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RESEARCH ARTICLE

STUDIES ON THE UTILITY OF AN ULTIMATE GUIDE TO BEING A TECH PRO FOR BRIDGING A GAP IN DIGITAL SKILLS OF SENIOR CITIZENS

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ABSTRACT

In a society where technology progresses at an exponential rate, old generations are unaware of the existence or use of various communication technologies. This research is aimed at analysing the causes and effects of the lack of technology understanding among the older adult population. The studies revealed that the huge generation gap and absence of such automation in their youth stages were a major cause of this problem. This puts a great deal of pressure on them as they are unable to perform certain tasks efficiently. This in turn impacts their mental health which will cause harm in the long run. Focus groups, research papers, forms, news, etc. helped authors figure out the depth of this problem in the senior community. The study includes proposing a guide to being a Tech Pro about the fundamentals of technology. 68% of the population supported the launch of the guide that would be helpful to their grandparents. Naturally, after getting acquainted with the basics of a device, elders will feel more confident, and will improve their wellbeing. Although this product may not reach most of the population, the few who do will be benefitted exponentially. Though there are already some helping tools for the same purpose. Most of them had major shortcomings like the products are too expensive orthose are so complex to understand and have minimal visual representation which is not very appealing to the eye. Hence, this study has been conducted with a vital objective to reduce the digital skills gap among the older generation by providing a whole guide to train them with the digital tools.

INTRODUCTION

The Baby Boom Generation (1946-1964) was not as technologically advanced and progressed as we are. Neither did they experience the level of automation and machinery present in our time, nor did they feel the need to depend on technology for basic tasks. As the COVID-19 pandemic hit, and the world went into quarantine, travelling restrictions were imposed and people are locked down. The reliance on the mechanisation occurring in this modern world increased exponentially. Since people were unable to meet face to face, so felt inclined to connect with grandparents through mobiles. While suffering the global outbreak, no one could help but realise the difficulties and struggles that were faced just to communicate with each other. As per experience and studies, it has been found that elder generations were not able to figure out how to operate simple video-calling apps such as BOTIM, Zoom, Google Meet, and many more. This caused numerous inconveniences in terms of communication and well being. Figure 1 represents the percentage of senior citizens over the years who are not being able to use technology.

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This research refers to senior citizens not being able to keep up with the exponentially growing technology. This not only restricts them from being able to perform daily tasks more efficiently but also puts a lot of pressure on them. They then bother their children and grandchildren to help them with simple tasks on the device, but youngsters nowadays are getting busier which prevents them from assisting their elders as shown in figure 2.This problem has been chosen because people have faced such situations first hand, where grandparents were stuck because they did not know how to operate a device. Older adults face several unique barriers and challenges when it comes to adopting new technologies. New technology help book has the potential to offer timely interventions to assist senior citizens in keeping an independent approach for longer (Geraedts et al., 2014). This problem is particularly addressed and aimed in India. Internet is widely used in the country. With an average of 560 million, it becomes the world's second largest online market. Although, there are vast inequalities in terms of use, whether it be age, socio-economic status, and so forth. The penetration rate of smartphones is 54% on an average, however, unfortunately, only 5% of them are above the age of 55.A survey was recently executed before the COVID-19 pandemic; results showed that 60% of senior citizens felt that their children do not have time to digitally literalise them.

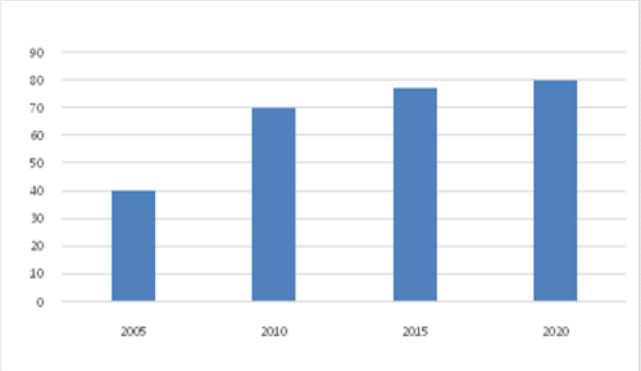

Figure 1. Percentage of senior citizens over the years not being able to use technology (Eleftheria et al.)

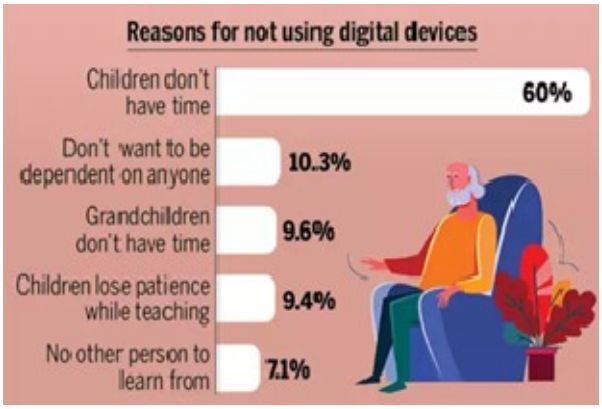

Figure 2. Main reasons of senior citizens for not using devices (https://timesofindia.indiatimes.com/india/the-digital-divide-

90% of elders are willing to learn how to use basic applications i.e., Whats App, Paytm, Uber, Skype, and so on. Older adults are a bit slower to adopting new technologies than younger adults (Czaja et al., 2006), but being familiar with such technologies appear to provide values like maintaining quality of life (Heinz et al., 2013). Greater familiarity with digital tools will also reduce dependency, increase autonomy, and boost self-worth among India's fast-growing elderly population. Hence, the current studies have been conducted to bridge the digital skills gap for senior citizens by proposing an ultimate guide to being a tech pro.

MATERIAL AND METHODOLOGY

A product has been proposed to teach senior citizens in India about the fundamentals of technology. The results based on a survey showed us that 68% of grandchildren agree that this solution would be beneficial to their grandparents. The authors have got in touch with their grandparents who reside in the rural side of India and learnt about the difficulties and inconveniences that they were experiencing with technology. After considering this, amanual guide has been designed that would instruct the senior adults on how to use the most essential aspects of technology. It would guide them on how to use familiar and standard apps and websites. The level of complexity of the guide depends upon the level of knowledge that the senior citizens obtain about technology. This guide will be written in Hindi first as it is the primary language for most people living in India.

It will later be translated into other languages to be used worldwide. This guide has a minimum and simple text so that it is easier to understand. This guide comprise of three levels: basic, intermediate, and advanced. The basic would be a hard-copy whereas the other two, soft copies to which to reach to, would be instructions on the back of the basic level hard-copy. The cost of publishing this guide could range from DHS 300-DHS 6000, including all aspects. The plan is to make this a short 100-page book and with the rate as DHS 1.5 per word for translating, our cost should average up to DHS 3000.Since the target audience is the minorities in rural areas, so it be best to keep the primary language as Hindi as it is widely spoken in India. After thorough research, it has been decided to self-publish the guide. This has been decided for numerous reasons, some being that marketing is quicker due to better networking, full creative control is in hands, royalty rates are higher since no need to share profits with the publisher, and there is no limit as to how many books can be published. Traditional publishing can get extremely competitive and there is a very lengthy process.

RESULTS AND DISSCUSSION

After careful consideration of contributing factors to senior citizens' digital unfamiliarity, most of the senior citizens would prefer to learn about technology to prevent being left behind and this product is a direct solution of the problem. Though, the youngsters of the family are willing to digitally literalise their parents and grandparents, however, are unable to provide their time to them due to busy schedules. This guide makes it easy on young people as they can assist senior citizens without their productivity in the economy being decreased. This guide makes no distinction in terms of class, caste, religion, gender, etc. It is for all to use irrespective of their status. It takes into account any person who may be illiterate or unable to read, as this guide shows plenty of visual representations for each step. Comprises of the most basic of the basic vocabulary for any common man to understand which increases our consumer market base. It reduces the senior citizens' dependency, feeling of helplessness, and increases their confidence, independence, and time management techniques as they are enabled to learn about their subject of interest, and entertain themselves. Not only does this guide indirectly help seniors to stay globally and publicly aware but also keeps them busy and helps them create a network and stay connected to the outside world. Learning about technology has proven to improve cognition and memory skills, which is important not only for senior citizens but also for society as a whole. The world is rapidly evolving with the use of AI and technology, and there is no point in leaving behind the older generations as they can be equally helpful to the generations to come, as it can impact the economy negatively. The prime course of action is to keep everybody informed, in order to progress at full potential and believe, this guide can be a part of the process. From previously represented data it has been interpreted that our product is not essential to the majority but will truly change the life of those people who require support in using technology. Seniors be able to spend their time more efficiently and productively as well as have more exposure to the world. It has been found that this problem is usually ignored as regarded as trivial, but to make an impact in the senior community because it is the little things that form a society that is secure in terms of welfare of every citizen.

An earlier study also indicated that elder people around 60 years perceive less comfort and control over devices in relative to young participants. However, experience with technology and computers resulted in development of positive attitudes (Czaja and Sharit, 1998). Alvseike and Brønnick (2012) also reported a cognitive deficit and low reduced efficacy associated with elder age group people that significantly reduce their ability to use new technology. Generally, the current literature suggests that although older adults are open to using technology there may be age-related (e.g., cognitive decline) as well as technology-related (e.g., interface usability) barriers.

Value Proposition: A possible source of error could be the publishing costs since they could vary from place to place as well as multiple other factors like number of images, number of words etc. The translating cost could also be different due to the same reasons. While a limitation is the fact that lesser people require this product according to the research and while the main focus is on targeting only the minority. This product could happen to not sell at all because of its name not spreading enough by the word of mouth of senior citizen. Further, limitations are the already existing similar products to this guide. There are two products which are our direct competitors. One is too expensive in terms of target audience and their spending capacity as it costs about Rs. 1730 which is almost quadrable of the price of this proposed guide which is Rs.350. It was also written in 2008 which means a lot of things would have been updated by now, it is also only available in English. Another direct competitor is published in 2014. This book barely has any imagery and reading so much for a senior citizen would probably not be appealing at all. Another guide is about using the internet not the phone as a whole. It is a kindle edition which our target audience would probably not know how to use and would end up making them more confused. We also came by multiple other competitors but they all in common have these three shortcomings: too expensive, not in Hindi and not enough visual representation which is why we believe our product is better than theirs.

Marketing Plan: The plan of marketing this product is by advertising it on YouTube and LinkedIn for those who are interested from the upper middle class, through using 30%-40% of the profit we make. The target audience for the advertising would be grandchildren who can purchase it for their grandparents as they are more active members in the market. Marketing for people in the rural area would be simply through word of mouth or YouTube depending on how many people use it in that region. The proposed design of the prototype has been shown in figures 3 and 4. Further directions of research would be firstly only producing twenty books and selling them in different rural parts of India, then actively getting consumer responses and suggestions on these twenty to see whether edits need to be made in the book and update accordingly. Authors would also conduct a controlled group to see the difference in development. After this analysis and making all the tweaks required, guide will be published in English and Hindi only. Depending on how much it sells, the plan would be extended to more and more languages depending on where the main consumer base is. Some new research showed that the ultimate guide to being a tech pro is not required by the majority but will truly change the life of those people who really require this kind of support in using technology.

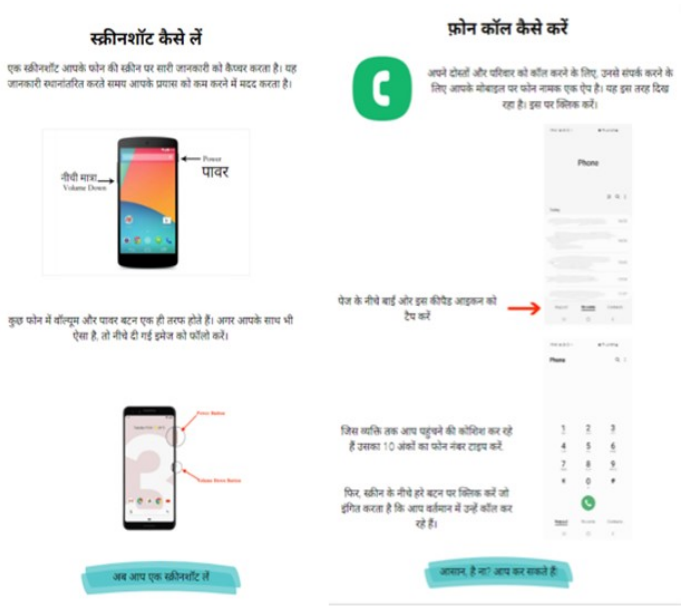

Figure 3 and 4. Two side by side pages of the prototype

CONCLUSION

The main objectives for this research include helping to reduce digital skill gap in senior citizens with a target audience being minorities in rural areas. This guide has been designed to keep the language and requirements of users in minds. Based on survey and feedback from users, most of the participants are eager to adopt this guide in learning new technology.

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