



THE STATE OF WOMEN DIGITAL ENTREPRENEURS IN INDIA DURING COVID-19 PANDEMIC

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ABSTRACT

During the Last two decades, the growth of Women Digital Entrepreneurs in India has been increasing tremendously with the high level contribution towards economic progress. In India, a Nationwide Coronavirus lockdown made many business to terminate. The impact of COVID-19 has affected not only many human lives but also economic activity of business. This pandemic and subsequent lockdowns created more restrictions on Travelling and Business. In this situation, Digital Business is most considered and best way of selling and purchasing different types of goods and services in order to avoid direct contact and physical distance of human. The Coronavirus has transformed the global digital business trends. The contribution of Women Entrepreneurs in India is at significant level in economic development but women-led business have been negatively affected due to Covid-19 as Women have to deal with difficulties not only caused by Coronavirus but also management of business as well their family responsibilities. This study determines the status of Women digital entrepreneurs in India during Covid-19 Pandemic. For this, study involved survey of 100 Women entrepreneurs doing online business in India to understand the Impact of Covid-19 on Women Entrepreneurs and Strategies used by Women Digital Entrepreneurs in continuing their business during COVID-19.

Key words: COVID-19, Pandemic, Lockdowns, Digital Business, Strategies, Women Digital Entrepreneurs.

Cite this Article: G. Lakshmi Priya and S. Smilee Bose, The State of Women Digital Entrepreneurs in India During Covid-19 Pandemic, *International Journal of Advanced Research in Engineering and Technology*, 12(4), 2021, pp. 518-533.

<https://iaeme.com/Home/issue/IJARET?Volume=12&Issue=4>

1. INTRODUCTION

Women digital Entrepreneurs is a single Women or group of Women who starts, organizes and operates a digital business enterprise with confident, creative and design economic independence individually and creates employment opportunities for others. Women Digital Entrepreneurs also refers to online women entrepreneurs who sells their products and services on digital platform with the capacity of bearing most of risks and expected most of rewards.

As the COVID-19 Pandemic evolves around the world, Many Countries have formulated various strategies to curb the COVID-19 spread. For this, India have been in a several stages of Lockdown by restricting movement and business as usual.

Quarantine 1: 25th March 2020- 14th April 2020 (21 Days)

Quarantine 2 : 15th April 2020- 3rd May 2020 (19 Days)

Quarantine 3: 4th May 2020- 17th May 2020 (14 Days)

Quarantine 4: 18th May 2020 - 31st May 2020 (14 Days)

Quarantine 5 (only for CoronaVirus Containment Zone) 1st June 2020 – 30th June 2020 (30 Days)

COVID-19 Pandemic has been a difficult time for the entire world economic system as it results in pay cuts and lay off. Coronavirus radically changes the behaviour of human, nature of business and even the way of their living. This situation has caused a fear among the people to avoid interacting with others. In order to cope up with this crisis, people are forced to adapt to digital technology. COVID-19 has forced business organisations to undergo digital transformation to adjust with current situation.

Women Entrepreneurs are considered as Back Bone of Indian Economy as they contribute in generation of various sources of income, create employment opportunities, enhance innovation and competition, develops skills and improve standard of living of society. The COVID-19 Pandemic has negatively impacted Women Entrepreneurs. Women Entrepreneurs are severely affected by the economic shutdown. During this Pandemic role of digital technology started major role among Women Entrepreneurs. Women Entrepreneurs who already accessed to digitalization were able to adapt to this social distancing measures.

This study determines the impact of COVID-19 on Women Digital Entrepreneurs as well as Strategies adopted by them in continuing their business during COVID-19 pandemic.

2. OBJECTIVES OF THE STUDY

- 1.To study the impact of COVID-19 on Women Digital Entrepreneurs.
2. To discuss the strategies used by Women Digital Entrepreneurs in online business during COVID19 pandemic.

3. REVIEW OF LITERATURE

Ms.K.S.Susmitha (September 2020)- “Impact of COVID-19 on E-Commerce”. This article presented the status of E-Commerce during COVID-19. This study highlighted the increased use of E-Commerce during COVID-19 which benefitted people buying online. Researcher indicated the factors affected demand and buying behaviour of consumer in COVID-19.

Risqo M. Wahid, Diah Isnaini Asiati (February 2021)- “Women MSMEs and COVID-19 Social Media Marketing as a survival strategy”. This study explored Social Media Marketing (SSM) strategy utilized by Women owned MSMEs in Indonesia during COVID-19 Pandemic. The finding of this study revealed that Women MSMEs implemented SSM strategies like posting, sharing, attractive contents, Word-of-Mouth, Follow-for-Follow, paid influence and native advertisement helped Women Entrepreneurs to survive during COVID-19 pandemic.

Taiba Sardar, Zeng Jianqiv, Muhammad Bilal and Nausheen Syed (September 2020)- “Impact of ICT on Entrepreneurial self-efficacy in emerging economy: Sustaining lockdown during COVID-19 Pandemic”. This article investigated the impact of ICT on Entrepreneurial Self-Efficacy (ESE), Social Networking and facilitation to micro-entrepreneurs during COVID-19 pandemic in Pakistan. This study resulted that survival of Micro-Entrepreneurs during the pandemic can be done through Information Communication Technology, as it has been considered as strong variable which helps Entrepreneurs in increasing their entrepreneurial activity in pandemic situation.

Inshan Meahjohn, Prakash Persad (2020)- “The Impact of COVID-19 on Entrepreneurship Globally”. This article discussed about challenges experienced by entrepreneurs at the time of COVID-19 and suggested measures to be taken in order to protect their ventures. This paper concludes that COVID-19 has caused significant disruption to economies and entrepreneurship globally and recommended to take in-depth longitudinal studies on impact of COVID-19 on entrepreneurs as it remains unclear.

4. RESEARCH METHODOLOGY

This study is based on both Primary data and Secondary data. Primary data are collected using Questionnaire. Secondary data are collected through Journals, Books, Websites, and Published articles and Magazines related to this topic.

Sample Design: This study has adopted Qualitative approach to examine the status of Women Digital Entrepreneurs during COVID-19 Pandemic. For this, sample of 100 women entrepreneurs doing online business has been taken in and around various Districts of Tamil Nadu. Sampling is done on the basis of simple and stratified random sampling.

This study was conducted between 16th March 2021- 31st March 2021. The survey was conducted via Personal Google form link.

Data Analysing Tools: Data are analyzed by using Percentage method and SPSS techniques like One Sample t test, Independent Sample t test, Analysis of variance (ANOVA) techniques and Multivariate Analysis of Variance (MANOVA)

4.1. Limitation of the Study

- As the survey was conducted through Google form link there has been lack of Quality data collection as the respondent provides information spontaneous but may not be consistent.
- Though opinion drawn is based on the feedback of the respondents, it may not represent the opinion of the Universe.
- This research study suffers from the change in opinion of the respondents with respect to time.

5. SUCESSFUL WOMEN DIGITAL ENTREPRENEURS IN TAMIL NADU

In the last two decades, there has been increased use of internet and social media among Women Entrepreneurs. Which paves a way for many Women Entrepreneur's to be successful in converting their big ideas into powerful brands unlike, their traditional way of their business. Now a days Women Entrepreneurs are becoming impressive and inspirational to others in digital landscape. The emergence of Digital media has given Women Entrepreneurs the power of liberalisation right from education to economic liberty Some of the Women Digital Entrepreneurs in Tamil Nadu :

Table 1

Organisation	Founder	Year Founded	Industry
Sulekha	Satya Prabhakar	2007	Sulekha is a digital platform for local service business for consumers and business to connect with each other
BankBazzar	Rati Shetty	2008	BankBazzar is a online Platform which helps consumers in comparing and choosing insurance and financial products
Chrysalis	Chitra Ravi	2001	Chrysalis is online education platform of integrated academic program for maths, English, science, and social studies in schools
Wandertrails	Sruti Ramesh Chander	2016	Wandertrails is a travel tech online platform company provides service of travel bookings and accommodation facilities.
Adjutas	Swathi Sethuraman Rajasekaran Anita	2015	Adjutas ia a cloud based support helpdesk for customer support and internal IT teams.
VIBIS Natural Bee Farm	Josephine Selvaraj	2005	VIBIS is a Agricultural cooperative which offers variety of Honey product.
Ravindra Services Pvt. Ltd	G.Sree Vidhya	1997	Ravindra Services Pvt. Ltd offers a variety of services nationwide to individuals and companies like security services, Guarding services etc..
STC Technologies Private Limited	Madhu Saran	2003	STC Technologies is the software testing education and certification company which provides services in testing education & certification, testing contract staffing and third party Independent.
myHarvest Farms	Archana Stalin	2016	myHarvest – a social enterprise, provides oil, seeds, fertilizers and other requisites for roof-top gardening.
WSquare	Vandhana and Jinal	2017	WSquare is a women-only co-working space in order to encourage Women can precent their products like jewellery, clothes, food etc.
Women Entrepreneurs India	Mahalakshmi Saravanan	2018	Women Entrepreneurs India offers support to women who looks forward to start a business by providing ideas that match with their abilities, interests and skills.

6. ANALYSIS AND FINDINGS

6.1. Demographic Profile of Women Entrepreneurs

Demographic factors of Women Entrepreneur's Age, Marital Status, Education Qualification, Experience, Ownership, Business Size and Type of business are analysed using One sample t-Test.

Hypothesis

H₀₁ : μ = Average age of the respondents belongs to the age group of 20 years – 30 years.

H₀₂ : μ = Average Marital Status of the respondents are Spinster

H₀₃ : μ = Average Education Qualification of the respondents have Under Graduate Degree

H₀₄ : μ = Average years of Experience of the respondents have in E-Business is 1year – 3 Years.

H₀₅ : μ = Average number of respondents are Retailers.

H₀₆ : μ = Average size of the online business is small scale Business

H₀₇ : μ = Average kind of Business run by the Women Entrepreneurs is Beauty products and cosmetics.

Table 2 Demographic profile of the Respondents

Demographic variables	Class Interval	No. of the Respondents	Mean (\bar{x})	Standard Deviation	Degree of Freedom	Test Statistic T	Sig.. (2Tailed)	Mean Difference
Age Group	Below 20 Years	27	2.16	0.961	99	1.665	0.099	0.160
	20 Years- 30 Years	42						
	30 Years- 40 Years	19						
	Above 40 Years	12						
Marital Status	Married	61	1.48	0.65874	99	-7.894	.000	-0.52000
	Spinster	30						
	Widow	9						
	Divorcee	0						
Education Qualification	SSLC/HSC	6	2.25	0.68718	99	3.368	.000	0.25000
	Under Graduate	71						
	Post Graduate	15						
	Professional	8						
Experience in E-Business	0-1 year	49	1.83	0.92174	99	-1.844	0.068	-0.17000
	1 year- 3 years	22						
	3 years- 5years	26						
	Above 5 years	3						
Ownership Structure	Sole Proprietor	41	1.95	0.98857	99	-0.506	0.614	-0.05000
	Retailers	33						
	Partnership	16						
	Co-Operative	10						
Size of Business	Micro level Business	40	1.90	0.87039	99	-1.149	0.253	-0.10000
	Small Scale Enterprises	33						
	Medium scale Enterprises	24						

The State of Women Digital Entrepreneurs in India During Covid-19 Pandemic

	Large Scale Enterprises	3						
Kinds of Business	Online Marketing	17	4.7	3.51476	99	-6.544	0.000	-2.30000
	Clothing and Accessories	13						
	Online teaching	14						
	Food and Catering services	15						
	Beauty cosmetics and services	18						
	online Consultancy services	3						
	Travelling and Tourism Services	2						
	online Professional Services	1						
	Online Health Care Services	2						
	Event Organizing	3						
	Web Designing	4						
	Retail selling	3						
	online Gifts sellers	3						
	online bidding services	2						

(source: Primary)

Age of the surveyed respondents varied from below 20 years to above 40 years. Age of the respondents are categorized as below 20 years, 20- 30 years, 30-40 years and above 40 years. The frequency distribution of surveyed Women Entrepreneurs in terms of age has been shown in table 1.1. Since the p value (0.099) is More than ($>$) 0.05. Null Hypothesis (H_0) is Accepted at 5% level. Hence, Average age of the respondents belong to the age group of 20 years- 30 Years.

Marital status plays an important role in the field of male domination. The factors like work-life balance and family support depend of marital status of women. The marital status of the respondents are categorised into Married, Spinster, Widow and Divorcee. Since the p value (0.000) is less than ($<$) 0.05. Null Hypothesis (H_0) is Rejected at 5% level. Hence, Average Marital Status of the Respondents are Married.

Education Qualification is considered as important factor because education helps in acquiring knowledge and skills. It is considered as asset of an individual in building their career. Education Qualification of the respondents are categorised as SSLC/HSC, Under Graduate, Post Graduate and Professional. Since the p value (0.000) is less than ($<$) 0.05. Null Hypothesis (H_0) is Rejected at 5% level. Hence, Average Education Qualification of the Respondents does not have Under Graduate Degree.

Experience determines one's own ability in success. It is considered as important factor because it helps to make decision and create confidence in performing business activities. The frequency distribution of Women Entrepreneurs in terms of experience are classified into below

one year, 1-3 years, 3-5 years and above 5 years. Since the p value (0.068) is more than ($>$) 0.05. Null Hypothesis (H_0) is Accepted at 5% level. Hence, Average years of Experience of the respondents have in E-Business is 1 year – 3 Years.

Ownership structure of business include control of business, managerial ability, cost of formation, liability exposure and tax consideration. Ownership structure of the respondent's business are classified as sole proprietor, partnership, co-operative business and retail business. Since the p value (0.614) is more than ($>$) 0.05. Null Hypothesis (H_0) is Accepted at 5% level..Hence, Average number of respondents are Retailers.

Size of business refers to scale of business and volume of business operation. It is depend on the number of employees in business. Size of business of the respondent's business are categorized as micro level business, small scale business, medium level business and large scale business. Since the p value (0.253) is more than ($>$) 0.05. Null Hypothesis (H_0) is Accepted at 5% level. Hence, Average size of the online business is small scale Business.

Various forms of business is a key factor for determining the economic performance of Women Entrepreneurs. Women Entrepreneurs chooses the type of business according to their skills, knowledge, education, finances and convenience. Since the p value (0.000) is less than ($<$) 0.05. Null Hypothesis (H_0) is Rejected at 5% level.. Hence, Average kind of Business run by the Women Entrepreneurs is not Beauty products and cosmetics

Interpretation

From the above table 2, shows that Women in the age group of 20 years -30 Years are more likely to start their own Online Business as compared to Women in the Age of Below 20 Years and 30 Years- 40 Years and less favourable in the age of above 40 years.

More than half (61%) of the Women Entrepreneurs are Married. They are more likely to start their own Online Business after their marriage as compared to Spinster Women Entrepreneurs.

Majority of the Women Entrepreneurs in Online Business are educated in Under Graduate (71%) followed by Post Graduate (15%) than in High School (6%) and Professional Degree (8%). This shows Women Entrepreneurs has good knowledge in running their E-Business.

The above table indicates that majority of the Women Entrepreneurs in E-Business have less than one year (49%) of experience. This shows that Women are most likely to start their online business recent times.

Nearly half of the Women Entrepreneurs (41%) in E-Business are Sole-Proprietors. This shows that Women Entrepreneurs are more likely to be owned and controlled by herself alone.

Most of the Women Entrepreneurs (40%) have Micro level business. This shows that Women start their business with the idea of minimum investment and maximum profits.

Majority of the Women Entrepreneurs are involved in selling beauty cosmetics and services (18%) followed by Online marketing (17%), Food and Catering services (15%), Online teaching (14%), Clothing and accessories (13%) and less involved in Web designing (4%), Consultancy services (3%), Event organization (3%), Retail selling (3%), Gift selling (3%), Tourism booking services (2%), Health care services (2%), Bidding services (2%) and Professional services (1%).

6.2. Impact Faced by women Entrepreneurs in Online Business During COVID-19

Impact of COVID-19 pandemic on Women Digital Entrepreneurs are analysed using Multivariate Analysis of Variance (MANOVA) and One sample t-test.

The eruption of COVID-19 made a severe impact on business activity with 38% of surveyed Women digital entrepreneurs business reporting a temporary shutdown of business activity against 9% reporting permanent closure of their business and 53% of surveyed Women Entrepreneurs reported continuity of business. The reasons for temporary shutdown of business during COVID-19 reported out of 38% , 42% of respondents says due to reduced orders. out of 38%, 26% of respondents says due to commutation, out of 38% , 13% of respondents says due to lack of Knowledge among customers, out of 38% , 18% of respondents says due to lack of workforce.

Market losses, liquidity shortage, supply difficulty appear to be the challenges faced by the surveyed Women Digital Entrepreneurs related to COVID-19 outbreak. 46% of surveyed Women Entrepreneurs reports that they face up to 25% financial loss in their business, 21 % of Women Entrepreneurs face 25%-50% financial losses, 18% of Women Entrepreneurs face more than 50% of financial losses in their business. 15% of the surveyed Women Entrepreneurs have earned profit in their business during COVID-19.

The Women Entrepreneurs not only experience financial loss and financial profit but also experienced the change in customer's demand for their product. 53% of the respondents faced no change in their product demand, 35% of the respondent faced decrease in demand for their product and 12% of the respondent faced increase in demand for their product.

6.2.1 Interrelationship Between Experience in Online Business with Financial Problems, Change in Demand among customers, and shutdown of business faced by Women Digital Entrepreneurs during COVID-19.

Variables:

Dependent Variable:

- Financial Problems faced by Women Digital Entrepreneurs during COVID-19.
- Change in Demand among the customers towards their products during COVID-19.
- Shutdown of their business during COVID-19

Independent variable:

Experience of Women Entrepreneurs in E-Business.

Hypothesis:

Null-Hypothesis

H₀₁: There is no significant relationship between Experience in online business between Financial Problems faced by Women Digital Entrepreneurs during COVID-19.

H₀₂: There is no significant relationship between Experience in online business between Customer's change their demand for products faced by Women Digital Entrepreneurs during COVID-19.

H₀₃: There is no significant relationship between Experience in online business between Temporary Shutdown of business faced by Women Digital Entrepreneurs during COVID-19.

Alternative Hypothesis

H_{a1}: There is a significant relationship between Experience in online business between Financial Problems faced by Women Digital Entrepreneurs during COVID-19.

H_{a2}: There is a significant relationship between Experience in online business between Customer's change their demand for products faced by Women Digital Entrepreneurs during COVID-19.

H_{a3}: There is a significant relationship between Experience in online business between Temporary Shutdown of business faced by Women Digital Entrepreneurs during COVID-19.

Table 3

Between-Subjects Factors			
		Value Label	N
Experience in E-Business of the Respondents	1.00	0-1 year	15
	2.00	1 year- 3 years	18
	3.00	3 years- 5years	4
	4.00	Above 5 years	1

(Source: Primary)

Table 4

Multivariate Tests ^a						
	Effect	Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.895	90.789 ^b	3.000	32.000	.000
	Wilks' Lambda	.105	90.789 ^b	3.000	32.000	.000
	Hotelling's Trace	8.512	90.789 ^b	3.000	32.000	.000
	Roy's Largest Root	8.512	90.789 ^b	3.000	32.000	.000
Exp	Pillai's Trace	1.002	5.684	9.000	102.000	.000
	Wilks' Lambda	.186	8.620	9.000	78.030	.000
	Hotelling's Trace	3.378	11.509	9.000	92.000	.000
	Roy's Largest Root	3.066	34.744 ^c	3.000	34.000	.000
a. Design: Intercept + Exp						
b. Exact statistic						
c. The statistic is an upper bound on F that yields a lower bound on the significance level.						

(Source: Primary)

Table 5

Tests of Between-Subjects Effects						
Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Financial Problems faced by Women Entrepreneurs in E-Business During COVID_19	6.502 ^a	3	2.167	4.532	.009
	Reason for Temporary shut down of business	33.985 ^b	3	11.328	26.064	.000
	Change in product demand of customers faced by Women Entrepreneur during COVID_19	4.140 ^c	3	1.380	1.522	.226
Intercept	Financial Problems faced by Women Entrepreneurs in E-Business During COVID_19	42.896	1	42.896	89.691	.000

The State of Women Digital Entrepreneurs in India During Covid-19 Pandemic

	Reason for Temporary shut down of business	82.054	1	82.054	188.785	.000
	Change in product demand of customers faced by Women Entrepreneur during COVID_19	54.737	1	54.737	60.358	.000
Exp	Financial Problems faced by Women Entrepreneurs in E-Business During COVID_19	6.502	3	2.167	4.532	.009
	Reason for Temporary shut down of business	33.985	3	11.328	26.064	.000
	Change in product demand of customers faced by Women Entrepreneur during COVID_19	4.140	3	1.380	1.522	.226
Error	Financial Problems faced by Women Entrepreneurs in E-Business During COVID_19	16.261	34	.478		
	Reason for Temporary shut down of business	14.778	34	.435		
	Change in product demand of customers faced by Women Entrepreneur during COVID_19	30.833	34	.907		
Total	Financial Problems faced by Women Entrepreneurs in E-Business During COVID_19	187.000	38			
	Reason for Temporary shut down of business	213.000	38			
	Change in product demand of customers faced by Women Entrepreneur during COVID_19	191.000	38			
Corrected Total	Financial Problems faced by Women Entrepreneurs in E-Business During COVID_19	22.763	37			
	Reason for Temporary shut down of business	48.763	37			
	Change in product demand of customers faced by Women Entrepreneur during COVID_19	34.974	37			
a. R Squared = .286 (Adjusted R Squared = .223)						
b. R Squared = .697 (Adjusted R Squared = .670)						
c. R Squared = .118 (Adjusted R Squared = .041)						

(Source: Primary)

Interpretation

Since the p value for Financial problems faced by Women Digital Entrepreneurs during COVID-19 with their Experience in their Online Business (0.009) is less than ($<$) 0.05. H_{01} is Rejected at 5% level. Hence, There is a significant relationship between Experience in online business between Financial Problems faced by Women Digital Entrepreneurs during COVID-19.

The p value for Customer's change their demand for products faced by Women Digital Entrepreneurs during COVID-19 with their Experience in their Online Business (0.226) is More than ($>$) 0.05. H_{02} is Accepted at 5% level. Hence, There is no significant relationship between Experience in online business between Customer's change their demand for products faced by Women Digital Entrepreneurs during COVID-19.

The p value for Temporary Shutdown of business faced by Women Digital Entrepreneurs during COVID-19 with their Experience in their Online Business (0.000) is less than ($<$) 0.05. H_{03} is Rejected at 5% level. Hence, There is a significant relationship between Experience in online business between Temporary Shutdown of business faced by Women Digital Entrepreneurs during COVID-19.

6.2.2 Impact faced by Women Entrepreneurs in online business during COVID-19

Hypothesis:

H_0 : There is no significant difference between the various kinds of impact faced by Women Digital Entrepreneurs During COVID-19.

H_1 : There is a significant difference between the various kinds of impact faced by Women Digital Entrepreneurs During COVID-19.

Table 6 Kinds of impact faced by Women Digital Entrepreneurs during COVID-19

Kind of Impact	(Test value = 3)						
	N	Mean	Standard Deviation	Mean Difference	T Value	Degree of freedom	Sig.
Improved the situation of your Business	100	2.5900	1.33405	-.41000	-3.073	99	.003*
Affected your Business situation	100	2.6800	1.36241	-.32000	-2.349	99	.021*
Operation of Business is impossible	100	2.6800	1.46942	-.32000	-2.178	99	.032*
Increased the number of online shoppers	100	2.4300	1.14816	-.57000	-4.964	99	.000*
Increased the sales of your Business	100	2.9600	1.28645	-.04000	-.311	99	.757**
Decreased the sales of Your Business	100	2.6700	1.26375	-.33000	-2.611	99	.010*

(Source: primary)

*significant at 1% **significant at 5%

Interpretation

The P Value of Variables improved the situation of Women Entrepreneur's Business during COVID-19 (2.59) and Increased the number of online shoppers during COVID-19 (2.43) are less than the 0.01 at 1% level of Significance. Hence, Null Hypothesis is rejected (H_0). It conclude that there is significance difference in the positive impact of COVID-19 on Women Entrepreneurs business Situation and their online shoppers.

The P Value of variables of negative impact on Women Entrepreneurs business Situation (2.68), Operation of Business becomes impossible (2.68) and decrease in their sales (2.67) are more than ($>$) 0.01 at 1% level of Significance. Hence, Null Hypothesis (H_0) is Accepted at 1%.

It concludes that there is no significance difference in the negative impact of COVID-19 on Women Entrepreneur's Business situation, their business operations and sales.

The P Value of variable increase of sales of Women Digital Entrepreneurs Business during COVID-19 (2.96) is more than ($>$) 0.05% at 5% level of Significance. Hence, Null Hypothesis(H_0) is Accepted. It concludes that there is no Significance difference in positive impact of COVID-19 on Women Digital Entrepreneurs in Increasing their sales.

6.3. Strategies adopted by Women Digital Entrepreneurs in attracting Customers during COVID-19

Today, it is difficult to anticipate the full recover of COVID-19 pandemic situation. This situation has effected many peoples especially Small Women entrepreneurs, as they face difficult to sustain without doing anything to generate revenue. This creates the need for adoption of some strategies in order to attract and sustain their existing and new customers.

Table 7 Strategies adopted by Women Digital Entrepreneurs

Strategies	No. of Respondents	Percentage (%)	Cumulative Percentage (%)
Frequent updates in websites and social channels	23	23.0	23.0
Free samples and gifts	27	27.0	50.0
Fast delivery of products and Good Customer services	7	7.0	57.0
Providing offers and discounts	9	9.0	66.0
Maintaining Blogs	4	4.0	70.0
e-mail marketing	12	12.0	82.0
Making Websites attractive	18	18.0	100.0
Total	100	100.0	

(Source: Primary)

From the above table 7, shows that the main strategy preferred by the respondents is frequent updation in websites and social channels (27%). Besides, providing free samples to the customers (23%), making websites attractive (18%), marketing through E-mail (12%), providing offers and discounts (9%), Good customer services (7%) and maintaining blogs (4%). These strategies could help Women Digital Entrepreneur's business to grow as well as increase their revenues.

6.3.1. Inter-relationship between Kinds of online business and Strategies used by Women Digital Entrepreneurs in attracting the customers during COVID-19

Hypothesis:

H_0 : There is no significance association between kinds of business and strategies used by Women Digital Entrepreneurs in attracting customers during COVID-19

H_1 : There is a significance association between kinds of business and strategies used by Women Digital Entrepreneurs in attracting customers during COVID-19.

Dependent Variable: Strategies used in attracting customers.

Independent variable : Kinds of Online Business run by Women Entrepreneurs.

Table 8 Relationship Between Kinds of E-Business and Strategies used by Women Digital Entrepreneurs during COVID-19

Strategies Used by Women Digital Entrepreneurs in attracting the Customers during COVID-19	Kinds of E-Business														
	Online Marketing	Clothing and Accessories	Online teaching	Food and Catering services	Beauty cosmetics and services	online Consultancy services	Travelling and Tourism Services	online Professional Services	Online Health Care Services	Event Organizing	Web Designing	Retail selling	online Gifts sellers	online bidding services	Total
Frequent updates in websites and social channels	3	0	2	2	4	0	0	1	2	3	4	0	0	2	23
Free samples and gifts	11	5	3	0	6	1	1	0	0	0	0	0	0	0	27
Fast delivery of products and Good Customer services	0	2	1	1	2	1	0	0	0	0	0	0	0	0	7
Providing offers and discounts	3	1	0	2	0	1	1	0	0	0	0	1	0	0	9
Maintaining Blogs	0	0	0	2	0	0	0	0	0	0	0	1	1	0	4
e-mail marketing	0	4	0	3	3	0	0	0	0	0	0	1	1	0	12
Making Websites attractive	0	1	8	5	3	0	0	0	0	0	0	0	1	0	18
Total	17	13	14	15	18	3	2	1	2	3	4	3	3	2	100

(Source: Primary)

Analysis of Variance Table**Table 9**

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F	Sig.
Between Groups	193.998	13	14.923	4.024	.000
Within Groups	318.962	86	3.709		
Total	512.960	99			

ndf = 99, The test Statistic $F_c = 4.024$

Table value of F at 5% level = 1.83569

Since, the calculated value of F is 4.024 which is greater than ($>$) the Table value of F (1.83569) H_0 is rejected. Hence there is significant association between kinds of business and strategies used by Women Digital Entrepreneurs in attracting customers during COVID-19.

Interpretation

The P value of variable (0.000) is less than ($<$) 0.05. Hence, Null Hypothesis is Rejected. The result is that there is significance association between kinds of business and strategies used by Women Digital Entrepreneurs in attracting customers during COVID-19.

7. FINDINGS

This study reports that most respondents of Women Digital Entrepreneurs belongs to the age group of 20- 30 years and have qualification of Under Graduate. Most of the Women Entrepreneurs are married and have less than one year of experience. Maximum number of respondents of Women Digital Entrepreneurs are Sole-Proprietors and have Micro level business.

From the above analysed data, it shows that by accepting the Null Hypothesis (H_0) Average age of the respondents belong to the age group of 20 years- 30 Years, Average years of Experience of the respondents have in E-Business is 1year – 3 Years, Average number of respondents are Retailers and Average size of the online business run by Women Entrepreneur is small scale Business. By rejecting the Null Hypothesis, Average Marital Status of the Respondents are not Spinster, Average Education Qualification of the Respondents does not have Under Graduate Degree and Average kind of Business run by the Women Entrepreneurs is not Beauty products and cosmetics.

Positive impact of COVID-19 on Women Digital Entrepreneurs reveals that, by rejecting Null Hypothesis (H_0) at 1% level, concludes that there is significance difference in the positive impact of COVID-19 on Women Entrepreneurs business Situation and their online shoppers. By accepting Null Hypothesis(H_0) at 5% level, concludes that there is no Significance difference in positive impact of COVID-19 on Women Digital Entrepreneurs in Increasing their sales.

Negative impact of COVID-19 on Women Digital Entrepreneurs reveals that, by accepting Null Hypothesis (H_0) at 1% level, concludes that there is no significance difference in the negative impact of COVID-19 on Women Entrepreneur's Business situation, their business operations and sales.

The relationship between Experience in Online Business with Financial Problems, Change in Demand among customers, and shutdown of business faced by Women Digital Entrepreneurs during COVID-19, MANOVA clearly indicates that

- a) There is a significant relationship between Experience in online business between Financial Problems faced by Women Digital Entrepreneurs during COVID-19.
- b) There is no significant relationship between Experience in online business between Customer's change their demand for products faced by Women Digital Entrepreneurs during COVID-19.
- c) There is a significant relationship between Experience in online business between Temporary Shutdown of business faced by Women Digital Entrepreneurs during COVID-19.

The main strategy preferred by the respondents in attracting customers during COVID-19 is frequent updates of websites and social channels (27%). Besides, providing free samples to the customers (23%), making websites attractive (18%), marketing through E-mail (12%), providing offers and discounts (9%), Good customer services (7%) and maintaining blogs (4%). These strategies could help Women Digital Entrepreneur's business to grow as well as increase their revenues.

The interrelationship between kinds of E-Business and strategies used by Women Digital Entrepreneurs in attracting customers during COVID-19, one way ANOVA clearly states that there is significance association between kinds of business and strategies used by Women Digital Entrepreneurs in attracting customers during COVID-19.

8. SUGGESTIONS

Women Entrepreneurs can be encouraged to start their business as joint stock companies and co-operative business rather than being a sole-traders or partnership concerns to avail advantage of large scale operations.

For increasing the participation of Women Entrepreneurs in online business, Government has to provide more fund as well as train more trainers so that the opportunity, survivability, profitability and sustainability of their business activities can be achieved.

It is recommended that the government has to provide more funds, develop adequate infrastructure as well as make arrangement of training to encourage Women entrepreneurs to participate in online business so that the opportunity, survivability, profitability and sustainability of their business activities can occur. And make sure that funds remains available for innovative start-ups at all stages of development.

Awareness can be created about existing measures and support initiatives which provide guidance to help Women Digital Entrepreneurs to adapt to COVID-19 crisis by educating them through official platforms that centralize information on various support programs, provide advice on cash flow management etc.

Reduction of barriers associated with Women Entrepreneurs, those who suffer during and after COVID-19 pandemic by accessing them health care facilities, paid sick leave etc.

9. CONCLUSIONS

COVID-19 pandemic has made drastic change in way of living to virtual to some extent in order to practice social distancing, washing hands and get accustomed to wearing mask COVID-19 pandemic has shown massive growth in Digital business ventures especially for Women. Today, in this COVID-19 pandemic situation, participation of Women Entrepreneurs in online business has been increasing at considerable rate. New born women entrepreneurs are emerged with new opportunities by transforming their existing knowledge, skills, employees and networks to new needs that have emerged.

This study shows that Women Digital Entrepreneurs have temporary shutdown of their business and financial problems faced by them during COVID-19 pandemic has significant relationship with experience in their E-Business. And change in product demand of customers during COVID-19 has no significant association with experience in Online Business. This study reveals that COVID-19 has both positive and negative impact on Women Digital Entrepreneurs. Positive impact of improving their business situation and increasing number of online shoppers has significant relationship with kinds of online business runs by women entrepreneurs and increase in sale has no influence on Women Entrepreneurs during COVID-19. Negative impact of Women Digital Entrepreneurs of adverse affect of their business, decrease in sales and impossible operation of their business during COVID-19 has no significant difference in kinds of online business run by them. This study discuss about various strategies used by Women Entrepreneurs in attracting customers during COVID-19 has significant association between kinds of online business run by them. This shows that strategies like providing free samples, active participation in social media, creating attractive business blogs etc. plays a significant role not only attracting new customers but also helps in retaining existing customers during COVID-19 pandemic. On the basis of findings, it states that Women Entrepreneurial activity will be increased both during and after COVID-19 pandemic which will ultimately help Women Entrepreneurs to grow digitally in future.

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