Market Acceptance of Virtual Assistance with special reference to Amazon Alexa

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Abstract: *As our world is becoming more digital, virtual assistants using advanced Artificial Intelligence are forming the bridge between the digital and human world by offering the consumers and business support with a wide range of tasks. A virtual assistant is an application program that can understand natural human language, speak natural language and complete electronic tasks for the end user. Virtual assistants, such as Amazon Alexa and smart speakers, are used for various applications. One major use of a virtual assistant is as personal assistant. It helps customers to accomplish various tasks. There are many smart speakers such as Amazon's Alexa , Google Duo , Bose , Apple's Siri that offers an intuitive interface for connected homes or cars . It is basically used for entertainment purpose. Smart homes using Alexa grew five – fold in last one year. It is experiencing high market acceptance as consumers are shifting to home automation system.*

Keywords: *Customer, Amazon Alexa, Marketing, Artificial Intelligence, Virtual Assistant.*

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Introduction:

Virtual assistant is boon for everyone in this new era of 21st century (https://en.m.wikipedia.org/wiki/Amazon_Alexa). In 2020, smart speakers had a market share of 79 percent in India. This was followed by Google, a distant second at 11 percent. In that year, over a million smart speakers were shipped in India and Echo Dot (3rd Gen) and Echo Dot (4th Gen) were the top two smart speakers (https://en.m.wikipedia.org/wiki/ Artificial_intelligence).

In 2017, Amazon was the first company to launch smart speakers in the country. Amazon Alexa is also simply known as Alexa, is a virtual assistant AI technology developed by Amazon. It is capable of voice interaction, music playback, making to-do lists, setting alarms, streaming podcasts, playing audio books, and providing weather, traffic, sports and other real-time information, such as news. According to Business

Standards of India, India smart speaker market to cross 7.5 lakh units by the end of the year.

Objectives :

- To review about the applications of virtual assistant in urban area with special reference to Patna.
- To identify the research in the area of acceptance and usage of virtual assistant.
- To examine the acceptance of ALEXA (an AI controlled device) in the market.

Hypotheses :

1. Virtual Assistant is beneficial for customers.
2. Most of the people know about Amazon Alexa.
3. It supports wide range of entertainment and has option of controlling smart homes , so it is widely accepted.

Research Methodology :

The approach carried out a literature review about its pros and cons of the entire functioning. The research type has been exploratory as well as illustrative .The data was collected during the time period of August 2021 to November 2021, from both primary and secondary data collection method. For primary data , trends in market scenario was approached and secondary sources like books, articles and internet were referred. The sample of 100 respondents were selected and were given a set of self–compiled questionnaire. Simple random sampling was selected for type of sampling.

Data Analysis and Interpretation:

Table 1. (a) Personal knowledge of Virtual Assistant Speaker.

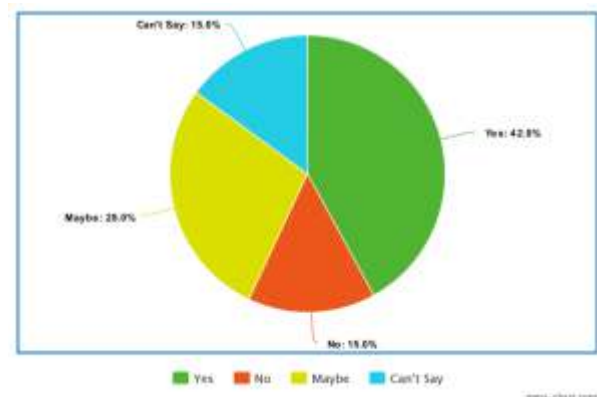| Knowledge level	No. of Responses	Percentage
Never heard of it	18	18.0%
Heard of it	30	30.0%
Have basic knowledge	40	40.0%
Have in depth knowledge	12	12.0%

Interpretation: Interpretation : Majority of the respondents have basic knowledge of Artificial intelligence (AI).
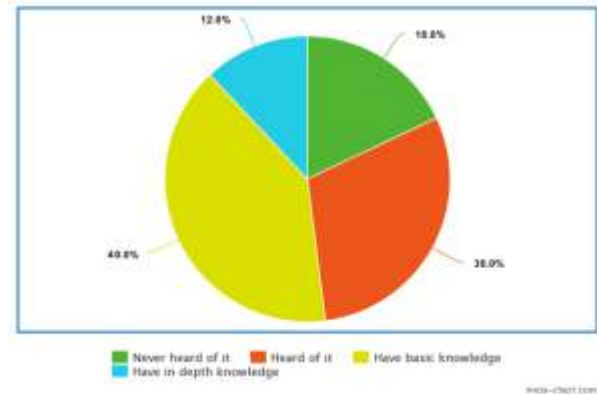
Table 1. (b) Opinion of respondents to consider virtual assistants for speeding up the manual process

Opinions	No. of responses	Percentage
Yes	42	42.0%
No	15	15.0%
Maybe	28	28.0%
Can't say	15	15.0%

Interpretation: Most of the respondents consider virtual assistants for speeding up the manual process.

Table 1. (c) Awareness and product recognition of Alexa in the market

Awareness Level	No .of responses	Percentage
Yes	65	65.0%
No	16	16.0%
Maybe	13	13.0%
Can't Say	6	6.0%

Interpretation: Most of the respondents knew about Alexa.
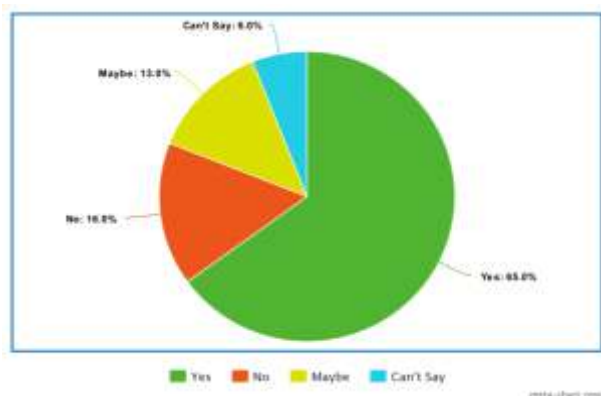
Table 1. (d) People who think Alexa benefits people with disabilities .

Knowledge level	No. of Responses	Percentage
Yes	61	61.0%
No	7	7.0%
Maybe	8	8.0%
Can't say	24	24.0%

Interpretation: Majority of them think it benefits people with disabilities.
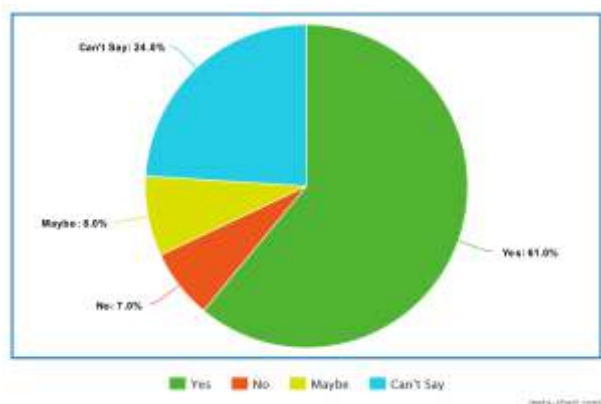
Table 1. (e) People who are comfortable with their personal data being used by Alexa to perform tasks

Knowledge level	No. of Responses	Percentage
Yes	38	38.0%
No	31	31.0%
Maybe	14	14.0%
Can't say	17	17.0%

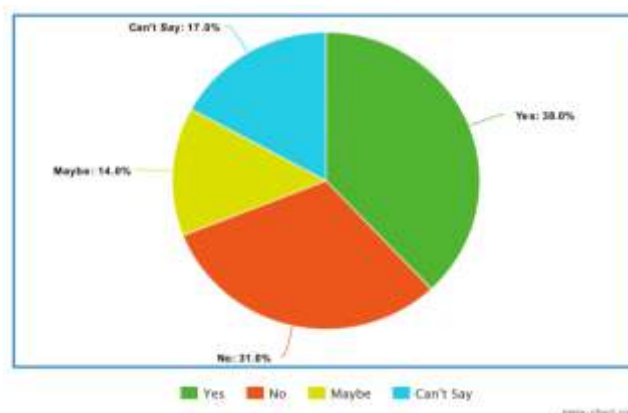**Interpretation:** Most of them are comfortable with their dataa being used in Alexa.

Table 1. (f) People who think Alexa is helpful in regular household use

Knowledge level	No. of Responses	Percentage
Yes	40	40.0%
No	30	30.0%
Maybe	21	21.0%
Can't say	9	9.0%

Interpretation: Most of them think Alexa is helpful in regular household use.
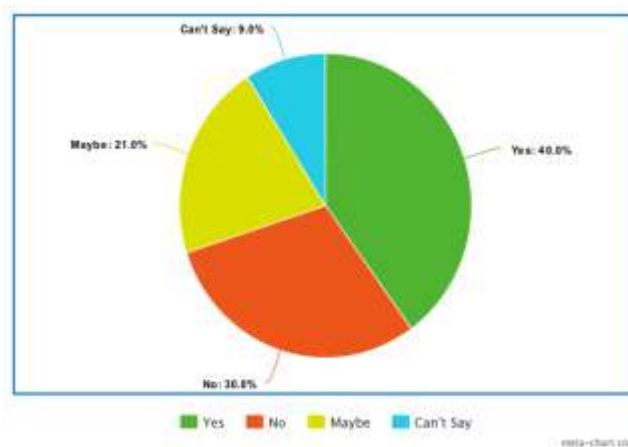
Table 1. (g) People who think Alexa is worthy in monetary terms.

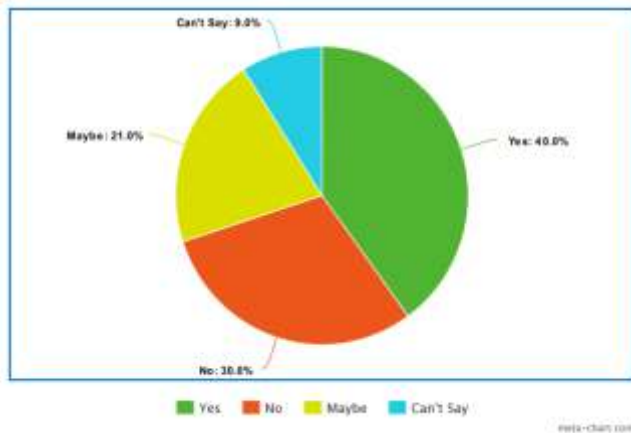| Knowledge level	No. of Responses	Percentage
Yes	47	47%
No	24	24%
May be	28	28%
Can't Say	01	01%

Interpretation: Majority of them think Alexa is worthy in monetary terms.
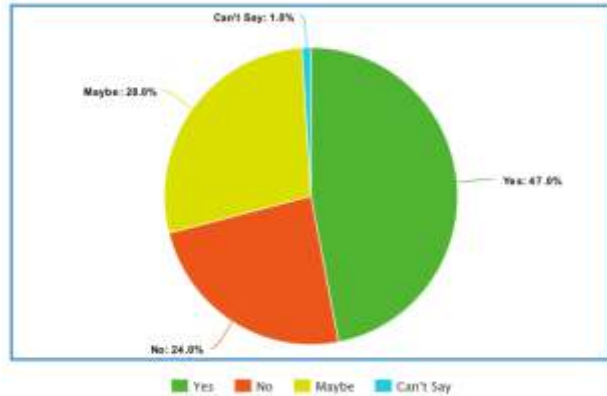
Table 1. (h) People whom we personally know who owns Alexa.

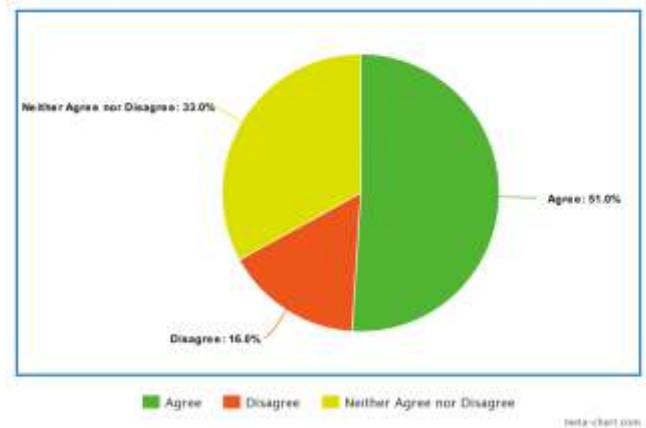| Knowledge level	No. of Responses	Percentage
Yes	40	40%
No	30	30%
Maybe	21	21%
Can't say	9	9%

Interpretation: There are very few who know that someone owns Alexa.

Table 1. (i) People who think Alexa has a positive influence in their daily life.

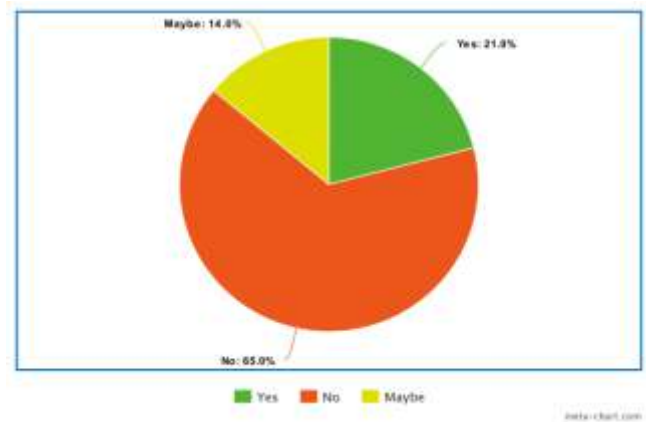| Knowledge level	No. of Responses	Percentage
Agree	51	51.0%
Disagree	16	16.0%
Neither agree nor disagree	33	33.0%

Interpretation: Majority of them think Alexa has a positive influence in their daily life.

Table 1. (j) People who bought Alexa, and do they regret it or not?

Knowledge level	No. of Responses	Percentage
Yes	21	21%
No	65	65%
Maybe	14	14.0%

Interpretation: Majority of them do not regret buying Alexa.

Table 1. (k) People who think or prefer any other virtual assistant other than Alexa.

Knowledge level	No. of Responses	Percentage
Google duo	38	38.0%
Apple home pod mini	30	30.0%
Bose	17	17.0%
Other	15	15.0%

Interpretation: Most of them prefer Google Duo other than Alexa.
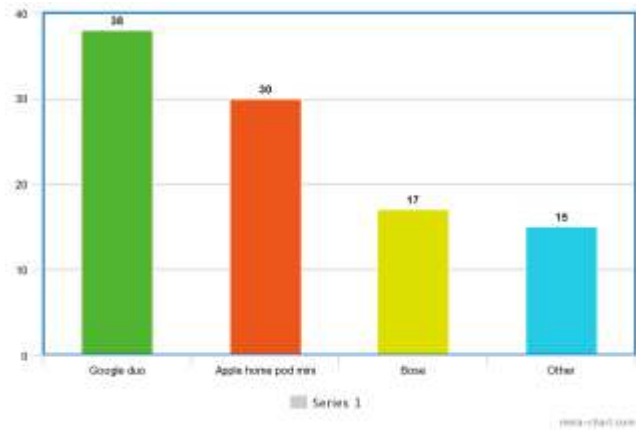
Table 1. (l) People who face problem while handling amazon Alexa.

Knowledge level	No. of Responses	Percentage
Yes	22	22.0%
No	49	49.0%
Maybe	29	29.0%

Interpretation: Majority of them do not face any problems while handling Amazon Alexa
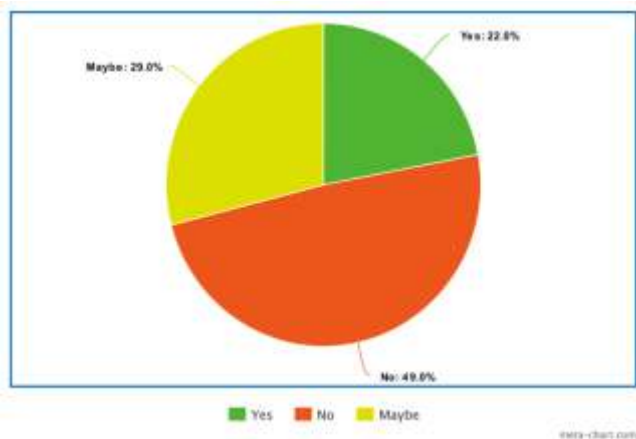
Table 1. (n) People who have recommend Alexa to their friends

Knowledge level	No. of Responses	Percentage
Yes	52	52.0%
No	18	18.0%
Maybe	30	30.0%

Interpretation: Most of them recommended Alexa to their friends.

Table 1. (m) People who generally face any type of problem in Alexa.

Knowledge level	No. of Responses	Percentage
Connection drop	28	28.0%
Mishearing	44	44.0%
Slow response	17	17.0%
Other	11	11.0%

Interpretation: Majority of them face the problem of Mishearing.
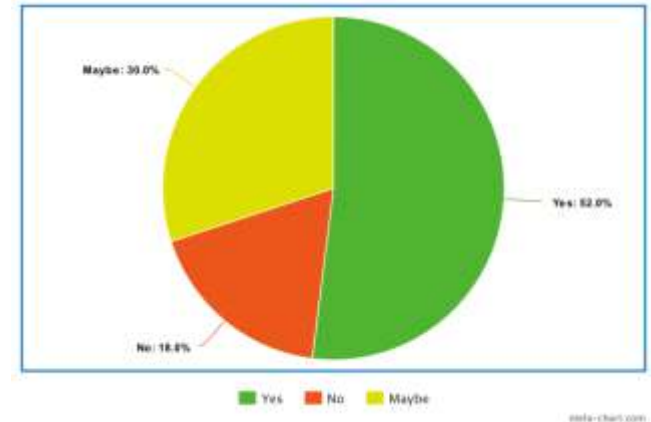
Findings :

- Majority of the respondents have basic knowledge about virtual assistant.

- Most of the respondents agreed to recommend Alexa to their friends.

- Bulk of the respondents generally face the problem of mishearing in Alexa.

- Generality of the respondents preferred google duo if not Alexa.

- A large number of the respondents did not regret buying Alexa.

- Many of the respondents bought Alexa for entertainment purpose.

- Mostly the respondents consider virtual assistant for increasing the manual process.

- Majority of the respondents knew about Amazon Alexa.

- Most of the respondents are comfortable with there data being used in Alexa.

Limitations :

- Our sample size was small and limited to 100 respondents, therefore it is possible that the results may vary if we surveyed a big sample size, hence the findings cannot be generalized.

- We had limited access to data as we had limited access to the respondents, which was only through online survey due to the restrictions of COVID 19 pandemic.

Suggestions :

(i) Artificial intelligence should work on improvising its efficient and efficient means of technology.

(ii) Alexa should improve its features regarding connection drop and mishearing.

(iii) Amazon should come up with low budget Alexa with upgraded features in market.

References :

https://en.m.wikipedia.org/wiki/Amazon_Alexa

https://en.m.wikipedia.org/wiki/Artificial_intelligence