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# **NALLAMUTHU GOUNDER MAHALINGAM COLLEGE**

An Autonomous Institution, Affiliated to Bharathiar University, An ISO 9001:2015 Certified Institution,

Pollachi-642001



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**One day International Conference**

**EMERGING TRENDS IN SCIENCE AND TECHNOLOGY (ETIST-2021)**

**27<sup>th</sup> October 2021**

**Jointly Organized by**

**Department of Biological Science, Physical Science and Computational Science**

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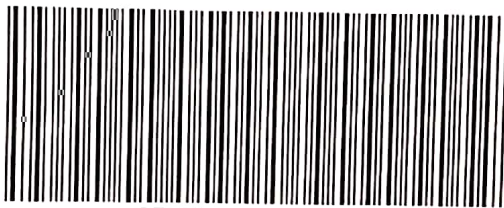
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## Impact and Customer Satisfaction on Internet of Things through Digital Seva Centers Services with Special References to Pollachi

Dr. T.Vijaya Chithra<sup>1</sup> - Ms. M.Gayathri<sup>2</sup>

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### Abstract

Internet of Things states about the network of things that are embedded with sensor, software and other technologies to share data between devices with the help of internet. With low cost, the data interchange takes place with the help of network connection and with less intervention of human too. It helps in recording, monitoring and adjusting the communication between each other system that wishes to share the information with fullest cooperation. Cloud centered IoT helps for faster access in providing service to the customers, human resource, financial services, and supply chain and so on. Hence the present research aims to identify the level of customer's satisfaction of digital seva services which uses the Internet of Things as the base for sharing of data through network. This study undertakes an empirical study conducted with Pollachi Taluk citizens and the study will explore to understand the customers level of satisfaction towards services. Based on the research design firsthand information has been collected through Google form were created to collect the data in the form of structured questionnaire and it was to get distributed through convenient sampling technique. A total 44 respondents' data were collected and the analyses is to be applied to statistics tools such as simple percentage and chi-square tests. The results from the present study would help in knowing the relationship between the demographic variables and the level of satisfaction.

*Key: Digital Seva Service, Awareness, Level of Satisfaction, Customers*

### Introduction

Internet of Things states about the network of things that are embedded with sensor, software and other technologies to share data between devices with the help of internet. With low cost, the data interchange takes place with the help of network connection and with less intervention of human too. It helps in recording, monitoring and adjusting the communication between each other system that wishes to share the information with fullest cooperation. Cloud centered IoT helps for faster access in providing service to the customers, human resource, financial services, and supply chain and so on. The present study focuses on the E-Seva Services and it is based on

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the Digital India program which helps to transform India into digitized, engaged, empowered service in a society and knowledge economy. Digital India is transformation in nature and would ensure that government services are available online. The government creates in citizen accountability through mandated delivery of government service online to do separate login id and e-pramaan based on authentic and standard based interpretable and integrated government application and data basis.

#### **Statement of problem**

The government is launching much new technology in the country which is suitable to people's community in order to meet the objective of country development. One such program is launching a digital seva services center. It is emerged from the concept of IoT. Focusing on how far Internet of Things are possible to apply in digital seva centers' services, whether the customers' level of satisfaction may differ from person to person due to several factor like age, sex, education etc., are the questions for clarification and hence the present study focuses on the problems as follows:

1. Whether the customers have awareness on the digital seva services?
2. What is the customers' levels of satisfaction regarding digital seva service center?

#### **Objective of the study**

The present study is aimed at assessing the customer's satisfaction on the services of digital seva centers through the application of Internet of Things. In this regard the following objectives have been framed for the study.

1. To analyze the customer's level of awareness about digital seva service centers through Internet of Things.
2. To understand the customers level of satisfaction towards digital seva services.

#### **Review of literature**

**MeltemÖzturan and Uğurkansurucu (2019)** made a study on "Citizen Satisfaction with E-Government Service: Case of Turkey". The main objective of the study was developing a model for identifying the factors that affect citizen's satisfaction with E-Government. Data were collected through a questionnaire with the sample size of 281 respondents and was analyzed using IBM SPSS statistics software. The statistical tools like simple percentage, 5 likert scale technique, correlation, chi-square test analysis were used for the analysis. The study revealed that the model of this study can assist e-Government designers and developers for enhancing their understanding of e-Government citizen satisfaction and for improving their e-Government services. **M.Sumathy (2020)** in her paper entitled "Users satisfaction towards E-Governance services in Coimbatore District" made an analysis with a keen objective to analysis the user satisfaction on E-Governance services. The main objective of the study was to identify the reason for using e-governance services by the consumers. Data were collected from 300 citizens of Coimbatore District selected using a purposive sample technique method. The statistical tools like mean, standard deviation, chi-square, one way ANOVA Two way ANOVA were applied for the analysis. The outcome of the study is that younger citizens are more satisfied than old aged citizens with the service provided by e-service centers and government practices. **Neha Mahajan (2018)** 'Digital India: Empowering to Rural Economy' discussed the Digital India scheme and its features greatly support for the development of the rural economy. The outcome of study revealed that challenges in implementation of Digital India programme and out of which lack of awareness was the

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major challenge faced by the Government. The reviews helped in getting an idea about the present research with the help of earlier studies made through.

### Data and methodology

The research design adopted in the study is mainly focused on the primary data. The area of the study is pollachi taluk. Secondary data helps in framing the theoretical background of the present study and for the purpose of review of literature study. Primary data has been collected in the form of structured questionnaire framed using Google form and floated through various social media like Facebook, Whatsapp, E-Mail. The secondary data is being collected from articles, journals, newspapers and various websites. The sampling technique used in this study is a convenient sampling method. A sample of 44 respondents are taken for the study. The statistical tools used for the study are simple percentage and chi square test ( $\chi^2$ ) test.

### Result and discussion

#### Demographic profile of the respondents

Simple percentage analysis have been used to analyze the data collated regarding Demographic profile

Table 1

Parameters	Number of respondents n=44	Total (Percentage)
<b>Age:</b> a) 18-25 years	26	58
b) 26-35 years	10	25
c) 36-45 years	5	20
d) above 45 years	3	07
<b>Total</b>	<b>44</b>	<b>100</b>
<b>Gender</b>		
a) Male	28	64
b) Female	16	36
<b>Total</b>	<b>44</b>	<b>100</b>
<b>Marital status</b>		
a) married	14	32
b) unmarried	30	68
<b>Total</b>	<b>44</b>	<b>100</b>
<b>Area of Residence</b>		
a)Rural	20	45
b)Urban	14	32
c)Semi urban	10	23
<b>Total</b>	<b>44</b>	<b>100</b>
<b>Occupation</b>		
a)Farmer	19	43
b) Land labour	17	39
c) Own business	1	2
d) Job	7	16
<b>Total</b>	<b>44</b>	<b>100</b>
<b>Education</b>		
a)Below SSLC	4	9
b) SSLC	3	7
c) HSC	3	7
d) Graduate	34	77
<b>Total</b>	<b>44</b>	<b>100</b>
<b>Total</b>		



Parameters	Number of respondents n=44	Total (Percentage)
Annual income	26	59
a) Below 1,00,000	12	27
b) 1,00,001-2,00,000	03	7
c) 2,00,001-4,00,000	03	7
d) Above 4,00,000		
<b>Total</b>	<b>44</b>	<b>100</b>

Source: Primary Data

Table 1 reveals that the majority of the respondents are Male (64%). Composition of age shows that the majority of the respondents are between the age group of 18-25 years. The most of respondents belong to rural areas (45%) and most of people are unmarried (68%). Majority of the respondents are graduates (77%). Most of the respondents' family income are below Rs.1, 00,000. Most of the respondent's occupations are farmers.

**Awareness of the Respondents towards IoT's Digital Seva Centers**

Table 2

Source of Awareness	Number of respondents n=44	Total (Percentage)
a) Friends/Relatives	24	54
b) Internet	15	34
c) Advertisement	3	7
d) Word of mouth	2	5
<b>Total</b>	<b>44</b>	<b>100</b>

Source: Primary Data

Table above shows that, out of 44 respondents, 24(54%) respondents get their source of awareness from Friends/Relatives, 15(34%) respondents know about it through the Internet, 3(7%) respondents are through advertisements and 2(5%) respondents are from word of mouth awareness. Thus, it is found that the majority 24 (54%) of the respondents are aware of the services provided by the Digital Seva Centers through their Friends/Relatives.

Table 3

Frequently access in digital seva center	Number of respondents n=44	Total (Percentage)
a) Always	10	22
b) Sometimes	21	48
c) Very often	2	5
d) Rarely	9	20
e) Never	2	5
<b>Total</b>	<b>44</b>	<b>100</b>

Source: Primary Data

Table 3 discloses that, 10(22%) majority of the respondents' frequency of accessing the Digital Seva Center shows a result as sometimes, which means they access the digital seva centers sometimes only.

Chi square test

Chi -square test has been made in order to find out the whether there is an association between Demographic variables and level of satisfaction of digital seva center. The level of significance used in the five percent level. In order to find out the association level among those two variables the following null hypothesis has been framed.



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*H0: There is no association between Demographic variable (independent) and level of satisfaction (dependent variables).*

S.No	Particulars	D.F	Chi-Square Value	P-Value	Result
1	Age	6	0.086	1.000	Rejected
2	Gender	2	0.035	0.983	Rejected
3	Marital status	2	0.013	0.993	Rejected
4	Occupation	6	0.241	1.000	Rejected
5	Education	6	0.107	1.000	Rejected
6	Annual income	6	0.273	1.000	Rejected
7	Source of awareness	6	0.673	0.995	Rejected

*Source: primary data*

As the calculated  $X^2$  value is less than the P value at 5 per cent level of significance, the null hypothesis is rejected. Hence there exist significant association between all the demographic variables such as Age, Gender, Marital Status, Occupation, Education, Annual Income, Source of Awareness and Level of Satisfaction.

### Limitation of the study

- a) The study depends upon the primary data collected from the respondents in Pollachi
- b) Time was a limiting factor for the study to collect large data, so data from the sample may not reflect the whole of the respondents.
- c) Information reported by respondents might be prejudiced.

### Suggestions

- a) The IoT shall improve its security technologies in its Digital seva service platform by protecting the information shared through the centers from hackers through encryption technology.
- b) Data crash analysis shall be made regularly to improve security and increase the managing capacity of devices at a time so that the highly personal and confidential data collected or provided through digital seva centers of every individual citizen may be safe.
- c) Through digital scanners of IoT, the data scanning of the customers may be made providing faster service to the customers by not delaying through making them wait for a long period of time. The government focus to start the help desk to provide the information above the services.
- d) During this covid period, IoT may be used to sensor the public using digital seva centers and find out the infectious persons and help to do their services without physical contact and reduce the spread too.
- e) Cloud storage may be provided in the digital seva centers for their customers to store their electronic and secured storage area allotted for each customers through networks so that they can handle their data whenever and wherever required.

### Conclusion

Internet of things are emerging in nature day by day and are also introducing new and advanced chipsets which are to make a revolutionary change in the existing operating system and which is exclusively developed for

the application of IoT. Digital seva services forms a basic part of IoT and the extensive review of the literature suggests that customer satisfaction in e-services can be investigated further to find out what method that digital seva service follows over a sample period for different service quality among the customer satisfaction. Though there have been a number of studies that have found the presence of service quality to update information and customer satisfaction unpredictability and recognized many reasons for service and customer satisfaction of digital seva service however no study has been able to resolve this issue. Hence, it can be an existing idea to address the issue of service, customer satisfaction amongst the situated in lack of network facility and some technical issues to create some other problems.

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