



Introduction to E-Keychain

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ABSTRACT

This research paper aims to find the usefulness of e-keychains in growing India. As we know, technology is increasing rapidly, and so is the youth, the youth want something new and innovative every day, and to fulfill that gap, the most common product in households is kachinas. To make life easier for the youth and the old age here is a paper on e-keychain and how they'll change the mindset of people. The report examines how effective the e-keychains would be and how they'll create a trend in the market. Another important part of the fashion history of keyrings relates to the keychain. The original keychain fastener was used to prevent burglaries by fastening keys tightly to doors. The invention was patented in 1894 by Frederick J. Loudin. As well as an inventor, Loudin was a member of the Jubilee Singers, a world-famous touring African-American choir that performed for Queen Victoria. Hampered by racism in his country, Loudin never received full credit for his invention but is today honored by the Black Inventions Museum.

This was about the old-fashioned key chains and how long they go back, but taking about today's world, it's necessary to bring change in the old products to create new impact, so this E keychain will help the needy with whatever they want with their device.

Key Words- usefulness, increasing technology, effectiveness, youth beneficial

I. INTRODUCTION

A keychain is a small ring or chain of metal to which several keys can be attached.

The length of a keychain allows an item to be used more easily than if connected directly to a keyring.

As the world is getting more advanced and updated, we have planned to launch our first e-keychain. We

have chosen a keychain as our product because of the growing technology in the world. Our company is coming up with many new features in a simple keychain like GPS and Bluetooth. Camera and flashlight.

Our product is eco-friendly as it is made up of reusable plastic polypropylene, and the E-keychain will be charged through solar energy; most importantly, many people will be able to afford it due to its quality product at a low cost.

You won't need to worry about losing your keys anymore with the Smart key chain that will not only save your keys from getting lost but also look stylish. This smart keychain comes with an anti-theft/anti-lost alarm that will ring if your keys go 20 m away from you. Moreover, it comes with a ring my keychain/phone feature so you can find your keys/phone under the sofa too.

One of the major advantages is the GPS tracker in it, so you can locate the last location with your phone. Apart from all this, it also has a cool selfie button to capture all the good times.

O

II. REVIEW OF LITERATURE

(Liu & Ning, 2002)

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Broadcast authentication is a fundamental security service in distributed sensor networks. A scheme named μ TESLA has been proposed for efficient broadcast authentication in such networks. However, μ TESLA requires initial distribution of certain information based on unicast between the base station and each sensor node before the actual



authentication of broadcast messages. Due to the limited bandwidth in wireless sensor networks, this initial unicast-based distribution severely limits the application of μ TESLA in large sensor networks. This paper presents a novel technique to replace the unicast-based initialization with a broadcast-based one. As a result, μ TESLA can be used in a sensor network with a large number of sensors, as long as the message from the base station can reach these sensor nodes. This paper further explores several techniques that improve the performance, the robustness, as well as the security of the proposed method. The resulting protocol satisfies several nice properties, including low overhead, tolerance of message loss, scalability to large networks, and resistance to replay attacks as well as some known Denial of Service (DOS) attacks.

(Hinkes, 2018)

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Most crypto assets natively function as bearer instruments. Whoever controls the private key for a given crypto asset wallet generally controls the assets held by that wallet. In a civil or criminal action or as part of a governmental investigation, parties may be ordered to disclose their private keys or to transfer crypto assets controlled by those private keys. However, people forget things and lose things, including extremely important things. Parties may lose private keys, and thereby lose control of their assets; parties acting in bad faith, or due to ideological motivation, may claim that "lost" or "forgotten" private keys prevent them from complying with disclosure or turnover orders. Determining whether claims of lost or forgotten private keys are genuine or are bad faith attempts to protect assets will be a challenge for courts, forcing them to confront complex, technology-specific evidence and requiring that they determine whether that loss is Bonafede or tactical" self-created impossibility." Courts may likewise find that traditional contempt sanctions are insufficient to compel a motivated contemnor to comply with disclosure or turnover orders. To avoid expensive, time-consuming evidentiary hearings on contempt, parties and courts should consider ex ante measures, including standing orders and injunctive relief that would require disclosure of and prevent the loss of private keys once financial condition becomes relevant to any claim or defense in litigation. Legislators could create novel contempt sanctions that leverage the unique features of crypto assets to lien sufficiently identifiable crypto assets at issue.

New laws could create registries listing identifiable crypto assets subject to turnover orders

(Hirose et al, 2008)

A concept and demonstration of a switching in frequencies of molecular motions are described using a pseudorotaxane system. The setup consists of dibenzylammonium hexafluorophosphate and a photochromic dianthrylethane- based [24] crown- 8- type macrocycle, which we designed as a key ring component for the pseudorotaxane system having photocontrollable threading functionality by changing the size of ring component due to the action of light.

(Wang et al, 2017)

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Although mass customization, which utilizes modularization to simultaneously increase product variety and maintain mass production (MP) efficiency, has become a trend in recent times, there are some limitations to mass customization. Firstly, customers do not participate wholeheartedly in the design phase. Secondly, potential combinations are predetermined by designers. Thirdly, the concept of mass customization is not necessary to satisfy individual requirements and is not capable of providing personalized services and goods. Industry 4.0 is a collective term for technologies and concepts of value chain organization. Based on the technological concepts of radio frequency identification, cyber-physical system, the Internet of things, Internet of service, and data mining, Industry 4.0 will enable novel forms of personalization. Direct customer input to design will enable companies to increasingly produce customized products with shorter cycle-times and lower costs than those associated with standardization and MP. The producer and the customer will share in the new value created. To overcome the gaps between mass customization and mass personalization, this paper presents a framework for mass personalization production based on the concepts of Industry 4.0. Several industrial practices and a lab demonstration show how we can realize mass personalization.

III. OBJECTIVES OF THE STUDY

Research objectives indicate what your study's goals are and why you are conducting them. They serve to focus your research by providing an overview of your project's methodology and goals.



Although each research project has a unique aim, the following broad categories could be used to categorize research objectives:

1. To study the effectiveness of e-keychain on youth
2. To appropriately represent our product's features so that consumers would grow accustomed to it.
3. To assess the issue, the level of customer satisfaction, and any issues the consumer may be having.
4. To explain how our product is superior to other products (in the same category) available and how it differs from them.

RESEARCH GAP

A research gap can be defined as an area or topic for which inadequate or missing information can limit the ability of reviewers to reach a conclusion for a given question.

The topic that we are studying, i.e., the keychain, is one which has not been researched much in the past. To fill this gap and recognizing the need of the market for this product, we started doing detailed research on it. The only purpose of us doing research on this topic and not on some other topic is that we love keychains and understand the market for the same pretty well.

RESEARCH METHODOLOGY

In simple terms, it refers to the overall approach or framework used to guide the research process. It includes theoretical perspectives, research design, data collection methods, and many more, and it ensures validity, reliability, and transparency.

SIZE OF THE STUDY

The size of the study refers to the number of participants or observations included in a study. In simple terms, it refers to how many people one collects information from.

In our case, the size of the study was the population of aged between 14-25 and elderly people, i.e., above 45 years. This was our target audience as this was the age group we found the most suitable for our product. We surveyed a group of the above people regarding our product. **The sample size for our study was 125.**

SOURCES OF DATA COLLECTION

There are two sources of data collection:

- 1) Primary Sources
- 2) Secondary Sources

The primary source of data is that which is gathered by the researchers themselves through questionnaires, interviews, and other methods. One illustration is the government of India's census.

A secondary source of information is one that mostly derives from the primary source.

We have chosen the major technique of data collecting for the aim of our study (i.e., for our product E-Keychain).

A compilation of data from the original source is referred to as the primary source of data. It gives the researcher access to quantitative and unprocessed data directly related to the statistical study. In other words, the researcher has direct access to the research topic thanks to the primary sources of information. For instance, statistical information, creative works, and transcripts of interviews.

We created a questionnaire for this report and circulated it to see how our product was received.

We have chosen the following data via questionnaires and schedules: In this way of gathering primary data, the researcher creates a questionnaire while keeping in mind the goal of the study. There are two methods the researcher can gather data using the questionnaire:

Mailing Method: This technique entails mailing questionnaires to informants in order to gather data. To clarify the goal of the study or research, the investigator mails a letter along with the questionnaire. The informants take note of the questionnaire responses and submit the finished file once the investigator promises them that their information will be kept confidential.

SAMPLING TECHNIQUES

Sampling is a technique of selecting individual members or a subset of the population to make statistical inferences from them and estimate the characteristics of the whole population.

In this research report, the method of study used a simple random sampling method. In this method, we asked people to fill up the questionnaire.

Random sampling is the purest form of sampling under the probability approach, which provides equal chances of being picked for each member of the target population.

Simple random sampling lowers selection bias while allowing the sampling error to be quantified, as is



the case with all probability sampling techniques. The fact that it is the most user-friendly probability sampling technique is a distinct benefit. Simple random selection has the drawback of maybe not selecting enough people who have your feature of interest, especially if it is not common. Also, it could be challenging to set up a thorough sampling frame and difficult to get in touch with them, particularly if you need to use multiple communication methods (email, phone, and mail) and your sample units are scattered over a wide geographical area.

DATA ANALYSIS AND INTERPRETATION

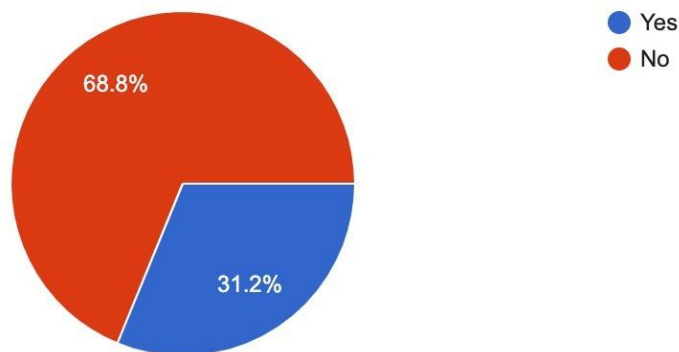
Data analysis means the ordering, manipulating, and summarizing, of data to obtain answers to research questions. Its purpose is to reduce data to interpretable form so that the relations of research problems can be studied and tested.

The aim of the questionnaire survey is to know more in detail about what kind of keychains people want and what is the scope of the business. We asked the following questions and got the following responses from a population of 125.

The sample size for the study conducted was 125.

Have you ever used the E-keychain?

125 responses



ANALYSIS

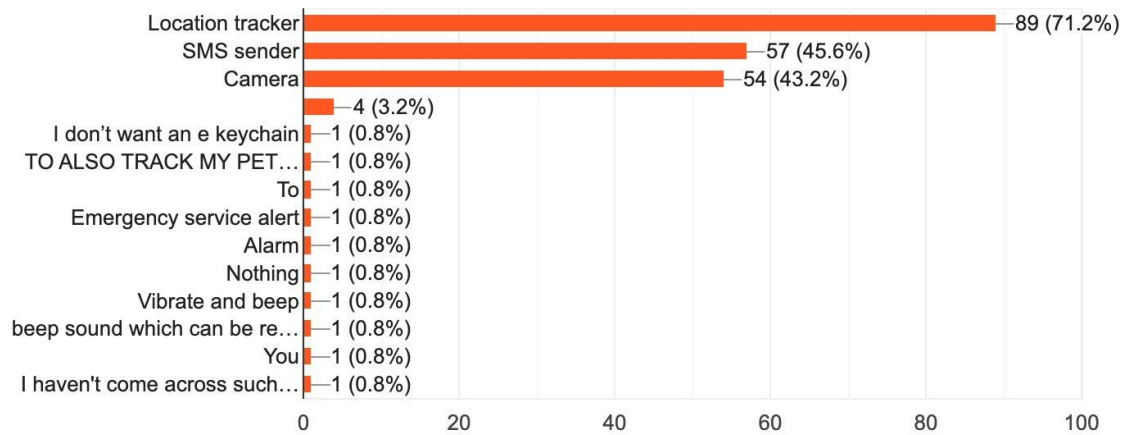
Research Analysis on the question regarding the usage of keychain 86 out of 125 have used it, and the other remaining 39 haven't used it.



What features would you like in your e-keychain?



125 responses

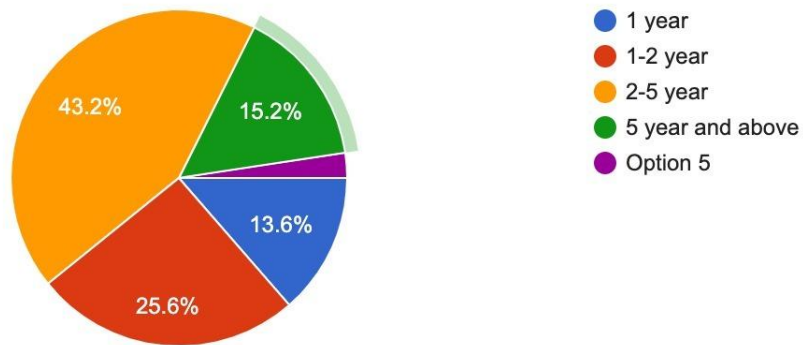


INFERENCE

According to the above, the majority of the respondents prefer location tracker, sms sender, and camera as the essential features of the e-keychain.

How important is the durability of the electronic keychain to you?

125 responses



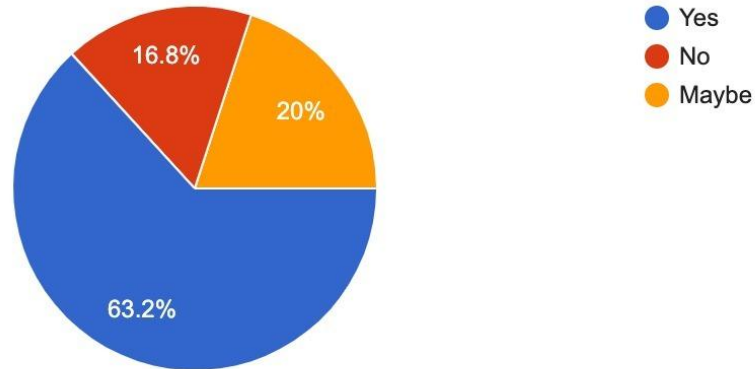
INFERENCE

According to the above pie chart, 43.2% of respondents chose the yellow part (i.e., 2-5 years), whereas the other remaining respondents chose 1-2 years, 5 years and above, and 1 year, and option 5, respectively (in descending order).



Would you like to own a E-Keychain?

125 responses



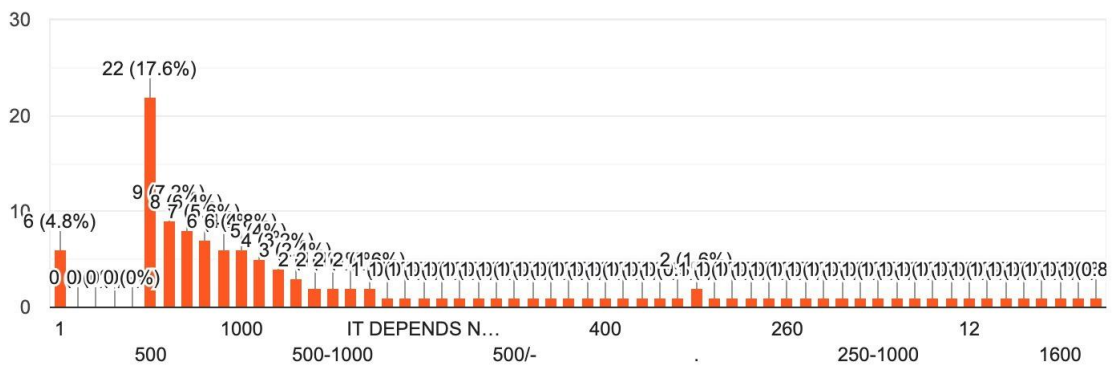
INFERENCE

According to the above pie-chart maximum number of people (63.2%) would like to own the e-keychain, and only 16.8% of the respondents are not interested in the same.

How much would you like to spend to buy one? Please enter the amount in Rs.



125 responses



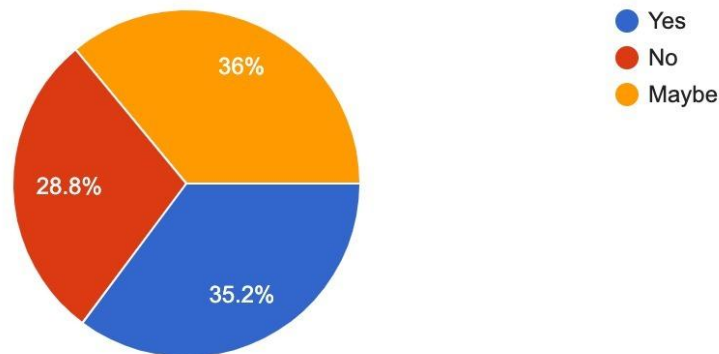
INFERENCE

According to the above figure, most of the respondents are interested in spending in the range of Rs 500-Rs 1200.



Are you interested in investing in a E-Keychain manufacturing and sales business?

125 responses



INFERENCE

According to the above pie-chart majority of the people are either interested or not sure whether to invest or not in the business.

Interpretation

Seeing the above data, we can easily interpret that most people have used the keychain, and even most who haven't used it in the past are interested in owning one. So, there is a good amount of demand for e-keychain with appropriate features in the market. Also, one more thing that can be interpreted is that a few people are even interested in investing in such a business which again shows the goodwill and demand for this business in the country, especially among youths.

FINDINGS OF THE STUDY

Research findings or findings of the study are the facts and phrases, observations, and experimental data resulting from research. Here the word "finding" does not always mean "factual information" because research relies on results and implications rather than measurable facts.

From the thorough finding of our study, we can easily interpret that most people have used the keychain, and even most who haven't used it in the past are interested in owning one. So, there is a good amount of demand for e-keychain with appropriate features in the market. Also, one more thing that can be interpreted is that a few people are even interested in investing in such a business which again shows the goodwill and demand for this business in the country, especially among youths.

Some other findings of our study:

- 1) Our new E-keychain provides many more new things than other keychains, including a location tracker, sms sender, and camera.
- 2) With all its new features, it is very easy and also more useful than any other keychain.
- 3) If you lose your keychain, it can easily be found with the help of GPS installed in it.
- 4) The price per E-keychain is reasonable, and also it differs as per the model of the car and also customer's personal customization.

IV. CONCLUSION

We conclude our product features and quality are satisfied customer's needs and it is also helpful to the environment.

Our Brand is bringing new products by finding more ways to satisfy its customers and ensures it always makes something unique and upgraded for them.

The Brand also provides a product seeding technique in which we can give a few samples to the customers for usage and collect feedback from them to ensure any changes or modifications in the product for the betterment of the customers as well as the company.

We finally conclude that our E-Keychain Brand is customer oriented and highly well-organized well, developed and progressive company.

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