Technology Diffusion: Conversational Banking through Chatbots

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Abstract

Diffusion is actually the penetration act of new technology to the existing process and practices over time. Financial Institutions have got confronted by technological development leading to the development of their offerings resulting in a cutthroat fight for market share. The main objective of the study is to look at the increased use of Chatbots in the banking sector and how they are being more preferred by the customers as compared to Apps. This paper tries to present a survey-based model of Banking Chatbots, leading to customer satisfaction and hence a boosting their loyalty to the bank.

As per top service researchers worldwide, customer satisfaction serves as a booster for efficient and smooth planning of organizations which aims to develop and be challengers in the economic ground. A customer is considered to be a crook pebble in the banking sector especially for any bank to mark its presence as an efficient and competitive player in an industry.

Present review concentrates on examining the role of Chatbots in the banking sector for an excellent customer experience. Technology performs brilliantly when gets aligned with core business processes especially leading to customer satisfaction. Banking Chatbots are examples of technology diffused banking process.

Key Words: Chatbots, Technology, Diffusion, Business Process, Apps.

Introduction

> **"Any technology distinguishable from magic is insufficiently advanced."**
>
> **Barry Gehm**

The need of conversational agents has become acute with the widespread use of personal machines with the wish to communicate and the desire of their makers to provide natural language interfaces (Wilks, 1999)

Conversational banking reduces operational costs furthermore by providing instant communication. This also enables banks to capitalize on lead generation opportunities. As compared to mobile banking apps wherein you need to search for information in graphical user interfaces (GUIs), conversational banking enables you to check your financial details using voice- and text-based chat interfaces. With the latest advent in artificial intelligence (AI), machine learning, (ML) and natural language processing (NLP), financial Chatbots, for short — are situational responsive virtual helper which can be programmed to inquire and respond questions in common, everyday language. This bidirectional communication gives a more instinctive understanding that lets customer get their queries about their finances resolved quickly &easily.

ChatBots linked Banking Process– Need for the Hour

Chatbots are AI based modules based on NLP to construe & react to explicit text and voice queries. Chatbots work on extremely straightforward basis: they are meant to identify key components of information a user searches in form of texts and voice, then offers a response if a solution is linked with that exact case.

Chatbots functions on the logic of "if this, then that". Chatbot as a technological innovation is a great prospect for banks to help customers in getting their queries resolved quickly and hence saving their time.

Most of the widely known web modules in the financial space are primarily based on Chatbots now days. These software components send regular text messages informing customers about the financial savings and last few transactions connected to their primary account on daily basis. The Chatbots also provide the overall account balance for the funding source. Users can pull out money by "chatting" with the Chatbots and requesting in text or voice mode for withdrawal. These conversational banking modules allow users to check their savings, view their balance statement, increase savings per month, hold savings for precise objectives with lucid deadlines associated with it.

Discovering the latent of Chatbots

Banking Chatbots not only offer marvelous paybacks for the customers but holds so many inbuilt features for Banks as well. Banking Chatbots give full access to customer's data. It can check expenditure behaviour, give credit points, set and administer accounts and guides the customer about the right avenues for spending their money.
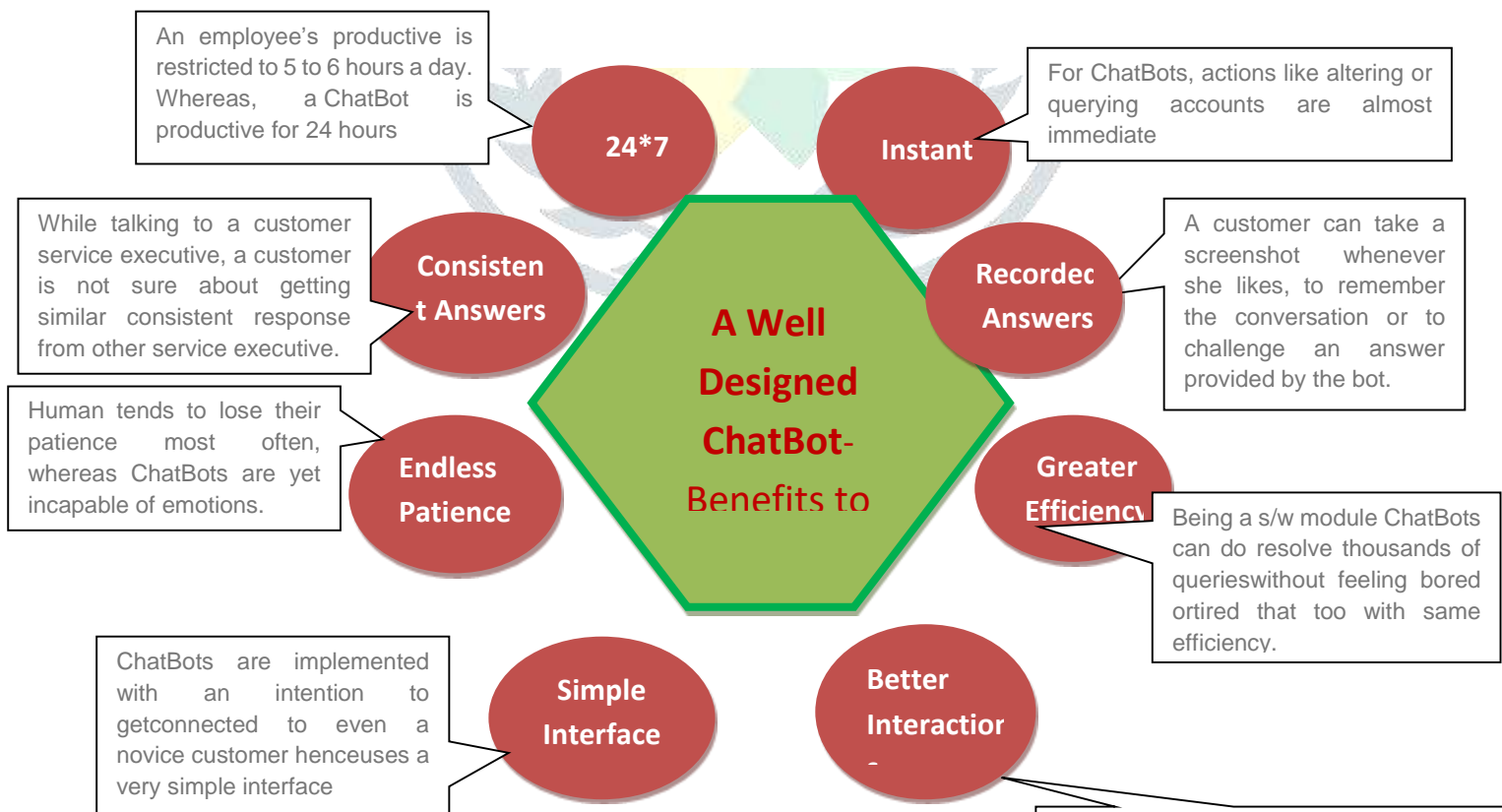
Benefits to the Customers

Fig. 1 Benefits to the Customers

Benefits to the Banks

Being continuously active on social platforms helps Banks reach new customers who may otherwise not want to reach out to the bank with an email or call

Unlike humans who can only communicate with one human at a time, chat bots can simultaneously have conversations with thousands of people. No matter what time of the day it is or how many people are contacting you, every single one of them will be answered immediately.

All the benefits offered by ChatBots will result in increased customer satisfaction which can lead to increased customer advocacy and sales.

Bank's' need for growing the customer service department can be managed by rolling out increasingly capable bots handling more and more complex queries.

Chatbots provides a bank with detailed, actionable records of the customers' greatest pain points, helping a bank improve its products and services

Expanded Customer Base

Handling Capacity

Improved Customer Satisfaction

A Well Designed ChatBot- Benefits to

Cost Saving

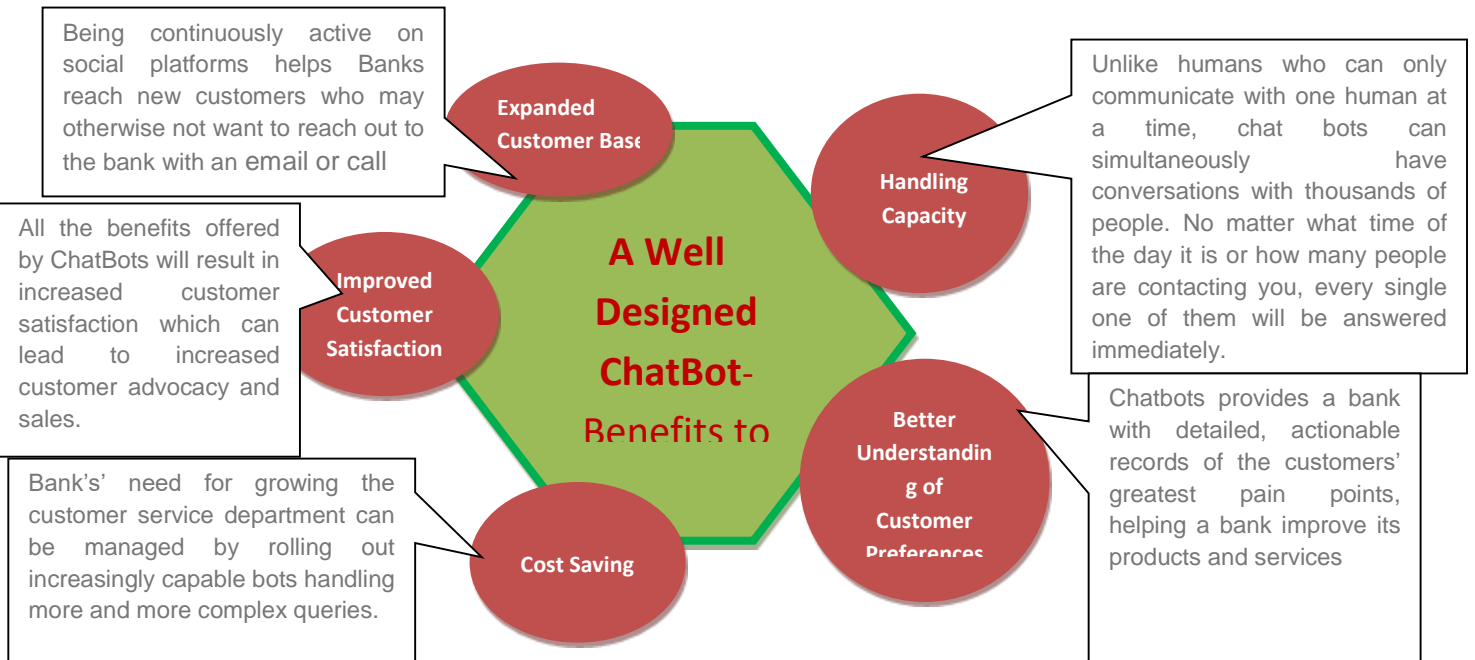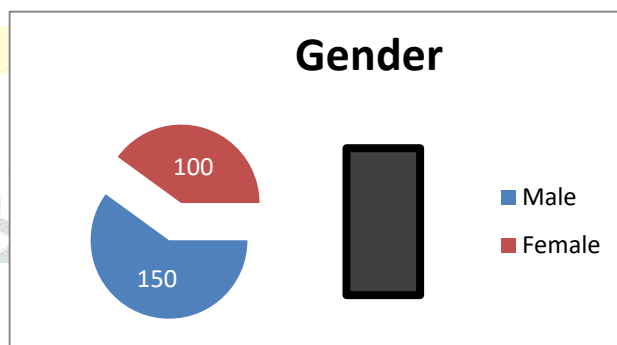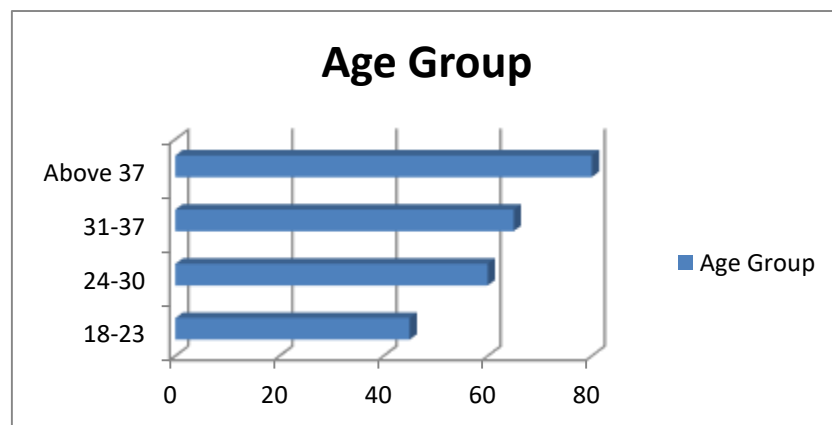Better Understanding of Customer Preferences

Fig. 2 Benefits to the Banks

A survey was conducted on 250 respondents through questionnaire method to compare the benefits most associated with Chatbots and Apps while communicating with banks.

Gender	Respondents
Males	150
Females	100

Gender

- 100
- 150
- Male
- Female

Age Group	Respondents
18-23	45
24-30	60
31-37	65
Above 37	80

Age Group

Age Group

The above statistics shows that out of 250 respondents 150 were male and 100 were female. In terms of different Age brackets, a round 80 respondents were above 37 years of age, 65 were from the age bracket 31-37,60 were around 24-30 years of age and only 45 were form the age bracket 18-23.
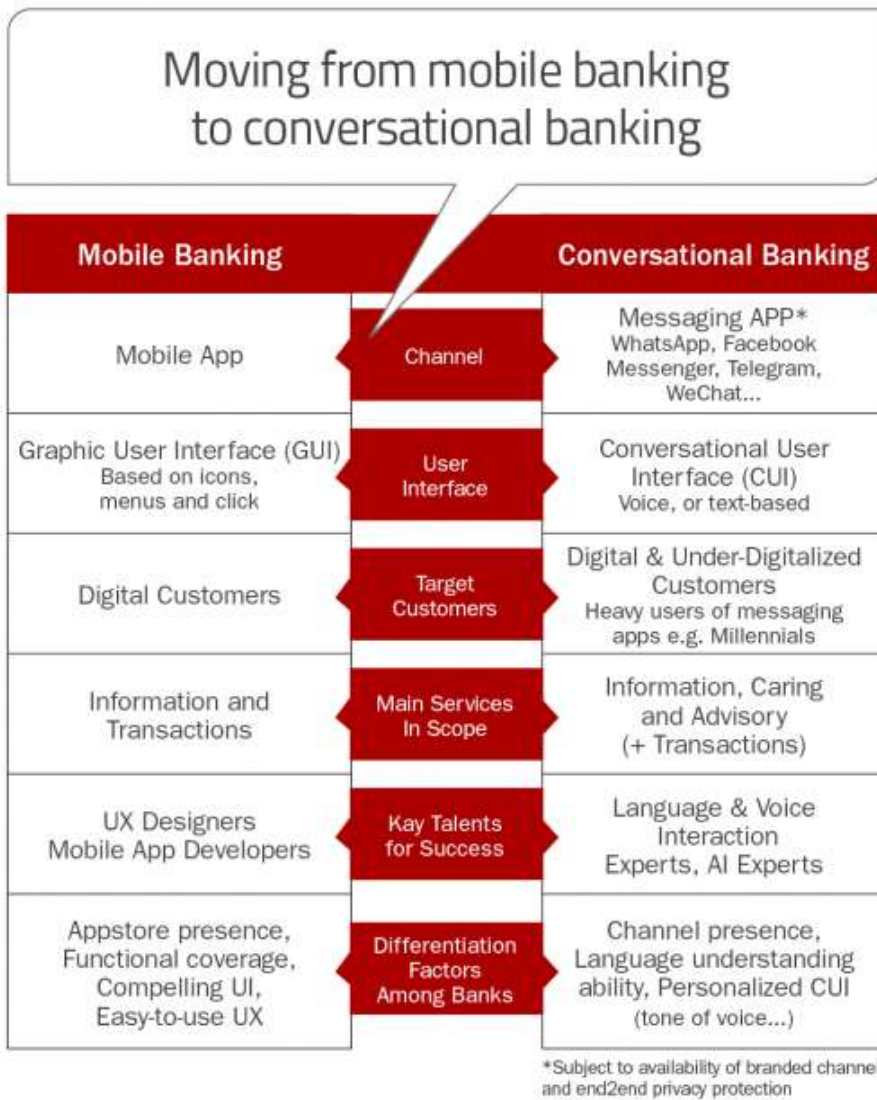
Chatbots vs. Apps

> Which of these benefits do you most associate with communicating with Banks?

Comparison	ChatBots	Apps
Quick Answer to simple Question	60%	32%
Getting 24 Hour Service	54%	24%
Convenience for you	44%	52%
Quick answers to complex questions	46%	36%
Ease of communication	46%	50%
Ability to easily register a complaint	54%	36%
Getting detailed/expert answers	36%	30%
A Good customer Experience	50%	46%
Friendliness and approachability	36%	60%
Complaint resolved quickly	36%	54%

As per the responses showed in the above table for Quick Answer to simple Question, 150 (60%) respondents out of 250 total responses favoured Chatbots, 80 (32%) respondents think Apps are better and only 20 (8%) think both are good. In the case of Getting 24 hours service, 135 (54%) think Chatbots is better than the Apps whereas, 60 (24%) respondents think app are better and 55 (22%) respondents said both are good. The 110 respondents reported that Convenience for you is good in Chat box, 130 (52%) said apps are better than the chatbots and only 10 (4%) think that both are doing well. In terms of Quick answers to complex questions, 115(46%) think Chat box is good, 90 (36%) favoured Apps and 45 (8%) voted for both. The responses for Ease of Communication showed that 125 (50%) respondents think Apps are better than Chatbots, 115 (46 %) think Chatbots is good and rest 10(4%) voted for both. In the case of Ability to easily register a complaint, 135 (54%) respondents reported Chatbots is better in this feature whereas 90 (36%) favoured Apps and only 25 (10%) reported that both are good. The 90 (36%) respondents reported that Chatbots is better in terms of getting detailed/expert answers, 75)30%) reported Apps are better for this feature and 70(28%) favoured both. For Good customer experience, 125 (50%) respondents reported that Chat Box has a superior edge over Apps; whereas 115 (46%) thinks Apps are better and only 10(4%) favoured both. The responses for Friendliness and approachability, 150 (60%) respondents out of 250 total responses favoured Apps, 90(36%) respondents think Chatbots are better and only 10 (25%) think both are good. In terms of Complaint resolved quickly, 135 (54%) think Chat box is good, 90 (36%) favoured Apps and 25 (10%) voted for both.

 From the above analysis it is clear that in many elements Chatbots have a superior edge over Apps while communicating with banks. In many important areas like Quick answer to simple questions, getting 24 hours service, quick answer to complex questions, ability to register complains, getting detailed expert answers, a good customer experience respondent reported that performance of Chatbots is better than Apps.

Working Challenges with Banking Chatbots

As compared to computer Apps, Chatbots need to manage individual financial record of the employee. Hence, few factors to ponder upon before employing bots in Banking are as under: -

- **NLP: A Constraint-**Biggest challenge for Chatbots is the constraint in the natural language processing and predictive analysis.

- **Potential to advice & accountability:** A challenge arises from the fact that if every unit has its own Chatbot, its capability to recommend customers financially would be limited, as it might lack details about the services, accounts or cards that we have connected with other banks.

- **Pressures to face:** Now a Days Banks are facing growing force to stay aggressive. The main source of force is mainly tech-savvy contestants which attract customers with user-friendly & cheaper products.

  Despite all aforesaid challenges, it's a true fact that Chatbot presents merged benefits of virtual and person backing to provide a tremendous customer know-how.

Conclusion

Amalgamation of Chatbots in the banking process leads to exceptional transformation in the functioning and managerial conversation style. Furthermore, the call for a radical variation in the skill sets is on the card, required by the banking customer service executives due to the previous obstacles resolved and the new challenges that are yet to be encountered.

Complicated marketplace situation and antagonism from tech savvy contestants have been challenging conventional banks. Chatbots, as a solution had emerged enabling these inheritance troupes to innovate at fairly meek cost.

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