



A STUDY ON USE OF VOICE CONTROL IN DAY TO DAY LIFE

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ABSTRACT

This research paper includes a detailed study on use of voice control in day to day life. we are going to search on how other people uses the voice control in their daily lifestyle. It also include People with intellectual disability are keen users of information technology, but the need for spelling and typing skills often presents a barrier to information and media search and access. How people with intellectual disabilities can use Voice Control in daily activities. The main aim of our research is to create awareness of the benefits that we can get.

INTRODUCTION

Imagination is the greatest gift man is blessed with .We imagined long to implement a system that will receive voice command and then behave accordingly. As we always want to get comfort in our day to day life, we wish that it will be a great achievement if we can control the daily used electronic devices just by giving voice commands sitting in an easy chair or lying in the bed. As this is the age of Computer Science, this gives us a boost to think a lot if we really can implement this. Since we have to control home appliances from computer using voice command, we implement software to recognize every voice command of every person. The voice command is taken into the computer using microphone which can be wired or wireless. From the voice command we generate some control signals to be passed through the parallel port to a control circuit and control the electronic devices according to the received signals. Digital assistants like Alexa or Siri are software programmes that help users to navigate their iPhone, smart speaker or car via a hands-free way using voice commands. The entire ecosystem of automotive manufacturers, app developers, wearable devices and smart speaker manufacturers are banking on digital assistants playing a key role for customers in the coming years.

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Voice control is also used in helping people with disabilities use computers without the need to use a mouse or keyboard. Using a microphone or headset and the right speech recognition software, individuals with disabilities are able to surf the internet or dictate notes on computers and laptops.

Voice control technology has made it possible for people with disabilities to use a variety of devices and even appliances; and with it, make their lives easier. And, while the current capabilities of this advanced technology are limited by the available solutions and applications, the future looks to be quite promising, as improvements continue to be made as time moves.

ADVANTAGES AND DISADVANTAGES OF VOICE CONTROL

Although many people see voice control as part of our future, there are some drawbacks to consider. Here are the advantages and disadvantages of voice recognition:

Advantages:

- It can help to increase productivity in many businesses, such as in healthcare industries.
- It can capture speech much faster than you can type
- You can use text-to-speech in real-time.
- The software can spell the same ability as any other writing tool.
- Helps those who have problems with speech or sight.

Disadvantages:

- Voice data can be recorded, which some fear could impact privacy.
- The software can struggle with vocabulary, particularly if there are specialist terms.
- It can misinterpret words if you don't speak clearly – take a look at Youtube's auto-captions!

REVIEW OF LITERATURE

[1] Kaladharan N “A Study of Speech Recognition” emphasized types of speech recognition technology developed in recent years and working for the same. The researcher has described types of words, types of speaker models and other approaches for the voice recognition system which provides basic knowledge about speech recognition systems.

[2] Reddy, D.R. & Ermann, “Tutorial on System Organisation for Speech Understanding” described a large variety in the speech recognition concept and it is important to understand the differences between the systems. According to the researcher, the classification of the voice recognition system can be done according to the size of the vocabulary, type of speech, and speaker dependence.

[3] Huggins-Daines explained the accessibility of real-time continual speech recognition on cell phones and embedded gadgets and the technical challenges of computational requirements of continuous speech recognition. In this paper, they have presented work on porting and development of CMU SPHINX-II, a largely used non-proprietary large vocabulary continuous speech recognition (LVCSR) system, for portable devices.

[4]P. Cerny's, V. Kubilius reports the study of the voice and sensor-controlled lift model in this paper. The structure is built with the help of a standard powered controller; it includes a speech recognition system, configurable ports

OBJECTIVES

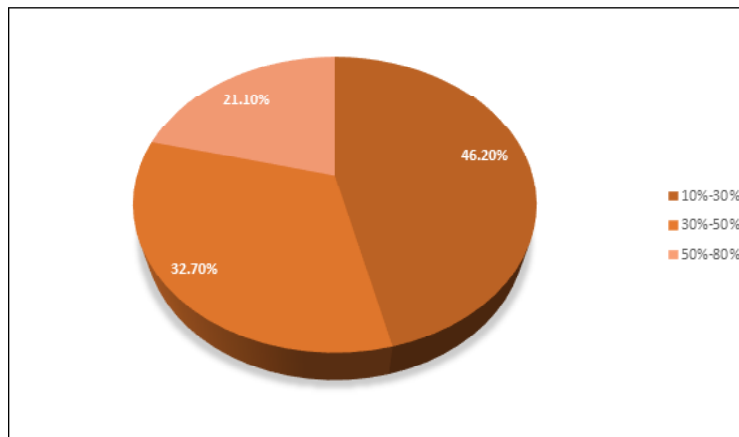
1. The objective of voice recognition is to recognize WHO is speaking.
2. The speech recognition aims at understanding and comprehending WHAT was spoken.
3. It is used to identify a person by analyzing its tone, voice pitch, and accent.
4. It is used in hand-free computing, map, or menu navigation.

RESEARCH METHODOLOGY

Research Universe	Thane
Sampling Method	Simple random sampling
Sample Size	100 Responses
Method of Data Collection	Primary & Secondary Data
Method of Primary Data Collection	Pre-structured Questionnaire
Method of Secondary Data Collection	Research Papers, Articles, Projects
Data Analysis Techniques	Pie Diagram, Clustered Column

DATA ANALYSIS AND INTERPRETATION

1. How much often you use voice control?

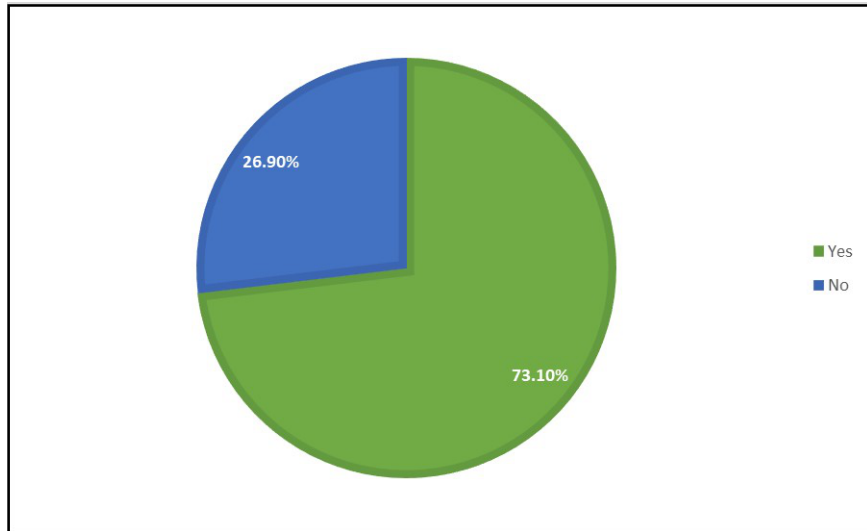


Source: Primary Data

Data Analysis: Most response shows that 46.2% people says that voice control is easy to use which is highest among the remaining other options.

Data Interpretation: Most users say that it's easy to use voice control.

2. Did you face technical and internet issues during the voice control search?

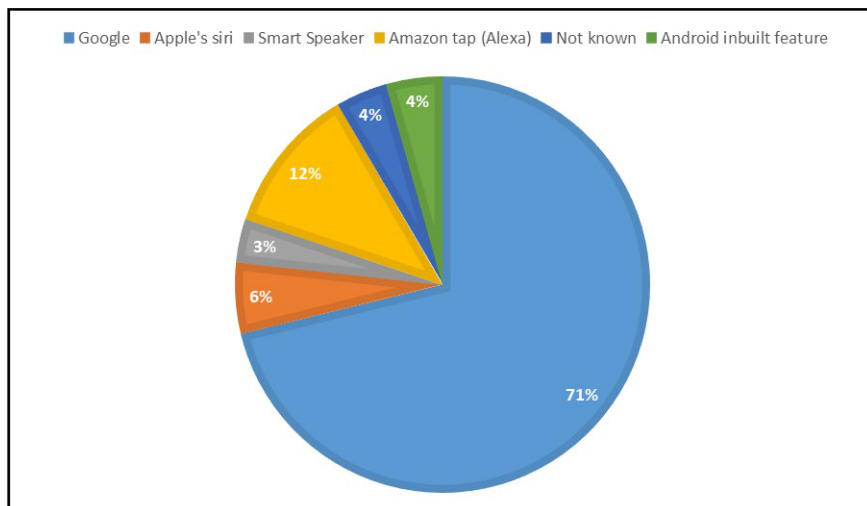


Source: Primary Data

Data Analysis: Most response were concentrated in the favor of facing the issue during the voice control search whereas 26.9% people does not face any issue.

Data Interpretation: We interpreted that most of the people face technical and internet issues during the voice control search.

3. Which voice control device or app you use to prefer?

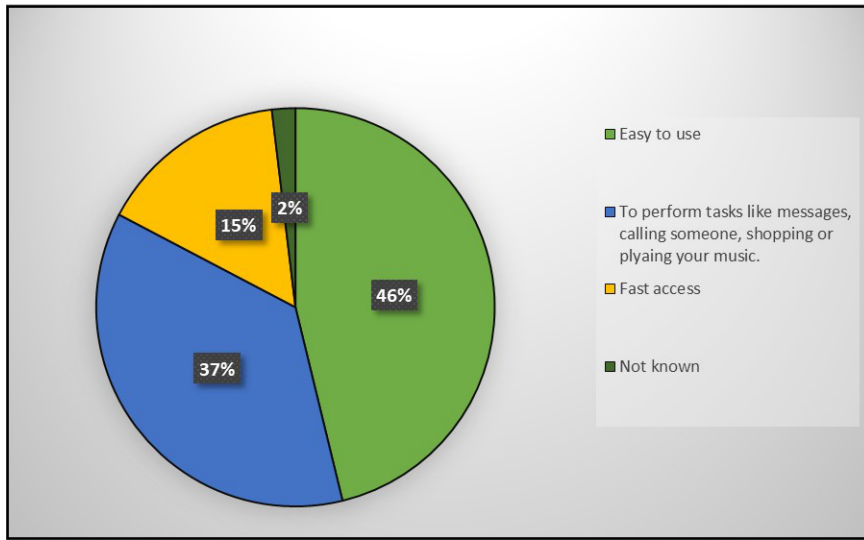


Source: Primary Data

Data Analysis: Most response shows that the preference of voice control device is Google.

Data Interpretation: We interpreted that most of the users use Google app to do voice control

4. What is the main reason that makes you use the voice control?



Source: Primary Data

Data Analysis:- Most response shows that 46.2% people says that voice control is easy to use which is highest among the remaining other options.

Data Interpretation:- Most users say that it's easy to use voice control.

CONCLUSION

Voice Controlled Personal Assistant System will use the Natural language processing and can be integrated with artificial intelligence techniques to achieve a smart assistant that can control applications and even solve user queries using web searches.

It can be designed to minimize the human efforts to interact with many other subsystems, which would otherwise have to be performed manually.

More specifically, this system is designed to interact with other subsystems intelligently and control these devices, this includes alot devices or getting news from Internet, providing other information, getting personalized data saved previously on the system, etc.

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4. <https://www.ringcentral.com/gb/en/blog/definitions/voice-recognition/>

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