Advance Technologies for Elimination or Mitigation of Retail Theft, and How This Can Affect the Consumer

[Name of the Writer]

[Name of the Institution]

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**Introduction**

Business market is a diverse place, where millions of transactions take place every day. These transactions give profit to some individuals while pushing some others towards loss. Business is all about profit and loss. The place where these transactions take place is called a market. A market is a place where commodities are bought and sold in exchange for something, mostly money.

If considered in the broader terms, markets are divided into two categories, Business to business (B2B) and Business to consumers (B2C) markets. B2B markets are those markets or traders that serve the business community of the market that it is serving. Their traders mostly deal in raw products or unfinished material that is used in further production of finished goods. These businessmen do not have direct dealing with the consumers and usually provide their merchandise in bulk form. This type of market is also known as the wholesale market, where the businessman or the producer can get things in bulk and a discounted rate from the market.

Another type of market is known as business to consumer or B2C market. This type of market deals directly with consumers. It produces, markets and sells products and services to those individuals who directly consume it rather than selling it to the merchandisers. Producers keep the direct consumer in their minds and make and design the product according to their choice and preferences. B2C markets are also known as Retail markets (Pennacchioli, et. al., 2014). It is, in fact, the most common type of market found in the business world. Retail markets have a lot of diversity.

There are multiple types of businesses that serve consumers directly and in various ways. Some of them directly manufacture and sell products and some businesses provide services, instead of providing direct products to the users. Some prominent examples of retail business are department stores, supermarkets, warehouse stores, specialty stores, discounted stores and many more (Caprice, Schlippenbach, & Wey, 2014).

Retail store is a very successful and growing business not only in the United States of America but also all over the world. Every now and then, retail stores can be seen popping up around the corners of one street or another. Multiple studies have shown that opening up a retail store provides much more profit and psychological satisfaction to the retailer as compared to starting any other business. It has also been observed that retail stores prove to be a much more profitable business as compared to any other business type. But this business type can also turn out to be a non-profitable one if the dark sides are not kept in the mind.

One of the major evils that come along with the starting of a retail business is Retail Theft. Retail theft, also more commonly known as "Shoplifting" is the act of stealing goods from a retail store. The person involved in the act of shoplifting or retail theft intends to deprive the merchandiser of the value of the merchandise, mostly on a permanent basis. Retail theft is a major crime prevailing in the business markets of the United States of America and many retailers are fed up these activities. The act of retail theft is mostly carried on by drug addicts or homeless people who cannot afford to buy the goods (Smith, & Clarke, 2015). The shoplifter mostly conceals the stolen item. There is a specific word assigned to the lost item or merchandise as a result of retail theft, called Shrinkage. Most of the times the crime goes unnoticed. Retailers and store owners have always been looking for various methods to curb this evil. Multiple methods have been devised to stop this crime altogether or at least bring a reduction in its rate of occurrence.

Technology has played a major part in this respect. Since the rolling out of new technologies and mechanisms in every field, things are becoming easier to manage and handle. Same has been the case in the sector of retail marketing. The area of retail marketing or stores has also taken use of these advancements and installed various types of technologies and instruments to handle the matter of retail theft. The following piece of research will look into the induction of advanced technologies in the retail stores in order to eliminate or mitigate the evil of retail theft completely or at least to some extent and how these inductions will affect the consumer of that retail market.

**Literature Review**

The crime of shoplifting or retail theft is not a recent one. In fact, the retailers have been facing it for a very long time. In fact, the act of shoplifting started when people started shopping for items (Clarke, & Petrossian, 2002). The first case of shoplifting r retail theft was noticed in London, in the 16th century. It was carried on by a group of shoplifters called lifters. At that time, the shoplifters were also perceived as con artists and even pimps and prostitutes,

The boom in the retail market or the store industry also brought various revolutions in the designing and the shapes and sizes of the retail stores. The owners or managers of the stores started placing goods at the very front or in the showcases in order to give a better view to the customers of the product. This also enabled the customers to touch and feel the products. But this advancement brought a drawback with it as well; a visible rise in the reporting of shopliftings. This all happened in the 17th century when the products were begun to be displayed in showcases or glass windows in order to attract more customers.

However, the term retail theft or shoplifting had not been used for this act. The term "shoplifting" came into existence when the Ladies Dictionary used it to define and describe the famous shoplifters of that time, the 17th century (Yamato, Fukumoto, & Kumazaki, 2017). Some of the notorious names in the field of shoplifting, especially the females were Mary Frith, Moll King, Sarah McCane, Maria Carlston and Samuel Pepys.

The first act or the law, to stop the crime of retail theft was passed in 1699, by the English Parliament. This act was the part of the Bloody Code, so the people who were proved to have shoplifted any item of more than five shillings were hanged in London's Tyburn Tree, in front of thousands of people or would be transported to Northern American Colonies.

In the beginning, retail theft or shoplifting was considered an act purely committed by females. In the late 19th century, to be more precise in 1960, the concept of shoplifting was revisited and hence, redefined. This time, it was considered more of a political act instead of a crime. The shop keepers or retailers started taking various measures to avoid the act of shoplifting by hiring more staff and keeping a close check at the customers (Kanashiro, 2008). As the technology had not made much progress at that time and the retailers were not focusing on the aspects of the use of technology to stop the evil of retail theft, they were paying more attention towards using the manual or more appropriately human methods in order to stop shoplifting. Researchers have extensively found out that shopkeepers had used to hire more staff in order to keep a look at the customers walking in the shop. The owner of the business or the stores also used to keep a closed check at the customers coming in and leaving the store. Moreover, the business owners also adopted approaches like building friendly relations with the customers and keeping healthy bonding with their employees so that they can be motivated to point out any such activity happening in the market.

With the passage of time, the technology advancements by leaps and bounds and new inventions came in the market to help the law enforcement agencies in the detection and catching of t6heives. Similar kinds of advancements also took place in the area of retail marketing. Retail marketers were pushed to take help from technology for security purposes (Rougier, Meunier, St-Arnaud, & Rousseau, 2007). Unlike before, they started realizing the importance of technology for running a business, especially for security purposes and cash handling. Thus they started installing security cameras and scanners in their shops and stores so that the evil of shoplifting can be stopped. The various previous studies on the uses of technical measures, especially surveillance cams, scanners, and many other inventions have proved that there has been a considerable reduction due to the use of these inventions (Perlman, & Ozinci, 2014).

**Research Design and Methodology**

The research method adopted for this research was descriptive and comparative research. The population in the case of this research were all the retail stores, including the departmental stores, clothing stores, baby and mama stores, cosmetic stores and boutiques, out of which 100 stores of various shapes and sizes will be selected to collect data regarding the use of technology and retail theft. It will be kept in mind that half of these stores use the advanced technologies of surveillance and half do not or use the minimum amount of technology for security purposes so that the results can be compared at the end.

**Discussion**

Retailers have been using various measures to curb the evil of retail theft in order to secure their business and save their goods from being stolen. In the previous times, when the science and technology had not made much progress and not many machines had not been invented in for the security purposes, the retailers were bound to use limited resources for the check and balance of merchandises. Most of the retailers did not use any measures to keep their merchandise secure from shoplifters at all. Those, who were aware of the consequences of this evil, were using security measures but on a small or manual scale. They used to hire more staff according to the size of the store and the type of business. Moreover, the retailers had to keep a suspicious eye on each and every customer, whoever entered and left the store. Relationship building with the customers and employees also helped in lessening the crime rate of theft.

Currently, with the rolling out of multiple latest technologies, it has become much easier to cope up with the security issues and the criminal activities like retail theft in the retail stores and departmental stores,

**Surveillance Cameras:**

The use of surveillance cameras for the purpose of security first started in Germany, in 1942, when German scientists used them to monitor the launch of V2 rockets. Later in 1960, Closed Circuit Cameras (CCTV) cameras were used to monitor the Thai Royalty in England, in the Trafalgar Square in London. Until 1965, the usage of CCTV cameras had become much popular and in 1969, these cameras were had begun to be used as a security tool for the homes. Until 1990, the use of these closed circuit cameras had been so common that they were installed at every ATM machine and the year 1996 brought the first IP camera in the market. The 2001 terrorist attacks on the World Trade Center highlighted the importance of the surveillance cameras on a new level and urged the government and non-government organizations to use more and more security cameras (Lauer, 2012).

The use of surveillance cameras in various places, like metro stations, subways and especially retail stores and shops has been proved to reduce the crime rate and retail theft figures to up to 25%. It is also a very economical method as the cost incurred on the installation of a single security camera and making a limited area secure from it is approximately US$ 2000 (Priks, 2105).

**Electric Article Surveillance (ESA):**

A comparatively new technique in the surveillance industry or making the retail market more secure is the use of Electric Article Surveillance (ESA). This is a form of tagging mechanism which includes the use of one or more antennas that are connected to the hard tags or labels on the articles found in the store. These antennas are placed at the entry and exit point of the store and if any customer or shoplifter tries to walk past them, the electromagnetic waves ring an alarm, and the thief is caught immediately. The usage of Surveillance tags first began in 1966 after its invention by Arthur Minasy.

The major forms or types of Electronic Article Surveillance Systems are Electro-Magnetic System (Also Known as magneto-harmonic or Barkhausen effect), Acousto\_magnetic, (also called magnetostrictive), microwave, radio frequency and video surveillance (to some extent). The installation and use of Electronic Article Surveillance Systems has proven to be an extremely successful technique in order to finish the crime of retail theft at a large level and has found to eliminate almost 99% -100% of the cases of retail theft (Aba, Abah, & Ozowa, 2016).

**Impact on Customers**

The use of modern technologies for security purposes have created great ease of work for businessmen and retailers. The businessmen and the store owners are extremely happy and relaxed over these advancements and are significantly moving towards their usage so that they can reduce or minimize their shrinkage.

Moreover, these advanced inventions and technologies have also impacted the customers significantly. They have improved the relations considerably between the retailer and the customer or the end consumer. With the usage of these updated mechanisms, retailers have become much relaxed from the side of security and are able to focus more on providing better products and services to their customers, which has resulted in the improved relationship between the consumers and the retail business managers (Križan, Bilková, & Kita, 2014).

**Conclusion**

In short, it can be seen that progress and advancement in technology have greatly benefitted the retail market. It has made the environment more secure and peaceful for consumers to shop. Moreover, the use of latest technology and the machines has made it much easier for the retailers to manage their business more properly, without worrying about the issues of retail theft or shoplifting.

These technologies include many machines, but the most prominent and recent ones are Close Circuit Cameras (CCTV) and Electric Article Surveillance (ESA). These devices have reduced the numbers of shoplifting considerably. These machines have also assisted in solving many cases of retail theft and capturing the culprit, most of the times, red-handed. These devices are proving to be extremely advantageous for retailers and they should imply maximum number of machines in their businesses in order to make their business and merchandise secure and provide better services to their customers.

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