

# A STUDY ON MARKET RESEARCH AND ANALYSIS OF IOT SYSTEMS IN COMMERCIAL MALL OF PUNE CITY WITH SPECIAL REFERENCE TO SSP TECHNOLOGY

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**Abstract-** The global sourcing market in India continues to grow at a higher pace compared to the IT-BPM industry. India is the leading sourcing destination across the world, accounting for approximately 55 per cent market share of the US\$ 185-190 billion global services sourcing business in 2017-18. Indian IT & ITeS companies have set up over 1,000 global delivery centres in about 80 countries across the world. India has become the digital capabilities hub of the world with around 75 per cent of global digital talent present in the country. Based on a survey of software-related companies in the major cities of India, this paper provides an analytical framework for examining the organization and size of the Indian software industry. With regard to organization, the extent of foreign participation in the industry and the degree of concentration in the industry has been looked at closely. The size of the industry, on the other hand, has been discussed in the context of the relative significance of its domestic market and export market. Export significance has further been evaluated by taking account of its qualitative composition. Given the current size and organizational structure of the industry, its future outlook together with the opportunities and challenges has also been briefly outlined. Finally, an attention has been drawn to India's recent strategic national policy and initiatives for strengthening its position in the software-driven information technology sector in the world. In this project author work on the main objective of the study was to conduct the survey in commercial Malls in Pune city and to know the market potential for the SSP Technology products. Finding most potential Malls which may use IOT system. Major Factors considered in the selection of the IOT systems. To know the awareness of various IOT products in the market. To find satisfaction level of current IOT systems used in Malls.

**Keywords-** Market Research, Business Management, IOT Systems, Commercial Mall.

## 1. INTRODUCTION

The economy of this country got liberated in 1992, with this liberalized economy came many multinationals to market their products to Indian consumers. This liberalization touched the industrial product users as well. These companies not only competed but also left the industries far behind. They did this with the help of advanced technology and aggressive marketing. All this led to tremendous competition and it was very difficult for the Indian industries to sustain it. No sector was spared from this phenomenon. The IOT industry is one such industry. From a long time compression systems have dominated this industry. IOT systems are used generally to avoid uncertainty risk and crime rate. Within liberalization the trends started to change very quickly, the international players crowded the industrial market with the advanced and efficient IOT systems. Like the change in the Indian industry there was also a change in Indian buyer behavior.

All the buyers needed to search for the effective and efficient technological systems. These companies mostly provide them. It has also been analyzed that every Malls spends a huge amounts IOT systems once. This provides the Standardized products and specification which are very cost effective solutions. This project emphasizes on those Mall in the market which are congruent with the standardized product specification. Initial surveys have shown that every Mall spends a sum of amount for IOT In this project it is essential to find the probable segments where it can be used and most prospective Mall segment which can be used IOT system HSS etc. The data is collected, analyzed and presented in the tabular form and then graphical representation is done for ease of understanding. On basis of interpretation of data conclusion is made and suggestions are put forward at the end.

**Smart IOT System-****1.1 Scope & Limitations****1.1.1 Scope of the project**

- IOT Systems are used generally very less used in various Malls and place in Pune.
- The project was related to those which may use the IOT systems products for their Malls.
- Finding the probable Malls market in which it can be used i.e. check the Mall working status and area.

**1.1.2 Limitations**

- Due to time constraints the study is limited towards only in Pune city and Survey is conducted only in Malls in various areas of Pune with limited number of Malls hence it is a market survey.
- This survey carried out only for those Malls in which IOT system can be used.
- This survey is limited only for the consultants and Suppliers are not covered in this survey.
- Study was based on the opinion of the customers.
- Project was limited for 30 days.

**1.2 Importance of the project**

- It will help to avoid risk for the commercial Malls.
- Knowing Work status in the Malls.
- Knowing crime rate in that area.
- It will helps to the fraud person must be arrested.

**1.3 Product Profile (IOT Based Home Automation)**

IoT Home Automation: Getting Started

Home automation has three major parts:

- Hardware
- Software/Apps
- Communication protocols

Each of these parts is equally important in building a truly smart home experience for your customers. Having the right hardware enables the ability to develop your IoT prototype iteratively and respond to technology pivots with ease. A protocol selected with the right testing and careful consideration helps you avoid performance bottlenecks that otherwise would restrict the technology and device integration capabilities with sensors and IoT gateways. Another important consideration is the firmware that resides in your hardware managing your data, managing data transfer, firmware OTA updates, and performing other critical operations to make things talk.

**Applications of Home Automation**

Rebuilding consumer expectations, home automation has been projected to target wide array applications for the new digital consumer. Some of the areas where consumers can expect to see home automation led IoT-enabled connectivity are:

- Lighting control
- HVAC
- Lawn/Gardening management
- Smart Home Appliances
- Improved Home safety and security
- Home air quality and water quality monitoring
- Natural Language-based voice assistants
- Better Infotainment delivery
- AI-driven digital experiences
- Smart Switches
- Smart Locks
- Smart Energy Meters

The list is still not exhaustive and will evolve over the time to accommodate new IoT use cases. Now that you are familiar with home automation applications, let's have a detailed look at what components are involved in building a typical home automation prototype.

### Home Automation Components

We have talked about them before, but let's clearly separate our components that will finally help you build a realistic model of what major components are involved in building a smart home. The major components can be broken into:

- IoT sensors
- IoT gateways
- IoT protocols
- IoT firmware
- IoT cloud and databases
- IoT middleware (if required)

IoT sensors involved in home automation are in thousands, and there are hundreds of home automation gateways as well. Most of the firmware is either written in C, Python, Node.js, or any other programming language.

The biggest players in IoT cloud can be divided into a platform-as-a-service (PaaS) and infrastructure-as-a-service (IaaS).

#### Major IoT PaaS Providers

- AWS IoT
- Azure IoT
- Thingworx
- Ubidots
- Thingspeak
- Carriots
- Konekt
- TempoIQ
- Xively
- IBM Bluemix

### Characteristics of IoT Platforms

Again, these platforms are extremely divided over the IoT application and security-related features that they provide. A few of these platforms are open source.

Let's have a look at what you should expect from a typical IoT platform:

- Device security and authentication
- Message brokers and message queuing
- Device administration
- Support towards protocols like CoAP, MQTT, and HTTP
- Data collection, visualization, and simple analysis capabilities
- Integrability with other web services

- Horizontal and vertical scalability
- WebSocket APIs for real-time for real-time information flow

#### 1.4 Company Profile



STABILITY, STRENGTH, PERFECTION i.e. SSP Technology is a leader in Software Development and empowers IT individuals with competitive advantage. SSP Technology is a leader in Software Development and empowers IT individuals with competitive advantage. SSP Technology dedicates itself to simplify the technology trends with its great R&D Division. SSP Technology is an Indian Software Development Company. A rapidly growing software company with a team of experienced intellectuals working in various technologies. It deals with Product and Service based applications in all major areas. We are committed to the qualitative, efficiency, innovativeness and timeliness of our deliverables with high focus on maximum customer satisfaction. **SSP Technology** is a high end full service IT solution Company based in India. Established in 2010, we are pioneer in providing total offshore and onshore web based solutions for small to large corporate companies. SSP Technology provides IT services to clients globally as partners to conceptualize and realize technology driven business transformation initiatives. Today we are comprised of a team of programming technicians, designers, and marketing executives- selectively chosen to lead our clients in their IT solutions.

SSP Technology has grown from strength to strength in both our Business and Software Solutions arena. From our IT Consulting as well as Custom Application Development, Web Development and E-commerce all of which help our customers with their diverse yet demanding needs. We are geared towards generating business value to the companies by providing expertise personnel and software services.

#### Our Vision

"To Become a Complete Software Company with the Quality performances and to develop success path for every industry's growth and progress."

#### Our Mission

"To provide multiple solutions for each and every problem to achieve the goal of organization."

#### Our Value

We at SSP Technology aim and are continuously approaching towards customer satisfaction and create a value to customer along with yielding knowledge for us by maintaining a motivated workforce.

#### Our Services

SSP Technology provides various Software Development services to the clients located worldwide in order to rationalize their business processes and e-enabling their business. We, at SSP Technology strongly believe that technology is a true business enhancer and you should not implement technology for the sake of it. That's why; we help you make best use of information technology. With the use of our services such as application development, application migration and application maintenance for your existing applications, you can formulate the best possible use of technology. We are a team of professional organization teamed by competent, committed, qualified and experienced personnel in various field. With the help of our commitment to professionalism and excellence. The programmers we design are developed to meet specific organizational needs. We provide a service that provides clients with value for each rupee invested. So feel free to come forward and avail the opportunity of getting reasonably priced consultancy services from us.

#### IT PROVIDES THE FOLLOWING SERVICES TO THE CLIENTS:-

##### Technology Services-

- Data Warehousing
- Data Migration
- High Availability
- Internet of Things
- Java Technology
- Linux and Unix
- Open Source
- Optimized Solution
- Web Development Services
- IOT
- SAP-ABAP,HR,ADMIN and FINANCE Module

- Server Consolidation
- SEO Services
- Service Oriented Architecture
- Windows and Dot Net
- Virtualization

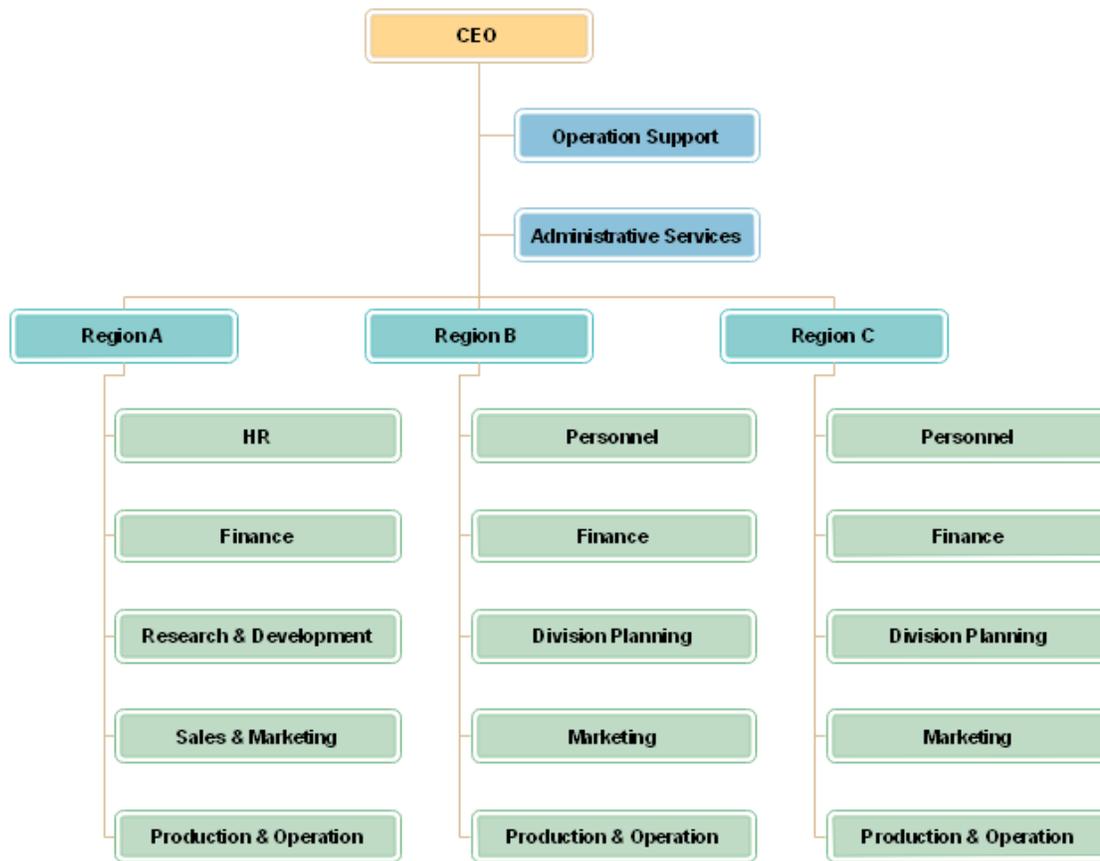
**Business Services-**

- Business Analytics
- Business Process Services
- Customer Experience
- Customer Relationship Management
- Enterprise Content Management
- Enterprise Management
- Financial Management
- Governance, Risk, and Compliance
- Human Capital Management
- Marketing Automation & Utilities Services
- Master Data Management & Retail Services
- Database and IT Infrastructure
- Project Portfolio Management

**Cloud Services Mobile Services and Industrial Services**

- Aerospace and Defence
- Automotive
- Chemicals
- Communications
- Consumer Goods
- Education and Research
- Engineering and Construction
- Financial Services
- Healthcare
- High Technology & Public Sector Services
- Industrial Manufacturing
- Insurance & Professional Services
- Life Sciences & Wholesale Distribution
- Media and Entertainment



**Organisation Chart-****Address-**

2<sup>nd</sup> floor, S. M. Tower, Above Jijamata bank, near karvenagar Bus Stop, Karvenagar, Pune-411052.

Contact Person HR- Mr. Shailesh Jagtap

Mob- 9503522733

WEB- [www.ssptechnosys.com](http://www.ssptechnosys.com)

## 2. LITERATURE SURVEY

### 2.1 Literature Survey

**Ruhi Kiran Bajaj et al.** In This paper the evolution and developments on Internet of Things with regard to the automotive sector to provide a perspective on the various areas such as- Connected Car services/applications, Vehicle communications, IoT in Intelligent Transportation, IoT based Supply Chain Management in Automotive Industry and New Generation Cars, where tangible progress is being made. The Internet of Things (IoT) is a new wave of Internet that is expected to transform our lives. Internet has connected people and now it is connecting 'Things' to make seamless communication and intelligence pooling. IoT in the automotive sector was being seen as a futuristic theoretical concept and today we are already seeing possibilities of connected cars, driverless cars and application of IoT in the car ecosystem covering parking, environment, supply chain and transport governing bodies.

**Akshay Kadam1 et al.** This paper presents a list of general ideas which help in realizing the dream of smart cities through Internet of Things (IoT). The framework presented uses sensors and networking with cloud based integration to provide an improvement to the existing cyber physical system. Existing services can be improved with the help of the IoT vision presented in this paper. The Internet of Things (IoT) is the network of physical objects, devices, vehicles, buildings and other items which are embedded with electronics, software, sensors, and network connectivity, which enables these objects to collect and exchange data. The Internet of Things allows objects to be sensed and controlled remotely across existing network infrastructure, creating opportunities for more-direct integration between the physical world and computer-based systems, and resulting in improved efficiency, accuracy and economic benefit; when IoT is augmented with sensors and actuators, the technology becomes an instance of the more general class of cyber-physical systems, which

also encompasses technologies such as smart grids, smart homes, intelligent transportation and smart cities. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure.

**T. S. Lopez et al.** This paper presents a vision that mainly focuses on smart transport, Street light control, Structural monitoring and forecasting etc. The basic aim is to reduce human effort in menial tasks and improve convenience and standard of living. This can be achieved by using an assortment of sensors, microcontrollers, central database and connections of cloud computing and Internet of Things. A hardware box is created that consists of microcontrollers attached to sensors. This is the basic data collecting unit of this project. Multiple hardware units like this will be set up at different points across the city. All these units are connected to the central database using Cloud Computing and IoT.

**Arati Godase et al.** In this Paper Water scarcity is one of the major problems which the major cities are facing across the world. As we know that big area of surface of Earth is covered with water. But only less amount of water is used for the daily use. Scientists have been searching for many techniques to make sources of water to be used in daily routine. Due to shortage of water it is supposed to make water reach in many small places from creating dams and electricity. Most commercial products trending is water. Now a day's vending machines (dispenser machine) are available and are operated with the help of only single coin. But our will is to make water dispenser machine(Water ATM) which will be operated on different coins as well as it will operated by using Mobile app.

**Swapnil Alase et al.** This research paper the proposed system will replace microcontroller based systems with raspberry pi which will drastically improve the performance and will consume less amount of power for operation. Internet of things (IoT) is a concept that considers pervasive presence in the environment of variety of objects that are interconnected through wireless or wired mediums having unique addressing schemes to communicate with each other to create new applications and reach common goals.

**Abhirup Khanna et al.** In this paper, we present an IoT based cloud integrated smart parking system. The proposed Smart Parking system consists of an on-site deployment of an IoT module that is used to monitor and signalize the state of availability of each single parking space. A mobile application is also provided that allows an end user to check the availability of parking space and book a parking slot accordingly. The paper also describes a high-level view of the system architecture. Towards the end, the paper discusses the working of the system in form of a use case that proves the correctness of the proposed model.

**Asmita Chaudhari et al.** This paper presented the waste collection process is a critical aspect for the service providers. The traditional way of manually monitoring the wastes in waste bins is a complex, cumbersome process and utilizes more human effort, time and cost which is not compatible with the present day technologies. Irregular management of waste typically domestic waste, industrial waste and environmental waste is a root cause for many of the human problems such as pollution, diseases and has adverse effects on the hygiene of living beings. In order to overcome all these problems, we are proposing the idea of smart waste management system which helps in auto management of waste without human interaction in order to maintain a clean environment. The concept of smart waste management is implementable in cities where waste production is domestically high but the effort put to control it is relatively very low. This idea is compatible mainly with the concept of smart cities. The smart waste management mainly avoids the congested collection of waste generated domestically which creates difficulty to manage its disposal.

**Dr.Kanchan Patil et al.** This Paper the purpose of this paper is to identify variables important to the acceptance and use of Internet of things by retail employees and to recommend management strategies for effective IoT integration in the retail stores. This study aims to extend the basic technology acceptance model (TAM) by analyzing the impact of trust, perceived behavior control and subjective norm on employee's attitude and behavioral intention towards adopting IoT in retail environments. Responses from retail employees were used to measure their perception of IoT in terms of usefulness, Ease of Use, trust, attitude towards IoT adoption, perceived behavior control and subjective norm and behavioral intention

**Pallavi K N et al.** the population is increasing the solid waste is also increasing in urban and rural areas and waste management has become a global concern. We need to take right decision in order to manage this overflowing garbage. Mainly there are three types of sources where garbage is generated viz. residential, commercial and industrial. The garbage produced in the residential area can be collected directly from home or by making an arrangement for mass collection in that area and can be lifted using vehicles. In case of restaurants, malls and other commercial establishment garbage can are collected directly from the unit using vehicles.

**Ravi Kumar et al.** present solid waste management is a major concern in the metropolitan cities of the developing and developed countries. As the population is growing, the garbage is also increasing. This huge unmanaged accumulation of garbage is polluting the environment, spoiling the beauty of the area and also leading to the health hazard. In this era of Internet, IOT (Internet of Things) can be used effectively to manage this solid waste. In this paper, we have discussed the definition of Internet of Things and its elements, testing and prototyping tool simulator and finally the study of various literatures available on smart waste management system using IOT.

## 2.2 Industry Analysis

### Introduction

The global sourcing market in India continues to grow at a higher pace compared to the IT-BPM industry. India is the leading sourcing destination across the world, accounting for approximately 55 per cent market share of the US\$ 185-190 billion global services sourcing business in 2017-18. Indian IT & ITeS companies have set up over 1,000 global delivery centres in about 80 countries across the world.

India has become the digital capabilities hub of the world with around 75 per cent of global digital talent present in the country.

### **Market Size**

India's IT & ITeS industry grew to US\$ 181 billion in 2018-19. Exports from the industry increased to US\$ 137 billion in FY19 while domestic revenues (including hardware) advanced to US\$ 44 billion.

Spending on Information Technology in India is expected to grow over 9 per cent to reach US\$ 87.1 billion in 2018. Revenue from digital segment is expected to comprise 38 per cent of the forecasted US\$ 350 billion industry revenue by 2025.

### **Investments/ Development**

Indian IT's core competencies and strengths have attracted significant investments from major countries. The computer software and hardware sector in India attracted cumulative Foreign Direct Investment (FDI) inflows worth US\$ 37.23 billion between April 2000 and March 2019 and ranks second in inflow of FDI, as per data released by the Department for Promotion of Industry and Internal Trade (DPIIT).

Leading Indian IT firms like Infosys, Wipro, TCS and Tech Mahindra, are diversifying their offerings and showcasing leading ideas in blockchain, artificial intelligence to clients using innovation hubs, research and development centres, in order to create differentiated offerings.

Some of the major developments in the Indian IT and ITeS sector are as follows:

- Nasscom has launched an online platform which is aimed at up-skilling over 2 million technology professionals and skilling another 2 million potential employees and students.
- Revenue growth in the BFSI vertical stood at 6.80 per cent y-o-y between July-September 2018.
- As of March 2018, there were over 1,140 GICs operating out of India.
- PE investments in the sector stood at US\$ 2,400 million in Q4 2018.
- Venture Capital (VC) investments in the IT & ITeS sector stood at US\$ 53.0 million during Q4 2018.

### **Government Initiatives**

Some of the major initiatives taken by the government to promote IT and ITeS sector in India are as follows:

- The government has identified Information Technology as one of 12 champion service sectors for which an action plan is being developed. Also, the government has set up a Rs 5,000 crore (US\$ 745.82 million) fund for realising the potential of these champion service sectors.
- As a part of Union Budget 2018-19, NITI Aayog is going to set up a national level programme that will enable efforts in AI<sup>^</sup> and will help in leveraging AI<sup>^</sup> technology for development works in the country.
- In the Interim Budget 2019-20, the Government of India announced plans to launch a national programme on AI<sup>\*</sup> and setting up of a National AI<sup>\*</sup> portal.
- National Policy on Software Products-2019 was passed by the Union Cabinet to develop India as a software product nation.

### **Achievements**

Following are the achievements of the government during 2017-18:

- About 200 Indian IT firms are present in around 80 countries.
- IT exports from India are expected to reach highest ever mark of US\$ 126 billion in 2017-18.
- Highest ever revenue was generated by Indian IT firms at US\$ 181 billion in 2018-19.

## **3. SIGNIFICANCE SCOPE AND OBJECTIVES OF THE PROJECT**

### **3.1 SIGNIFICANCE**

1. It will help to avoid risk for the commercial Malls.
2. Knowing Work status in the Malls.

3. Knowing crime rate in that area.
4. It will helps to the fraud person must be arrested.

### 3.2 SCOPE OF THE PROJECT

1. IOT Systems are used generally very less used in various Malls and place in Pune.
2. The project was related to those which may use the IOT systems products for their Malls.
3. Finding the probable Malls market in which it can be used i.e. check the Mall working status and area.

### 3.3 OBJECTIVES OF THE STUDY

1. The main objective of the study was to conduct the survey in commercial Malls in Pune city and to know the market potential for the SSP Technology(India) products.
2. Finding most potential Malls which may use IOT system.
3. Major Factors considered in the selection of the IOT systems.
4. To know the awareness of various IOT products in the market.
5. To find satisfaction level of current IOT systems used in Malls.

## 4. RESEARCH METHODOLOGY

### 4.1 Sampling Design:

- Type of sampling: Simple random sampling.
- Sample size: 100 Customers.
- Sample unit / area: Mall in Pune
- Tool for data collection: Survey Questionnaire/ Survey method

### 4.2 Data Collections Methods:

Market research requires two types of data i.e. secondary data and primary data. Primary data has been used abundantly for the study. Well-structured questionnaires were prepared & the survey was undertaken. Feedback for the display has been taken by asking questions & observation has also done to gather primary information.

- **Primary data** - The research instrument used for the study was a structured questionnaire with a mix of a majority of close-ended questions and a few open-ended questions. "Close ended question" asked users to respond on a scale, "excellent", "best", "good", "average", "poor".
- **Secondary data** - The secondary data was also collected through internet, Books, Journals, Reports, Research Articles published in the newspapers are also one of the sources of secondary data.

**4.3 Study Period:** Year 2018-2019.

**4.4 Area of Study:** Pune

**4.5 Statistical Method:** Descriptive study

**4.6 Sampling:** For the survey, 100-sample size was to be covered as a small number of employees made up the whole work force.

**4.7 Sample size:** Samples are devices for learning about large masses by observing a few individuals.

### 4.8 Methods of Sampling

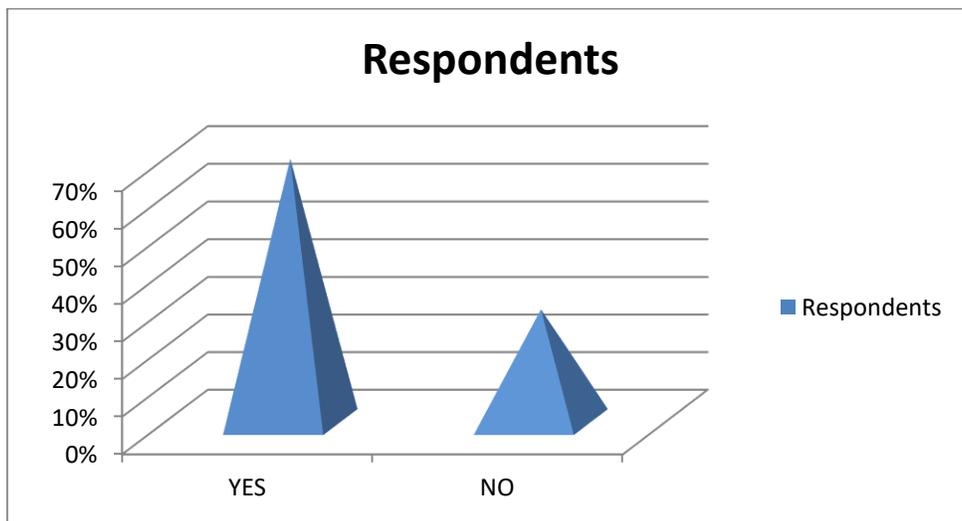
Random sample method or Convenience Sample method etc.

## 5. DATA ANALYSIS AND INTERPRETATION

1) Are you using any IOT system product for your Mall?

**Table No 1:** Awareness about IOT system product in Mall

Sr. No	Respondents	Percentage (%)
1	Yes	70%
2	No	30%
<b>Total</b>		100%



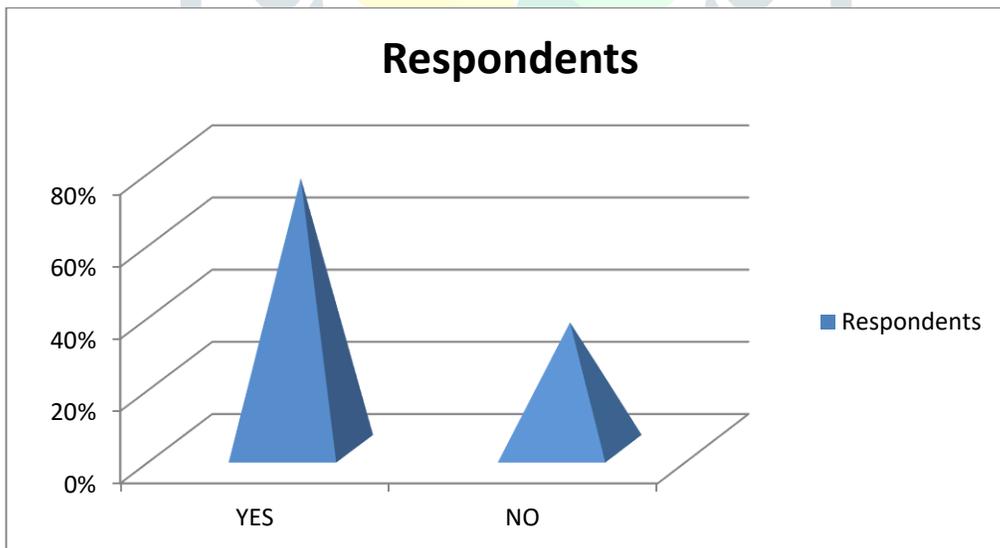
**Graph No 1:** Awareness about IOT system product in Mall

**Interpretation:** The interpretation of the above graphs and table shows that, maximum no. of respondent’s aware about various IOT systems available in market. The 70% people say Yes and 30% people say No.

2) Are you aware about the crime rate Pune city?

**Table No 2:** Awareness about crime rate in Pune city

Sr. No	Respondents	Percentage (%)
1	Yes	75%
2	No	35%
<b>Total</b>		100%



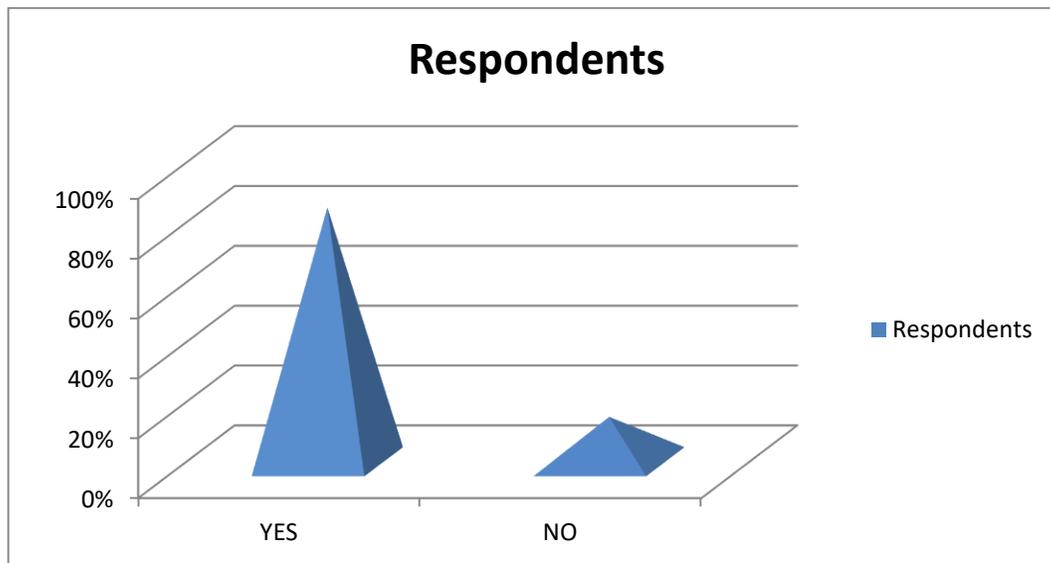
**Graph No 2:** Awareness about crime rate in Pune city

**Interpretation:** The interpretation of the above graph and table shows that, maximum no. of respondents aware about crime rate in Pune that is the 75% knowing and 35% are don’t know about that.

3) Are you aware about the types of IOT products available in market for Mall IoT?

**Table No 3:** awareness about types of IOT product available in market

Sr. No	Respondents	Percentage (%)
1	Yes	85%
2	No	15%
<b>Total</b>		100%



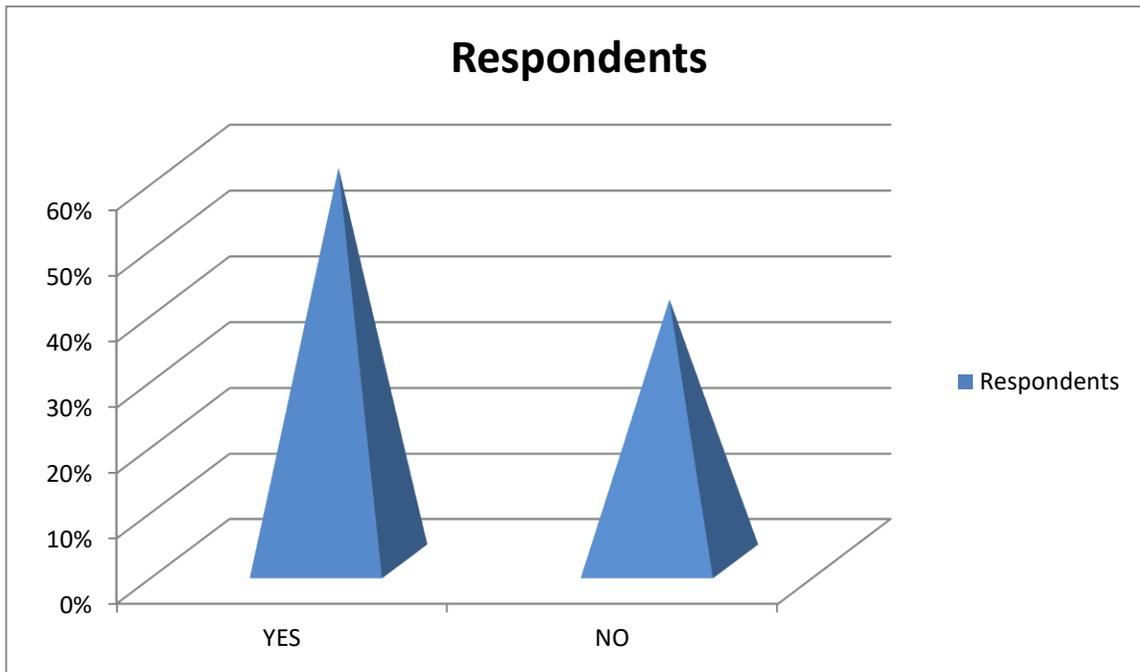
**Graph No 3:** awareness about types of IOT product available in market

**Interpretation:** The interpretation of The above Graph and table shows that, maximum no. of respondents aware about various IOT systems available in the market for Mall IoT. This type of respondents is 85% are Yes and 15% are No.

4) Are you willing to purchase IOT system for your Mall?

**Table No 4:** Awareness about IOT system product in Mall

Sr. No	Respondents	Percentage (%)
1	Yes	60%
2	No	40%
<b>Total</b>		100%



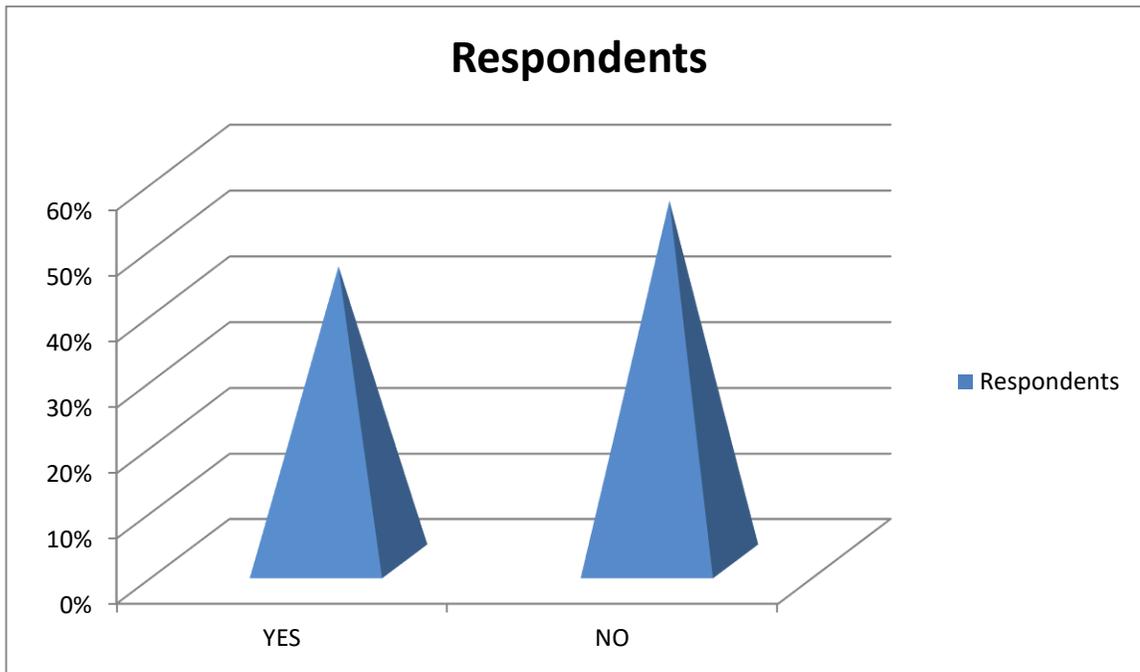
**Graph No 4:** Awareness about IOT system product in Mall

**Interpretation:** The interpretation of the above graph and table shows that, maximum no. of respondents ready this type of respondents is 60% are Yes and 40% are No.

5) Are you aware about benefits of IOT systems?

**Table No 5:** showing benefits of IOT system.

Sr. No	Respondents	Percentage (%)
1	Yes	45%
2	No	55%
<b>Total</b>		100%



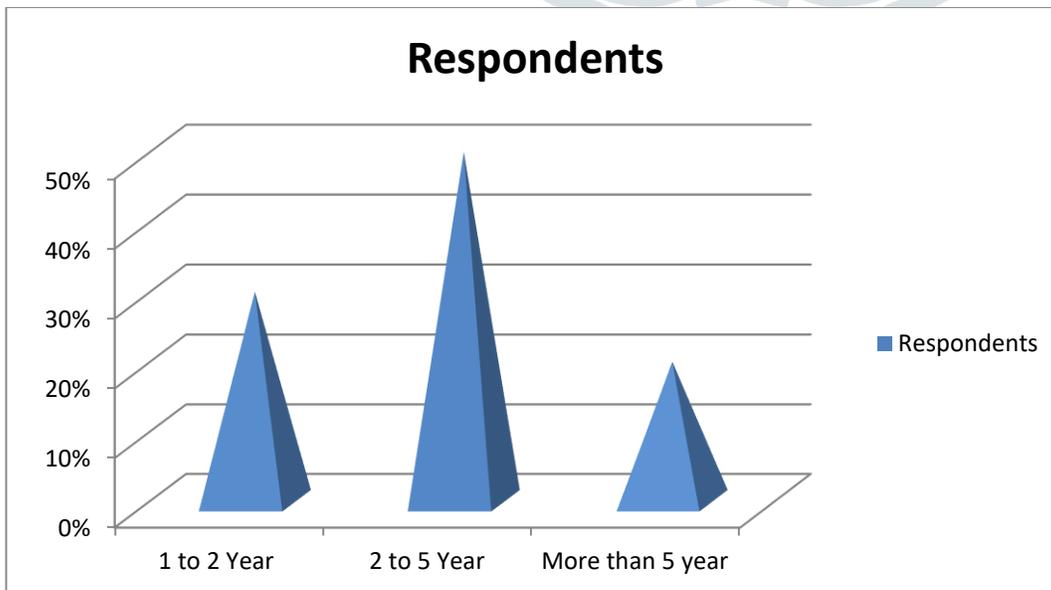
**Graph No 5:** showing benefits of IOT system.

**Interpretation:** The interpretation of the above graph and table shows that, 45% aware respondents know what the benefits of IOT system are and 55% respondents don't know what is the benefits of IOT system.

6) Since how many years you are using IoT product?

**Table No 6:** showing use of current IOT product in year.

Sr. No	Respondents	Percentage (%)
1	1 to 2 year	30%
2	2 to 5 year	50%
3	More than 5 year	20%
<b>Total</b>		<b>100%</b>



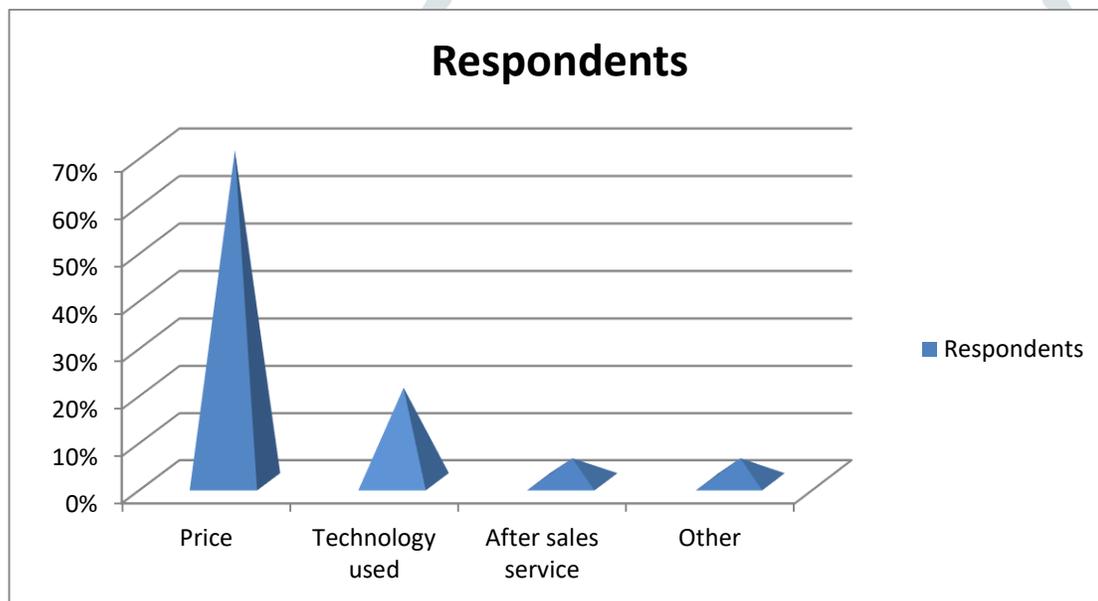
**Graph No 6:** showing use of current IOT product in year.

**Interpretation:** The interpretation of the above graph and table shows that, 30% respondent's use of IOT system more than 5 years and 50% respondents are using 2 to 5 years and 20% respondents are using 1 to 5 years.

7) Which factor do you consider while purchasing IOT system?

**Table No 7:** purchasing IOT system

Sr. No	Respondents	Percentage (%)
1	Price	70%
2	Technology used	20%
3	After sales service	5%
4	Other	5%
<b>Total</b>		100%



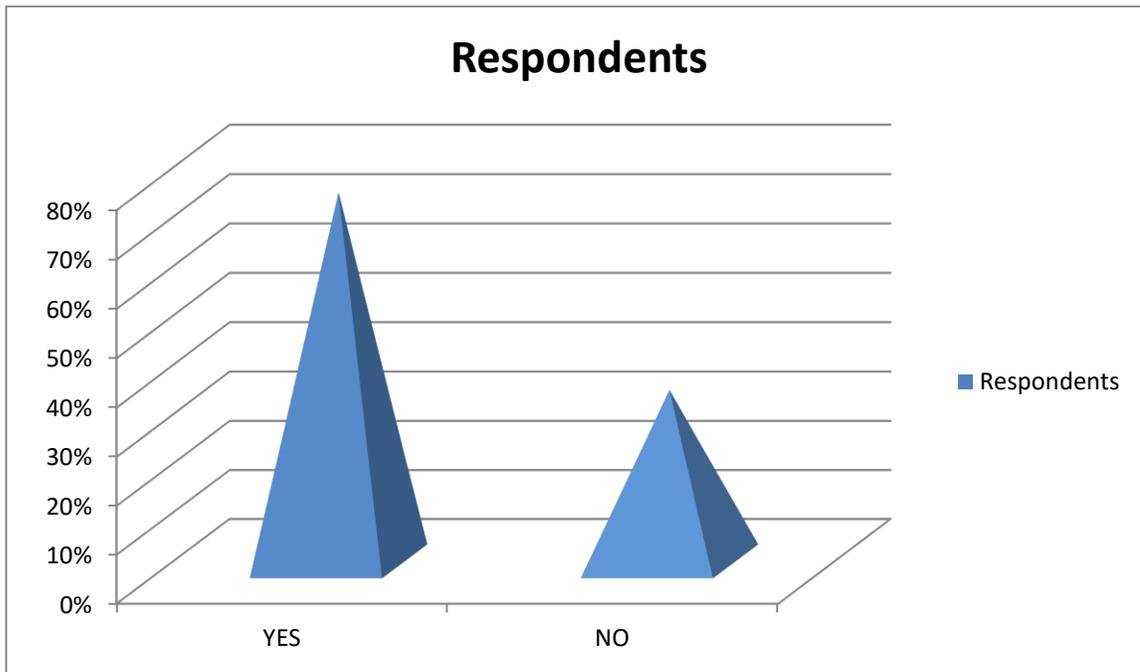
**Graph No 7:** purchasing IOT system

**Interpretation:** The interpretation of The above graphs and table shows that, maximum no. of respondents considering price factor that is 80%, 10% respondents are considering technology, 5% respondents are considering after sales service. 5% respondents considering other factors.

8) Are you aware about the number of companies available in market for IOT system?

**Table No 8:** number of companies available in market

Sr. No	Respondents	Percentage (%)
1	Yes	75%
2	No	35%
<b>Total</b>		100%



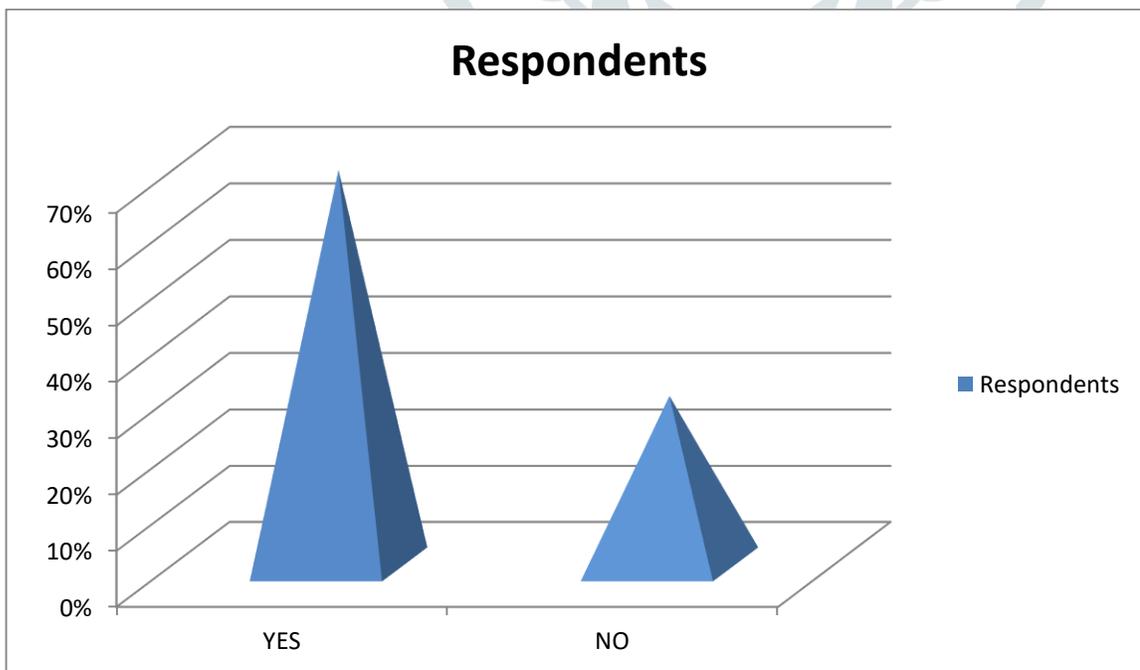
**Graph No 8:** number of companies available in market

**Interpretation:** The interpretation of the above graph and table shows that, 75% respondents Yes. And 35% respondents No.

9) Are you interested to purchase another IOT service or upgrade your current IoT service?

**Table No 9:** Awareness about IOT system product in Mall

Sr. No	Respondents	Percentage (%)
1	Yes	70%
2	No	30%
<b>Total</b>		100%



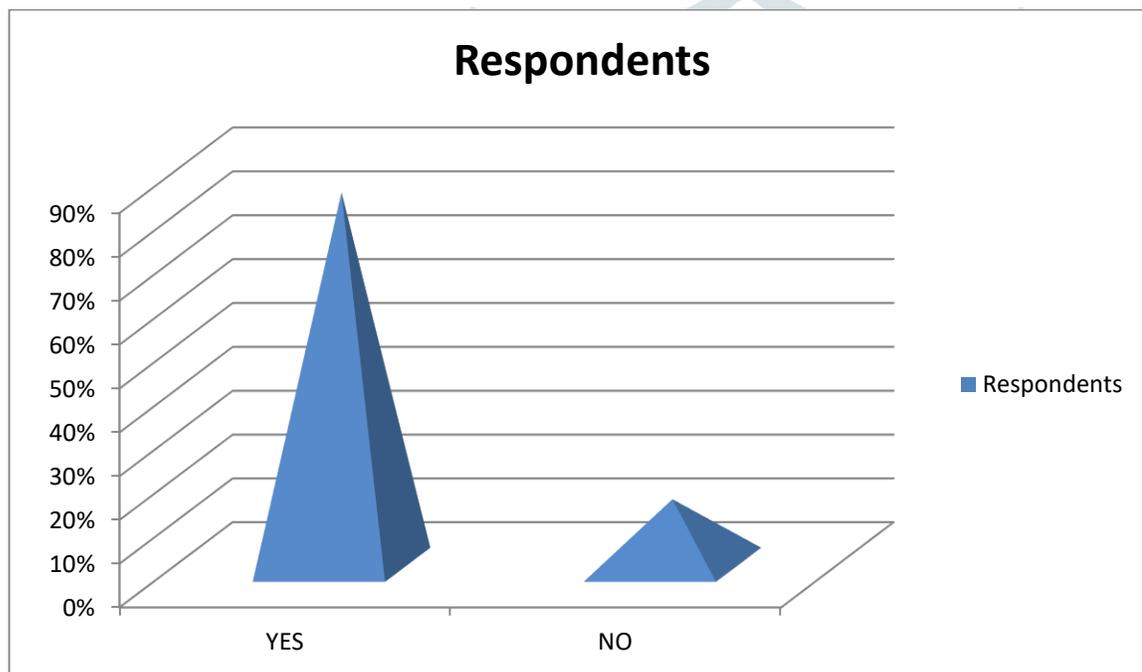
**Graph No 9:** Awareness about IOT system product in Mall

**Interpretation:** The interpretation of the above graph and table shows that, 70% respondents Yes. And 30% is No. for Awareness about IOT system product in Mall

10) Are you satisfied about current companies after sales service?

**Table No 10:** satisfied about current companies

Sr. No	Respondents	Percentage (%)
1	Yes	85%
2	No	15%
<b>Total</b>		100%



**Graph No 10:** satisfied about current companies

**Interpretation:** The interpretation of the above graph and table shows that, satisfied about current companies 85% respondents Yes. And 15% is No.

## 6. OBSERVATION, FINDINGS, SUGGESTIONS & CONCLUSION

### 6.1 OBSERVATION AND FINDINGS

1. There is a maximum market potential of IOT systems for Malls in Pune city.
2. Most lucrative of potential segment targeted is jewelry Malls, cloths showrooms, gold showrooms, automobile showrooms, hotels, lodges, mobile showrooms, cinema halls, etc.
3. It was found that respondents give first preference to the product Performance followed by reliability of product and then to the price.
4. It is observed maximum of the Mall keepers feel the price of IOT Is high.
5. Mostly in the market it is found that for IOT reason Mall keepers prefer IOT camera not use another IOT product. Like smoke detectors, metal detectors, sensor, etc. Because of price factor.
6. Price also plays an important role in the decision making than technology.
7. Product satisfaction is there for existing IOT system but some way or the other they are dissatisfied with after sales service.

## 6.2 Suggestions

- Field officers should frequently visit the existing customers and enquire about their requirements and problems they face.
- SSP Technology has to increase their advertising to reach maximum people.
- To meet the customer expectation, SSP Technology has to provide discounts, gifts, & run loyalty program.
- The company should sponsor any measure event in Pune.
- Company should also focus on sub urban areas of Pune city.
- Field officers can take sales leads from existing customers.
- Company should take IOT & Safety awareness camp in major Malting areas of Pune city.

## 6.3 Conclusion

In today's market most of the Malls using the IOT system; relative market share for the HSS is indelible. Most of the Malls are well aware of the HSS systems. Had created the brand in the market for the IOT system. Due to increasing of IOT & crime rate in Pune. This is the actual market potential of software project of SSP technology Pune. There is huge potential for the Micro Technologies India Ltd. IOT system especially in the some niche Mall segments in Pune from this Malls study it can be concluded that this product is having large scope in market. In today's business world, the IOT & safety is must for over commercial Malls due to increasing crime rate.

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