

A Statistical Analysis on Demand of Security Devices in India

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ABSTRACT

The security systems industry caters to a wide range of area which includes front door management, security biometrics, CCTV cameras integrated with door locks, electronic safes and vaults, security alarms. In India the electronic security market is growing rapidly. There is vast potential in the security locks and security solutions market as they are right now a niche market and a very few consumers have the idea of the products available in the market and its advantages. So the industry demands a very high tech savvy consumer who is aware about the technicalities of the products. Another area of growth is the servicing of these locks and implementation in other areas like thermostat control, garage maintenance, front door management, etc. In this paper we attempted to analyze the demand of electronic security products in India with the special reference to Delhi- NCR region. An exploratory study was carried out by interviewing and interacting with the dealers, dealing in security products from Ghaziabad, Noida, Gurgaon and Delhi. The paper provides valuable insights about vast potential in the security locks and security solutions prevailing in India.

Keywords

Security Systems, Locks and Security Solutions

1. INTRODUCTION

Demand for security products are growing across the globe. World demand for security equipment is growing from the annual growth of 5.2% in 2008-13 to 6.8% in 2013-18. The fastest gains will be in the parts of Asia, Central and South America, Africa and the Middle East, where security markets are underdeveloped and the intensity of security product is low in use. India is expecting a growth rate of around 30-35% in coming years [1, 2]. In the United States and Western Europe, an improved economic outlook and rebound in building construction activity will provide significant opportunities. Technological innovations and the integration of security equipment with smart phones and other electronic devices, as well as with lighting, heating, and other building systems, will aid sales of security equipment. New age devices like video door phones, CCTV cameras with digital video recording and access control mechanisms not only provide surveillance of homes in the absence of owners, but in case of break-ins or burglaries, also raise an immediate alarm that not just reaches them via mobile phones, but also their neighbors [3, 4].

The Freedonia industry study analyzes the \$11.6 billion US security product industry. It presents historical demand data (2004, 2009 and 2014) and forecasts (2019 and 2024) by product (e.g., alarms, access controls, video surveillance, contraband detection, electronic article surveillance) and market (e.g., government and institutional, consumer, trade

and distribution, industrial, air transport, financial institutions, office and lodging establishments) [5-7].

The increases in crime and terror attacks have given impetus to the demand of such security devices. It is also the best time to invest in India as India is developing as a global manufacturing hub with the vision of make in India campaign [8, 9]. In this paper we are presenting a profound statistical analysis on demand of security devices in India with special reference of Delhi NCR region. A team of students of our college conducted a ground survey. Collected data to analyses the demand of security devices in the region and the figure 1 gives a clear indication that there is high demand of such devices in India.

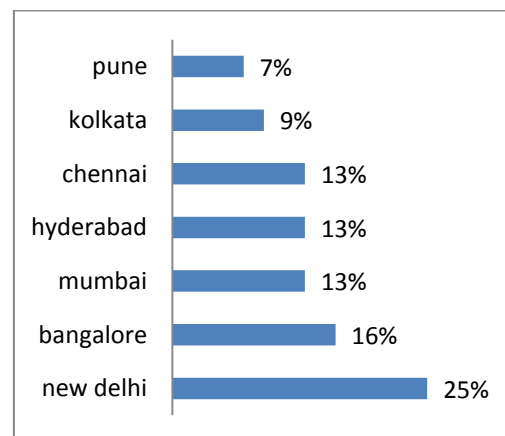


Fig 1: Demand of security devices in metro cities

2. OBJECTIVES OF THE STUDY

The study focuses to gain into following objectives:

- To understand the market potential and growth of security systems devices in India.
- To analyze the demand and supply of security systems in Delhi/NCR.
- To explore the possibility of setting up an industry in Delhi/NCR to cater the present and future demand of security systems devices.

3. METHODOLOGY

3.1 Sampling Technique

A well-structured self-designed questionnaire was prepared for the collection of necessary primary data to study the market potential of security systems, its demand and supply status and how this gap could be filled with the growth in demand of such product.

3.2 Source of Data Collection

A survey was conducted involving a self-designed questionnaire to the dealers /customers respondents. Respondents were asked about a variety of questions regarding the most prospective demand for security systems. Secondary source of information here includes library resources, articles in various newspapers and magazines and online resources like company websites, online reports and articles. Sample size taken for the research was 93 respondents.

4. RESULTS & DISCUSSIONS

96% of hardware dealers deal in electronic security systems in Delhi/NCR. This shows that there is huge potential in this region. They all have stated that it was the requirement of the market demand that they have to start dealing with this product and this demand has grown in last 4 to 5 years.

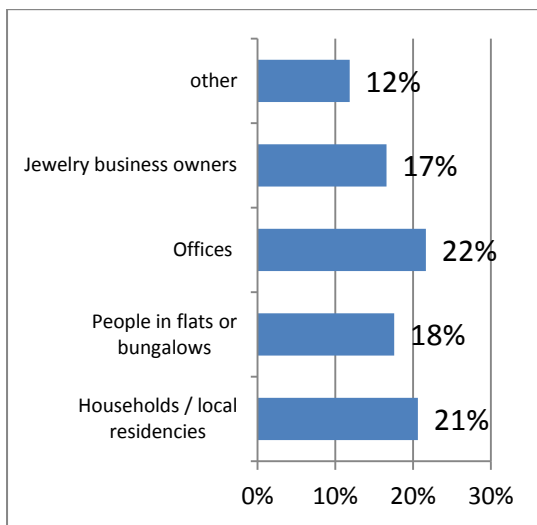


Fig 2: Most prospective clients

The figure 2 shows the results that prospective demand of the electronic security systems are mostly in office i.e. 22% compared to household with 21%, people in flats or bungalows with 18%, jewellery business owners with 17% and others with 12%. The 75% of dealers/manufacturers have said that they do not manufacture security system rather they import and assemble it whereas 25% have said that they manufacture these devices locally.

During the research it was found that 32% of manufacturers face challenges while procuring the raw material in terms of import restrictions whereas supply constraints and defects in product are 24% each, 16% believed that large amount of tax is also a kind of challenges they face, only 4% see high logistic charge as a challenge as shown in figure 3.

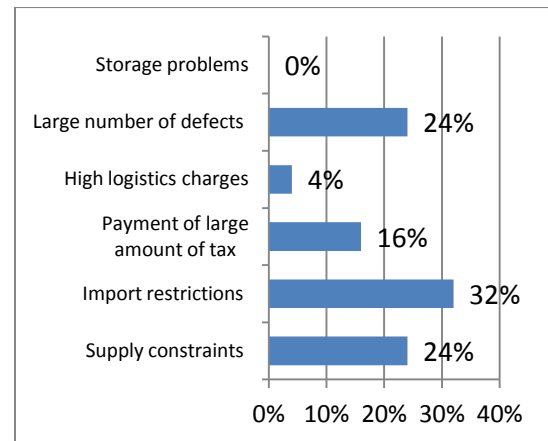


Fig 3: The challenges while procuring the raw materials required for manufacturing

From the study it is evident that those who don't manufacture, 78% procure from local vendors, 6% from international vendors and 16% procure from local as well as international vendors shown in figure 4.

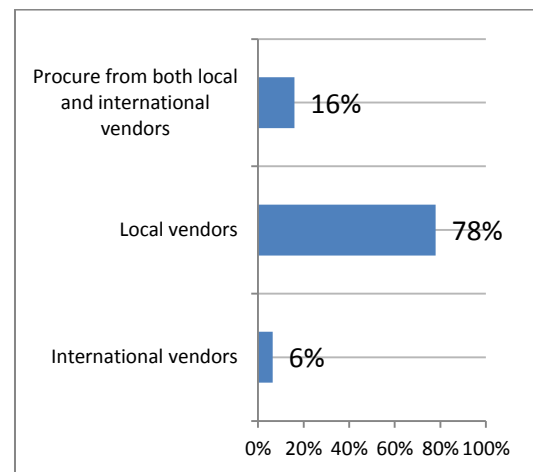


Fig 4: The security devices procured by

It is quite evident from the study that 80% of the local suppliers are facing problems related to availability of electronic security devices in India as shown in figure 5. The problems facing by local suppliers are indicating the demand of establishing the manufacturing industry of such devices in India.

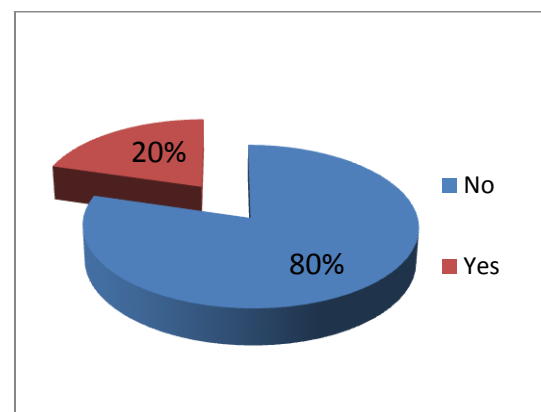


Fig 5: Facing problems related to supply

Now days, technology has connected security locks with your mobiles, so the limited battery backups hinders them to prevent their places. Frequent power cuts especially in Noida & Ghaziabad region, technical problem with the product and networking issues with modern devices are some of the hurdles that make people reluctant to use these products. The frequent complain that a dealer faces is frequent power cuts and mobile power backup. After sale services is also on the concern as most of the devices are imported from outside of India therefore these product needs technical guidance to increase the need of after sales services as shown in figure 6.

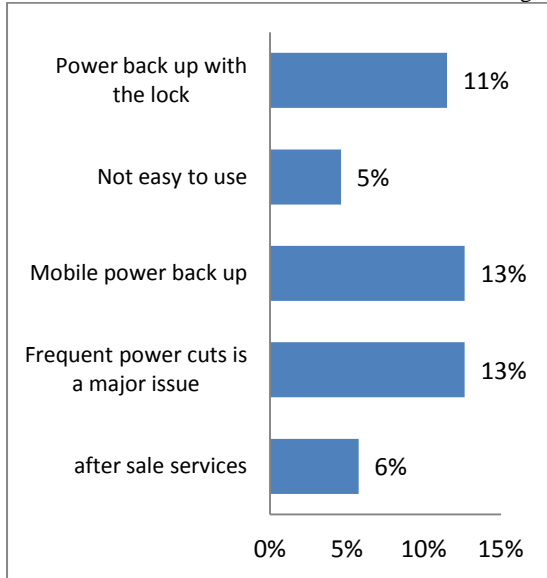


Fig 6: Consumers complaints

There are 6% of dealers reported complaints related to after-sale service, whereas 13% have experienced problems related to power back-up and 11% faced problems related to inbuilt power back up with the lock. 10% have reported technical problems and 20% have reported networking as major complaint.

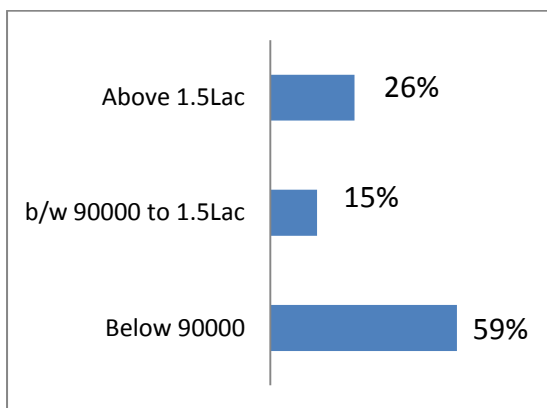


Fig 7: Various price ranges

As people in India are too price sensitive, and wants to procure best at cheap rates. So the most asked prices are somewhere as low as could be. Practically, retailers keep the huge stock of that product which is most demanded. So the majority of retailers keep the product which is less than Rs. 90,000/-. 26% also prefer to keep product above Rs. 1,50,000/-. Price range customer is willing to pay at POP: majority of customers are willing to pay the price which is as low as possible. 59% are ready to pay below Rs. 90,000/-.

Only 15% are the ones who take products ranging from Rs.90,000/- thousands to Rs 1.5 Lac. And most importantly products are sold as a bundled packages as shown in figure 7.

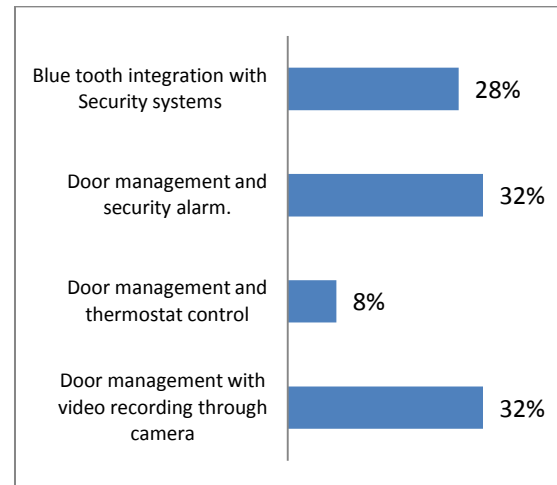


Fig 8: Other features demanded apart from the normal security features

The most demanded advancement is connecting the product with the wireless technology and wardrobes should be integrated. Some are also demanding about the bluetooth connectivity and door management with videos. During the study it was reported by dealers that 32% of customers are asking for product in both the category with “Door management with video recording through camera” and “Door management and security alarm, whereas 28% inquires for “Bluetooth integration with security systems” and 8% have shown interest in “Door management and thermostat control”.

5. CONCLUSION

In summary, this research highlights that as security is always a major concern in India. Although the research focused on Delhi-NCR region but the demand for security devices is increasing day by day throughout the country as shown in figure 1. Moreover, terror attack like 26/11 have forced government establishments to think and upgrade their security systems from manual to security devices. Delhi being capital of country also plays a role in terms of increasing demand for it. Through mathematical analysis following figure gives a fair idea in terms of increase in demand of security devices.

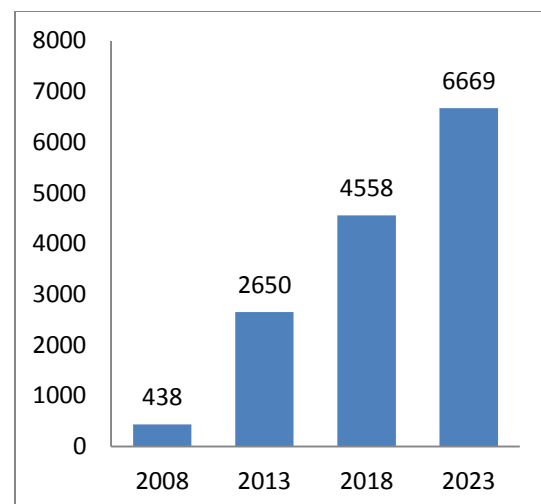


Fig 9: Prediction of growth of security equipment demand

The empirical formula for the growth of security equipment demand in India is $y=2549+412(x-2013)$ which is obtained by the existing data. The formula is predicting that the market of security devices will increase with more than 40% growth rate and reach to the 6669 million dollar in 2023 as shown in figure 9. This shows that the Indian market is ready to become a manufacturing hub for security devices. The government of India is also inviting all the investors to invest in India in all manufacturing sector and providing all necessary support. By the existing research we have shown that there is high demand of security devices in India as well as the world, thus this research proposed in future it is the key element which creates huge employment and can contribute in India's GDP.

6. REFERENCES

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