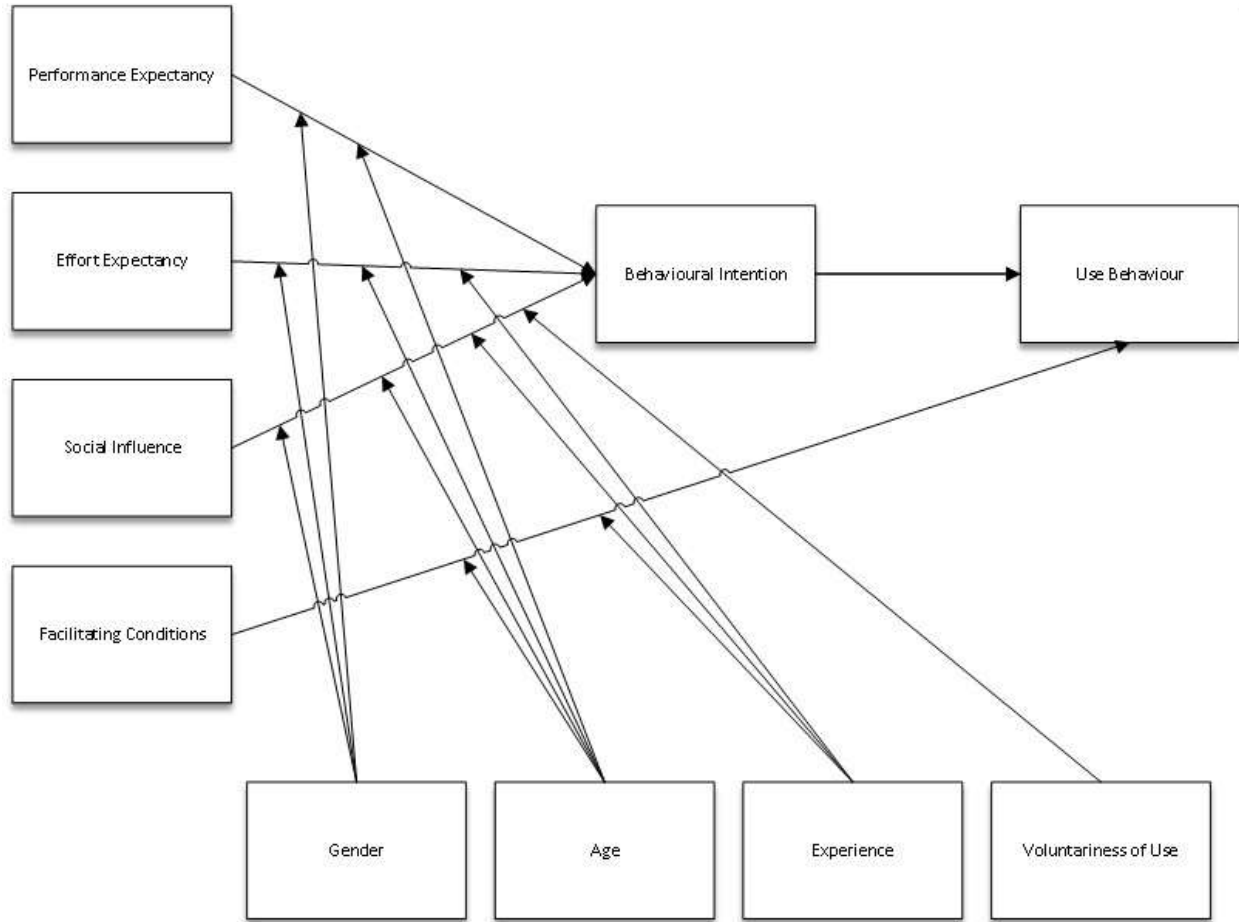


Figure 1. The UTAUT Model, Venkatesh et al. (2003)

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2)

Additionally, UTAUT 2 includes moderators such as gender, age, experience, and voluntariness of use, which can influence the strength of the relationships between the four key constructs and technology acceptance. UTAUT2, introduced by Venkatesh et al. 2012, retained the core constructs of the original UTAUT but added three new constructs:

- Hedonic Motivation: This refers to the pleasure or enjoyment individuals derive from using technology. It captures the extent to which using the technology is perceived as fun or enjoyable.
- Price Value: This construct reflects individuals' perceptions of the economic cost-benefit trade-offs associated with using the technology. It considers factors such as the perceived value for money and the affordability of the technology.
- Habit: Habit represents how technology use becomes automatic or habitual for individuals over time. It accounts for the influence of past behaviors and routines on current technology usage. The Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) which

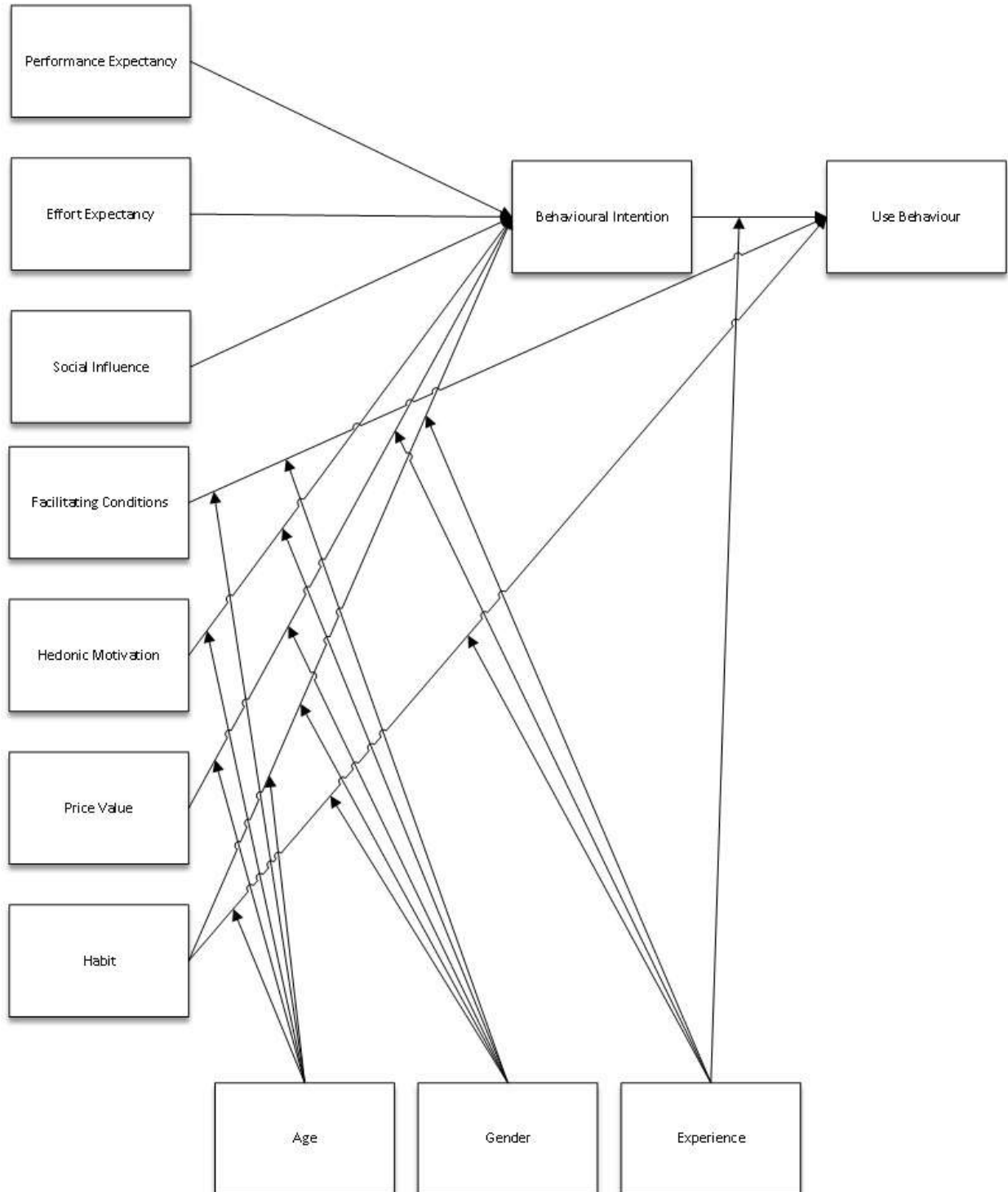


Figure 2. The UTAUT 2 Model, Venkatesh et al. (2012)

RESEARCH METHODOLOGY

To study about the various factors that affect the acceptance and usage of e-commerce amongst the women entrepreneurs in Coimbatore, Tamilnadu, India, implementing the Unified Theory

of Acceptance and Use of Technology (UTAUT2). The total sample consisted of 100 women entrepreneurs engaged in Beauty & Cosmetics, Food Products & Services, Garments, Handicrafts, Printing & Photography and Travel & Advertising in Coimbatore



city. A structured questionnaire was used to collect data from individuals. The convenience sampling method was used as the

ones who were easily accessible were taken as a sample size from the rest of the population.

➤ **Simple Percentage Method**

Table No.1

Demographic Profiles of the Respondents

Category	Number of Responses	Percentage(%)
Age		
Under 30	9	9
30-40	70	70
40-50	16	16
50 and above	5	5
Marital Status		
Married	79	79
Unmarried	18	18
Widow	2	2
Divorce	1	1
Education Level		
High school (upto 12 th std)	10	10
Bachelor's Degree	87	87
Master's Degree or higher	3	3
Type of E-commerce Business		
Beauty & Cosmetics	23	23
Food Products & Services	18	18
Electrical Goods	3	3
Garments	25	25
Handicrafts	11	11
Leather Goods	9	9
Printing Photography	6	6
Travel & Advertising	5	5

Inference: From the above table it is observed that 70% of the women entrepreneurs belonged to the age group of 30-40 which is the majority, 25% and 23% of them are in the Garments & Beauty and Cosmetic business respectively.

The questionnaire provided covers several key factors outlined in the UTAUT-2 model. Here's how each question corresponds to the relevant construct:

➤ **Behavioral Intention to Use**

Behavioral Intention to Use is one of the constructs that influences women entrepreneurs to use technology for their business. It is observed that 89% of women entrepreneurs use e-commerce for payment processing, 84% for Customer Service, 80% for Sales and Marketing, and 22% for Inventory Management.

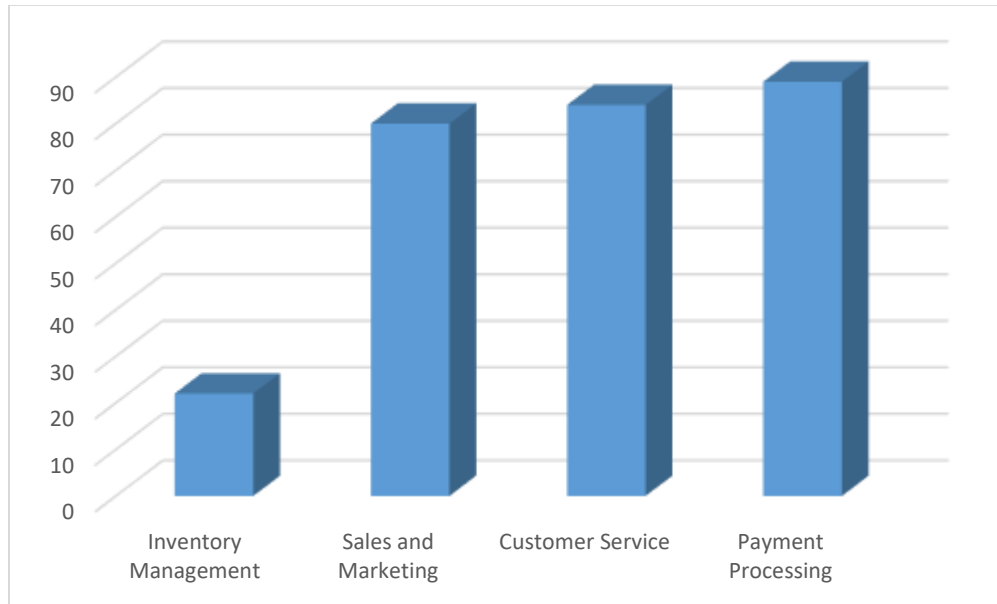


Figure 3. Behavioral Intention to Use E-commerce

➤ **Facilitating Conditions**

Facilitating conditions means the resources or support required to effectively use e-commerce technology for business was analyzed based on the responses where 96% of the women entrepreneurs

opted for more financial assistance, 87% suggested training programs, 76 % opted for Technical Support and 66% suggested better internet connectivity for effectively using e-commerce technology.

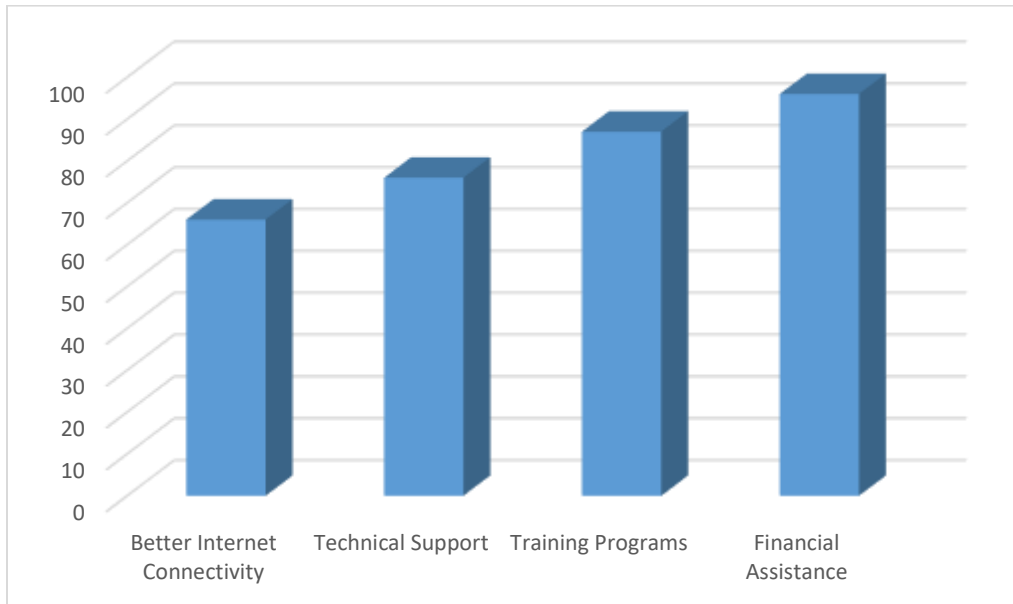


Figure:4 - Facilitating conditions to use e-commerce technology

➤ **Correlation Analysis**

Correlation Analysis was used to learn the strength of the correlation between each determinant(constructs) and the

behavioral intention to use e-commerce by the women entrepreneurs.



Pearson's Correlations

Variable		Performance Expectancy	Effort Expectancy	Behavioral intention to Use	Hedonic Motivation	Price Value	Satisfaction	Social Influence
1. Performance Expectancy	Pearson's r	—						
	p-value	—						
2. Effort Expectancy	Pearson's r	0.923	—					
	p-value	< .001	—					
3. Behavioral Intention to Use	Pearson's r	0.923	0.808	—				
	p-value	< .001	< .001	—				
4. Hedonic Motivation	Pearson's r	0.871	0.913	0.808	—			
	p-value	< .001	< .001	< .001	—			
5. Price Value	Pearson's r	0.820	0.748	0.802	0.721	—		
	p-value	< .001	< .001	< .001	< .001	—		
6. Satisfaction	Pearson's r	0.881	0.855	0.879	0.867	0.822	—	
	p-value	< .001	< .001	< .001	< .001	< .001	—	
7. Social Influence	Pearson's r	0.803	0.728	0.760	0.760	0.942	0.831	—
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	—

A Pearson correlation coefficient (r) with values closer to 1, indicates a stronger relationship between each determinant. A p -value less than 0.001 indicates that the observed correlation coefficient is statistically significant at the 0.001 level. Therefore the null hypothesis can be rejected and it can be concluded that all the constructs i.e Performance Expectancy, Effort Expectancy, Behavioral Intention to Use, Hedonic Motivation, Price Value, Satisfaction and Social Influence have an positive influence on women entrepreneurs in adopting e-commerce technology.

CONCLUSION

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2), its different constructs Performance Expectancy, Effort Expectancy, Behavioral Intention to Use, Hedonic Motivation, Price Value, Satisfaction and Social Influence positively impact sampled women entrepreneurs to adopt and use technology.

The adoption of e-commerce technology among the sampled women entrepreneurs in the Coimbatore District is driven by a combination of performance expectancy, effort expectancy, social influence, and facilitating conditions, as outlined by the UTAUT framework. Social influence support or encouragement from your social circle (Family members and friends) regarding the use of e-commerce technology for business also has a greater impact on women entrepreneurs. Moreover, their behavioral intention to use technology has made their business more sustainable. By understanding these factors and addressing the specific needs and challenges faced by women entrepreneurs further assistance can be provided in terms of financial assistance, training facilities, workshops and better infrastructure which can encourage the present entrepreneurs to grow and welcome new women entrepreneurs to adopt e-commerce for a much faster growth in their venture.

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