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Team Title : AI based discourse for Banking Industry

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INTRODUCTION		SURVEY/BODY OF REVIEW					CONCLUSION		
Year	Title	Keywords	Problem Definition	Methodology (Algorithm, Protocol...Etc)	Input Parameters	Result	Advantages	Disadvantages/Drawbacks	Research Gap/Research Question
2022 (Thiyagarajan)	Overcoming customer innovation resistance to the sustainable adoption of chatbot services: A community-enterprise perspective in Thailand	1.Overcoming innovation 2.Resistance behaviors 3.Sustainable adoption 4.Chatbot services 5.Community enterprise 6.Innovation decision process	The primary goal of utilizing chat bots for customer service is to fulfill customer requests without requiring a conversation. However, the challenge to the sustainable adoption of innovations is overcoming the obstacles that prevent the innovation's spread.	1.Sampling and data collection 2.Measurement instrument 3.Data analysis	1.Consumer behaviours and expectation regarding 2.goods and services	It received 407 survey responses 401 surveys were fully completed. Table 3 shows the demographic characteristics of the sample. Most of the respondents were female (54.6%), aged 20–25 (57.4%), preferred using facebook messenger as a messaging platform (66.6%),and spend more than 4 hr per day communicating through the facebook messenger(40.9%).	Findings indicate that PIQ positively affected ATT use of chatbots, while PPR and PTR negatively affected ATT chatbot acceptance.	First, the sample comprised only customers who had used community-enterprise chatbot services in Prachuap Khiri Khan province, Thailand. As a result, the sample lacked demographic and geographical diversity. Second, cross-sectional studies only provide explanations of behavior over the short term. Third, the survey was conducted using a self-assessment questionnaire that measured the participants' experience using chatbots.	In this research way to find the customer behavior with the limited user details only gather so all kind of user behavior can be used to implement.
2020	Chatbot usage in restaurant takeout orders: A comparison study of three ordering methods	1.Takeout order 2.Chatbot 3.Human-robot interaction 4.Social presence theory 5.Contingency	The purpose of this study was to explore customers' perceptions and behaviors when using chatbots in restaurant takeout orders. Built	1.Data analysis 2.Social Sciences 3.Contingency theory	1.Order items	Multivariate analysis of variance (MANOVA) was conducted to compare social presence, attitudes, satisfaction, and behavioral outcomes among the three ordering methods. The	56% of chatbot users were interested in ordering meals from restaurants using chatbots,while 34% already order at least one meal,A chatbot easily integrated with any restaurant digital ordering system. . Chatbot ordering is better	The current study used undergraduate students as the study sample.	The effectiveness of implementing chat bots, such as conducting interviews or focus groups with restaurant managers. Such managerial insights may also be very valuable when implementing

		theory	on the social presence theory, this study conducted a lab experiment to examine and compare three ordering methods in quick-service and full-service restaurants. Results revealed that phone ordering and online ordering were both better than chatbot ordering in terms of satisfaction and behavioral outcomes.			MANOVA results indicated a significant main effect for ordering method, with Pillai's Trace value of 1.112, $F = 29.82$, $p < 0.001$, partial $\eta^2 = 0.556$.	suited for use in quick-service restaurants due to their simpler menus. In terms of order items, chatbot method was used for simple menu items and core products, phone method for specials and more complicated items, while online method for more expensive items and add-ons. The findings offer new insight for restaurant practitioners into designing and adopting chatbots.		chat bots to improve restaurant ordering experiences. In addition, as the adoption of chatbots in restaurants is still in its early stage, researchers should also conduct longitudinal studies to examine the impact of HRI on consumer experiences with continuously improving AI and robotic technologies.
2020	Customer service chatbots: Anthropomorphism and adoption	1.Chatbots 2.Artificial conversational entities 3.Self-service technology 4.Anthropomorphism 5.Perceived humanness 6.Need for human interaction	Firms are deploying chatbots to automate customer service. However, miscommunication is a frequent occurrence in human-chatbot interaction.	1.Sampling and remove 2.missing data 3.FlowXO	1.User require service	ANOVA was used to confirm that average age and gender distribution was similar across the three conditions. In addition, regression analysis showed that the demographic variables had no relationship with the other variables of interest. Skewness and kurtosis was assessed as per study one and deemed acceptable.	the reduction in adoption scores for the error chatbot appears to be the result of a decrease in anthropomorphism.	Our work has limitation that can seed future inquiry. First, participants in study one were only exposed to an animation of a humanchatbot interaction. This was rectified in study two, however, additional studies featuring genuine human-chatbot interaction would improve generalizability. Second, while we had laypeople assess the realism of the stimulus used in study two, our stimulus material was developed to incorporate the experimental manipulation. It may not represent a typical human-chatbot interaction.	The relationships identified against service scenarios are high in credence qualities, such as medical or legal advice. It is important to test the proposed chat bots with the provision of triage medical advice and legal advice to asylum seekers.
2020	Understanding the attitude and intention to use smartphone chatbots for shopping	1.Mobile applications 2.Chatbots 3.Technology acceptance model (TAM) 4.Diffusion of innovations (DOI) 5.Attitude Intention to use	the intention of consumers to use chatbots on smartphones for shopping.	1.data collection and analysis 2.missing data remove 3.Smart-PLS	1.Product name 2.quatity 3.brand	Although the study explains >72% of the variance associated with adoption, variables can differ over time as people begin to adopt and use the technology, and hence, a longitudinal research would certainly provide interesting results. Although the sample was presumed to represent the population, a large sample size can reduce the probability of error in the estimation, and	The young respondents believe that chatbots are useful and increase the level of enjoyment in shopping using a mobile phone.	Performance risk can be described as the risk due to failure of a product or service, which leads to a loss in performance, and predicts overall perceived risk best . Social risk refers to the perception of others while a consumer adopts and uses products or services.	The security systems built into the chat bots may not be strong enough to protect my account so we can improve security of this chatbot application.

						hence, future researchers can attempt to validate the model with larger datasets. Chatbot application in business is truly immense, and this study analyzed chatbot application in mobile-based commerce. Identifying applications of mobile chatbots in a B2B perspective and understanding adoption would indeed be interesting.			
2020	Conceptualising a Library Chatbot using Open Source Conversational Artificial Intelligence	1.Chatbot 2.Conversationa 1 software 3.Conversationa 1 AI 4. Natural language processing 5.Dialogue management 6.Rasa OpenStack 7.Human computer interaction 8.Information retrieval	The purpose of the paper is to conceptualise a novel library chatbot using a recently developed, artificial intelligence-powered open source conversational software platform named Rasa, and to propose its potential adoption by libraries. The paper introduces the essence of chatbot technology and their present-day application in libraries.	1.Rasa stack 2.NLP 3.ML 4.NLU 5.NLG	1.User queries 2.feedback	. In the context of practical implications in library and information services, it would be relevant to note that though open source AI-based conversational software requires more in-depth research in order to perfectly learn and emulate human conversations, it nonetheless has boundless powers to induce a tectonic shift in the way libraries function and interact with their patrons.	24*7 patron support which will enable information resource centers to be connected full-time and in real-time with patrons.	this direction should stress on how conversational AI should handle negation, multilingual entity extraction or Out-Of-Vocabulary (OOV) words, which are indeed amongst the toughest problems in NLU.	the integration of library chatbots with semantic knowledge management systems, whichremains the ideal information service framework compliant with end-to-end semantic integration, coupled with AI technologies.
2022 (Deenadhay alan)	Mobile Gramabot: Development of chatbot app for Interactive German grammar learning	1.Chatbot 2.gramadot 3.string matching	Develop the gramabot application as a means of online learning during the pandemic and to examine its effectiveness as a medium for German grammar learning	1.Water fall 2.dialogue flow 3.blackbox testing method 4. Artificial intelligence 5. Natural language processing 6.digital signal processing	All German grammar language related queries	All German grammar language related queries and corresponding solution	”struktur und wordschatz” is the difficult subject in the study of German grammar is easy to learn in mobile gramabot	Does not provide level-appropriate leaning content(the chatbot recommends a book based on students’ language level)	We can provide the level based learning content and book can be recommended.
2022	Consumer’s behavior in conversational commerce marketing based on messenger chatbot.	1.Messenger chatbot. 2. conversational commerce. 3. M-commerce. 4. technology acceptance	Smartphone and the internet in developing countries caused the rise of e-retail-conversational commerce in highly increasing via through messenger.	1.Artificial intelligent 2.NLP 3.technology acceptance model(TAM).	Get the user detail, online server for collecting the response.	The various factors resulting in consumer favor of accepting chatbot as an interface for M-commerce.	Conversational commerce mavating related answer can be receive faastly, voice and text recognition can be acceptable and reply also both format.	The Findings indicate that organization should design strategin to interaction with the customer by developing messenger chatbot for More trusting conversation	Theoretical digital marketing approach Conversational commerce based on antheropoma morphic digital technology can be used to improve the trusting conversation.

		model. 5. artificial intelligence. 6. online shopping experience. 7.Anthropomorphism.	Customer and assist online shopping on the messenger interface.						
2021	Toward a chatbot for financial sustainability	1.Chatbot 2.artificial intelligent 3.financial sustainability 4.telemarketing 5.web 6.model 7.voice recognition 8.conversion model	Bank revenues through customer age classification and indicate the new product-oriented fund or housing subscription savings are more suitable can be indicated.	1.Artificial intelligent 2.NLP 3.speech recognition technology 4.big data analysis.	Customer name and age, bank detail, help key feature, graphic information.	Indicate that new product-oriented fund or housing subscription saving are more suitable for purchase through customer services than through chatbot.	Strengthen financial soundness and suggest policy alternative.	Customer can be wait to ask the question while browsing.	Resistance to corrupted technology can be reduced and efficiently accommodated.
2019	Banking inquiry chat bot	1.Natural language processing 2.artificial intelligent 3.banking bot 4.chatbot.	Going to bank and ask questions to any bank employee, the procedure take too much time to process a single question. so our focus is to make an intelligent assistant system that will save time of user and reduce workload of bank employee	1.Natural language processing 2.artificial intelligent.	Botchat,text to speech, dislike button, effective GUI.	The intelligent system understand the user's queries, get answer from the bank related questions of user.	User need net to write the question in standard format,the botmat user feel that they are interacting with a human	Do not use single interface in multiple windows.	Can be modifying by using single interface in multiple windows
2018	Chatbot for college management system using AI	1.NLP 2.sentiment analysis 3.synsets 4.word net	Use can be ask the question any college related activities throw the chatbot without physically available to the college for inquiry. The system analysis the question and answer to student	1.Artificial intelligent 2.orter stemmer algorithm 3.NLP	User login and complaint, chat Bot responding system, answer the complaint.	Complaint and queries regarding the electronic and answer the complaint.	Quality service provision and customer satisfaction with less human effort.	Admin does not feed all local college, related document so chatbot can be struggling some times.	Could not use in middle-school CSCL scenario and school related document not be available.
2022 (M.Hariharan)	Using clinical history taking chatbot mobile app for clinical	1.Clinical education 2.Computer 3.Simulation4.N	A novel chatbot mobile app for training of undergraduate	1.Dialogflow 2.Natural language processing	Disease relevant queries	Blinded assesment of students performance in clinical history taking were comparable between conventional	During pandemic situations medical students can be able to clinical learning activities by virtual or online formats by using	Voice recognition function is not available in this chatbot.	Some students reflected on the limited keyword identification and student-chatbot by the Chatbot system.

	beside teaching.	ew technology	medical students clinical history taking skills from the virtual patient	3. Machine Learning.		group,chatbot group.	chatbot .		These can be overcome by updating the keyword database of the Chatbot system.
2022	Evaluating the use of chatbot during pregnancy.	1.Chatbot 2.Health literacy 3.Artificial intelligence.4.Thousand days period	This works presents the findings of a pilot study that investigated the use of chatbots to assist pregnant woman during the prenatal,postnatal periods	1.Parallel convergent mixed method design. 2.Natural language processing techniques 3.Machine learning 4.Dialog flow tool	Perfomance expectancy,effort expectancy,Medical influence,Trust,Anxiety.	The pregnant majority of respondents have positive attitudes towards the chat.	One of the main focuses of this chatbot is its use in health units with low-income people.	The chatbots performance was not tested on different mobile phones which may have interfered with the users experience with their device.	In future studies, we intend to investigate Natural language technique conversation aspects. Also, we aim to promote a multimodal chatbot to verify possible disparities in pregnant women's engagement between voice and text interaction techniques to improve
2022	When do AI chatbots lead to higher customer satisfaction than human frontline employees in online shopping.	1.Customer satisfaction 2.AI chatbots 3.Human FLEs 4.Product attribute type	The increasing adoption of AI chatbots in online-shopping assistance,as a complement or substitute for human frontline employees(HFLEs),leads to the question .This study explores how the impact of service agent on customer satisfaction varies along with product attribute type.	1.Scenario based experimental approach has been used	Completeness Accuracy,Reliability.	Manipulated check was conducted, reliability, validity tests were conducted.	The findings offer useful implications for companies when selecting service agent types in online-shopping assistance.	This is the first study to compare customer satisfaction associated with AI chatbots ,FLEs in online-shopping assistance from the perspective of product attribute type,there are some limitations which can be overcome in future research.	How does product attribute type impact customer satisfaction in customers interaction with online assistance.
2022	A longitudinal study of human-chatbot relationships.	1.Human-chatbot relationships 2.social –chatbots 3.social penetration Theory	Social chatbots have become more advanced,paving the way for human-chatbot relationship.This study shows the relationship between humans –chatbots.	1.Qualitative longitudinal research design	SPT.	Most participants perceived “Replica”as something humanlike from the onset.	Less loneliness,more self-reflection.	It has several limitations,first the qualitative approach allows for rich descriptions,but it may be more vulnerable than other approaches to bias.	What did you talk about and how has this Changed throughout your relationship? How attached were you to Replica in the beginning?
2021	Chatbot applications in education.	1.Artificial intelligence 2.chatbots in education 3.Benefits of chatbots 4.challenges of chatbots 5.systematic	This paper presents a systematic review of previous studies on the use of chatbots in education.	1.Systematic reviews in software engineering	Systematic literature review.	The search was presented in relation to the research questions.	Allow multiple users,Immediate assistance,Quick access,Integration of contents,Motivation & engagement.	The identified benefits and changes will be empirically examined .	What is the most recent research status or profile for chatbot applications in the education domain? What are the primary benefits of chatbots applications in education? What are the challenges facing the implementation of chatbot

		review							that literature revealed ?
2021 (Logesh)	Banking With A Chatbot – A Study On Technology Acceptance	Technology acceptance model, Artificial Intelligence, Chatbot, Self-service, Banking, Partial Least Squares-Structural Equation Modeling (PLS-SEM)	The aim of the present paper is to identify the factors that influence consumers’ intention to use chatbot technology applied in the banking industry	Behavioral Intention to Use Banking Chatbot, Perceived Usefulness, Perceived compatibility, Perceived Privacy Risk, Awareness of service	Customer Support with Just One Tap	the present study was conducted with the aim of identifying the main factors that influence customers’ intention to use the banking chatbot technology	1) resolve the client queries 2) provides prompt service	The questionnaire respondents were mainly young, highly educated individuals whose actions may vary somewhat from the population average. Thus, the study sample is not representative and the findings are not generalizable. Second, this research is not specific to a single banking chatbot application or specific bank	Needs to investigate the proposed research model in a different geographic location with special emphasis on rural areas and the model should be tested on a different sample.
2020	Role Of Ai-Induced Chatbot In Enhancing Customer Relationship Management In The Banking Industry	Artificial Intelligence, Banking, Chatbot, Customer Experience, Customer Relationship Management	This paper will discuss how AI-induced chatbots improve customer interaction and how chatbots play an essential role in customer relationship management in the banking industry.	Data-driven chatbots are the latest one based on the text dataset, especially conversation, which learns to deliver answers from the documents’ content, namely, man to man conversation, man to bot conversation, and other forms of human conversations.	Send Timely Alerts & Notifications	banking institutions should utilize this latest development to enhance customer service and customer loyalty.	1) assist the customer 2) easy process	Not able to interpret user input	It needs live agent solution while not programmed questions How to answer the non-programmed questions
2022	A model to develop chatbots for assisting the teaching and learning process	Chatbots, extra school tool, middle school, teaching and learning process	A model for a chatbot assisting the teaching and learning process in middle school	Google cloud technologies, firebase and dialog flow, MySQL database, Natural language processing	Student asking queries	Student asking queries corresponding solution	All the people involved, Allows end users to access the resulting chatbot anytime and anywhere using a pc or mobile platform.	Chatbots have limited responses, so they’re not often able to answer multi-part questions or questions that require decisions.	How to improve the Response speed of chatbot? The quick response is questionable.