Assessing Intelligence Conversation Agent Trends- Chatbots-AI Technology Application for Personalized Marketing

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Abstract:
This research presents an overview of the global trends of personalized marketing along four dimensions: personalization impact, preferred personalized marketing channel, challenges, and personalization drivers/benefits. Based on the analysis of the previously surveyed reports and article, the research presents a rich insight from two perspectives: the present and futuristic role of marketing professionals across industries and countries, as well as consumers' perceptions based on personalized marketing. The global result shows that the utilization rate of artificial intelligence powered chatbots is lagging across most industries and countries, except for *travel and tourism industries*. Furthermore, it is shown that the effectiveness of any personalized marketing depends largely on the access to quality data, data analytics, and automated technological solutions to help harness and integrate data from multiple channels. Taken together, the research findings consistently highlight the importance of personalized marketing to be for these: revenue growth, profits, customer loyalty and retention, and increasing customer lifetime value through engagement.

Keywords: *Intelligence conversational agent, chatbot, personalized marketing, consumers, marketing trends.*

1.   Introduction

Recent advancement in machine learning has contributed to the rebirth of the chatbots, also known as intelligent conversational agents. Lately, there has been a rise in chatbot technology being made available on the web and mobile devices.Latest reports state that 57 per cent of companies have already implemented chatbot technology or are planning to do so in the near future. Chatbots-AI is an intelligent conversational agent or assistant with learning capabilities, which provides personalized services to the user in the form of an intelligent human conversation. These technological advancements and growing innovation processes are referred to as digital transformation.

Digital transformation is the process of utilizing digital technologies to create new or modify existing business processes, culture, and customer experiences to meet changing business and market requirements [2]. As for customer experience, it can be defined as the complete set of interactions and engagements that a customer has with a brand, including online touchpoints such as video views, mobile and desktop content consumption, e-commerce transactions and emerging technologies such as chatbots and connected IoT devices, as well as offline touchpoints such as in-store, in-branch, outdoor and

experiential advertising [1].Essentially, digital transformation is about people, process and technology that requires a right mix of skills and an environment for people to flourish in, as well as the right technology to empower them [1]. In addition, digital transformation not only refers to the technologies itself but also involves the integration of those technologies into all areas of entrepreneurship, which in turn contributes to significant changes in the enterprise operation and generates added value for consumers [2].

Studies showed that the biggest challenges among retailers in 2019 to date are achieving omnichannel retail, keeping pace with technology and loyalty retention [3]. Artificial intelligence chatbots (Chatbots-AI), which integrate with messaging applications such as Facebook Messenger, and virtual assistants - including Apple's Siri and Amazon's Alexa - are examples of intelligent conversational agents that have emerged in recent years. As their adoption increases among SMEs, so will opportunities for marketers to utilize them to better meet consumer needs. While Capgemini consulting report shows that 28 percent of retailers globally deployed artificial intelligence (AI) technology in their organization in 2018, the adoption rate of 15 per cent in Asia is however still lagging as at 2019compared to other markets around the world[3]. The predominantly used application of AI in Asian business has been in machine learning and chatbots to improve operational efficiencies and deliver better customer service. These applications have been centred mainly on retailers marketing and online operations to satisfy the ever-growing consumer demand for relevance and personalization.

Personalization and consumer context are now ensconced in every marketer's lexicon and the single biggest driver of digital transformation is customer experience [4]. The authors advise marketers to create better target, more relevant and contextual communications, and work together to set up better consumer engagement. Surprisingly, only a quarter of Asian retailers are investing in AI because of personalization aspects [3]. According to the report, personalization is one of the best use cases of AI because consumers are expecting their interactions with retailers to be very relevant to them. As a matter of fact, Chatbots-AI, if properlyutilized, have immense potential to boost user engagement for any business, and this consequently may lead to more conversions and sales. The key lies in personalizing the conversational experience for the customer and suggesting product/services to help them out.

The process of communicating with the client via intelligent conversation application is termed conversational commerce or conversational marketing [5] and conversational commerce is defined as the practice of meeting or conversing with your potential buyers or people who have shown interest in your services in order to let them understand your business more and answer all their queries. It is a one-to-one approach to marketing where personalization acts as a fulcrum for the marketing strategy. Conversational commerce, as simple as it sounds, uses a one-to-one, personalized promotional approach to gain the same advantages of traditional one-on-one technologies is commonly used on a large scale. It uses new technologies to deliver targeted messages, for instance, real-time messaging through intelligent chatbots. With messenger campaigns,Chatbots-AI can gather information about customer preferences and tastes through quizzes and other simple questions. Furthermore,by using machine learning, these chatbots can turn data into individual recommendations and large segment data for the company to better understand their customers.

This research paper highlights the trends driving the rise of personalized marketing whileidentifying the types of preferred channels in it, and the inhibiting/challenges for personal marketing, as a prerequisite understanding of the current trends**.** The paper was based on an analysis of research publications, web-based sources such as business and technology blogs, websites, as well as a market research institution and other corporate online resources. By using iterative and intuitive search approach, we integrated the impending trends of the industry and cross-referenced it with academic research, hence,creating the relevance of this paper in

bringing academia, business and the public together.

2. Theoretical Aspects of Personalized Marketing

In the Fourth Industrial Revolution, the definition of a "good" customer experience has changed. With the vast choice and access to information, today's customers demand an overall experience that matches their standards for product quality. However, digital marketing has revolution-ized the marketing landscape. Though traditional marketing is still prevalent, the majority of brands are going digital. According to[2], digital marketing encompasses all online marketing techniques including SEO, PPC, email marketing, content marketing and social marketing, technologically enabled by which firms collaborate with consumers and partners to mutually create, communicate, deliver, and sustain values for stakeholders. The authors' emphasis that digital marketing involves managing and harnessing "5Ds of Digital", such as, digital devices, digital platforms, digital media, digital data and digital technology. However, with analysts predicting that there's going to be substantial growth in digital marketing budgets, marketers are going to go the extra mile to make sure that their company stands out on newsfeeds, emails, and blogs. This is where personalized marketing comes into play — allowing consumers to get an individualized marketing experience that will keep brands at the top of their minds.According to [6],personalization can be defined as a process that allows tailoring of marketing strategies to specifically target each customer individually, taking into account their preferred choices and preferences. It is also sometimes known as one-to-one marketing, because it focuses on individual customer, based on their keen preference.Personalized marketingis therefore, one-to-one marketing,and can be defined in different ways, but at the most basic level, **personalized marketing is the implementation of a strategy by which companies or brands deliver individualized content to recipients through data collection, analysis, and the use of automation technology.**Personalized marketing helps bridge the gap between an endless abyss of choices on offer and the needs of consumers,by presenting their consumers with highly-targeted suggestions,to help them save time and effort, which in turn,drives customer loyalty[7].Personalized marketing makesuse of customer information such as their preferences, buying behaviour, demographics etc.whichhelpscompanies to understand their customers better and to create a personal connect with them.

According to [8], personalization can deliver five to eight times the ROI on marketing spend, and can lift sales by 10per cent or more.Personalized marketing leverages on big data and digital technologies to understand and address customers in a direct and personalized manner. This data belongs to customers, such as: address, phone number, personality profiles, credit card details, purchase history, invoices, likes and dislikes, or whatever imaginable valuable data mined from different channels and/or through conversational commerce[9]. According to [5], personalized interactions not only bring value to customers who start feeling valued and unique by virtue of being recognized, but they also allow companies to gather more data about their customers, which, in turn, helps them further improve their personalization efforts. The authors claim conversation software, such as chatbots-AI, is the solution since the software can automatically converse with consumers and answer various requests without any human intervention. Chatbots-AI offers a new layer of support to the service quality dimension by assuring that personalized service is available to meet customer needs anytime and anywhere [10]. The authors finding reveals that Chatbots-AI provides interaction and engage brand/customer service encounters.

3. Trends in Personalized Marketing

Globally, we are currently living in a data-driven, algorithmically-obsessed era, where customers expect highly personalized experiences that are personalized to their exact needs. However,by examining intelligent conversational agent trends due to the emergence and convergence of exponential technologies,will create an opportunity to understand customers more profoundly, boost

operational efficiency, and generate highly personalized products and services[11]. More so, organizations that fail to show customers they know them and their individual buying preferences stand at risk of losing them to competitors who are more attuned to what their customers want,and the ranks of those competitors are growing[12].In this study, we classifythe literature on personalization trends in order of theirfindings, channel/usage, barriers/challengesand personalization benefits.

Table 1: General Overview of Digital Trends of Personalized MarketingSurveys

Company (Author)	Overview of Personalized Marketing Surveys
Evergage and Researchscape, research, "2019 Trends in Personalization", surveyed 314 marketing professionals across industries and countries, although predominantly in the U.S.	The study reveals 98per cent of marketers agree that personalization helpsadvancecustomer relationships, 74per cent claim it has a "strong" or "extreme" impact,while 88per cent state that their current and prospective customerexpect a personalized experience.**Preferred Personalization Channel**: Email (78per cent), website (58per cent), in-person (42per cent), online advertising(35per cent), mobileapp (28per cent) andweb application(19per cent). **Marketing Challenge:**Lack of personnel, lack of finance, lack of knowledge and skills, lack of organizational alignment, lack of access to data, and poor technology solutions, low quality data, and privacy concern.**Benefits**: To help drive customer relationship by deliveringimproved customer experience (88per cent), increase customer loyalty (59per cent), and to generate measurable lift/return on investment (ROI) (50per cent) as citied by marketers.
Deloitte Insights (2019),"Title: Tech Trends 2019: Beyond the digital frontier''.	The study finding shows that 47per cent of respondents reported that a brand that delivers poor, impersonal and frustrating experiences will be abandoned. For those purpose, Chief Marketing Officers (CMOs)are investing nearly a third of their budgets to marketing technology to enhance their customer experiences. Secondly, the study shows that consumersdon't just want personalized communication alone, they are also interested in personalized products and services recommendation.Consumers who expressed interest in purchasing personalized products or services was 36per cent, as against 48per centeager to wait over a long time periodin order to receive it.**Preferred Personalization Channel**: Mobile phone, social medium and website. **Marketing Challenge:**The greatest challengeswith AI initiatives is data issues as reported by 39per cent of respondents. **Benefits**:To increase customers'profoundpassionateconnections to products and brands.Thus, drivingcustomer loyalty and business growth.
Monetateresearch (2019), on "2019 Personalization Development Study", surveyed 600 senior marketers from North America and Europe, who shared their experiences across the retail, travel & hospitality and insurance sectors.	The survey result shows that 23.2per cent of businesses already invest in machine learning, while 48.5per cent plan to do so within a year. 77per cent of companies currently practicing personalization reported revenue growth in 2018. 75.5per cent are getting positive ROI from personalization, with every industry responding in the affirmative at 70per cent or above. Companies with the highest ROI (50per cent), are focusing on customer loyalty and customer lifetime value. Also86per cent of companies getting the highest ROI report that personalization made up 21per cent or more of their marketing budget, and over 14per cent of the same group reported that 40per cent or more were allocated to personalization.However, over 77per cent of those that exceeded their 2018 revenue expectations have their strategy documented. **Preferred Personalization Channel**: 94.2per cent prefer email, social media and website channels. **Marketing Challenge**: Data architecture, architecture of data quality and integrating third data. **Benefits**: 50per centof marketers are focusing mainlyon customer loyalty, and increasing customer lifetime value.
Smart Insights, 2019, "Title: Privacy & Personalization", surveyed 1,000 + consumers on their privacy concerns, channel affinity, brand experiences, and personalization preferences.	The results show that while consumers are increasingly aware of their privacy and data usage, they are not so-concerned if the data collected gives them value in return, as long as brands employ accurate and tasteful personalization strategies.72per cent of consumers are willing to and want personalized marketing messages tailored to their interest. 80per cent of frequent shoppers says they will only shop with brands who personalize their experience. 90per cent of consumers say they are willing to share behavioral data for a cheaper and easier shopping experience, while 63per cent of consumers say they will stop buying from brands that use poor personalization strategies.**Preferred Personalization Channel:**51per cent of consumers prefer emailsand 25per centprefer social media. **Marketing Challenge:**86per centare concerned about their data privacy.
Harvard business review Analytics Services (2018), survey with Mastercard on "The Age of Personalization",drawn from 625	The study outcome shows that 90per centof respondents say customers expect organizations to know their interest and anticipate their needs. Almost half of the surveyed respondents say their organizations are tailoring communications to customers across all channels. 44per cent say their organization's revenue has increased over the

respondents drawn globally.	past two (2) years, specifically due to their company's ability to create personalized customer experiences. ***Preferred Personalization Channel***: 47per centof respondents are already personalizing communications across all channels. ***Marketing Challenge:***Companies can find it challenging to find the people with the right skill sets to drive personalization initiatives, or to implement them on the front lines where organizations and their customers interact in person, due to a lack of robust of data analytical approach and data privacy. ***Benefits***: The study reveals personalization drives revenue and profits, and also helps to foster greater customer loyalty and retention.
Econsultancy's 2018 Digital Trends report on "Digital Trends of Customer Experience", *surveyed almost 13,000 marketers taking part globally, predominantly across EMEA, North America and Asia Pacific.* *.*	The report shows that, marketers' vision for the next three years, is to adoptartificial intelligence and bots to drive campaigns and deliver personalized experiences for consumers in real time.Furthermore, above half (53per cent) marketers from Asia Pacificregionhaveeither adoptedAI already, or are planning to adoptit in the next 12 months, whereasEurope and North America marketersAI adoption rate is still very slow.7per cent of their organizations reported that delivering personalized experience is their top priority, as against20per centwho citedcontent management. However, with regards to themes and technologies they are most excited about over a three-year timeframe, the report shows that 'Delivering personalized experiences in real time' is the most popular choice across all regions, with more than a third (36per cent) of company respondents, and 40per cent of their agency counterparts, selecting this option.Finally, results emphasizing improving customer experience show that 29per cent North American and 23per cent European respondents' main effort is to make their customer experience valuableas soon as possiblewhereas 21per cent of Asia Pacific respondents focused mainly to delivervaluedand relevant personalized experience to their customer as earlier as possible.***Preferred Personalization Channel***: Social marketing, ***Marketing Challenge:***lack of resources (significant investment in digital skills and training), and lack of knowledge on howartificial intelligence technology can be used. ***Benefits***: Improving customer experience, and using marketing automation to increase efficiency and yield.
Periscope by McKinsey (2018) researchon the title, "Consumers Value Personalization: Up Your Game to not Miss the Opportunity", *to better understand consumers' perceptions of personalized marketing inFrance, Germany, the UK and the U.S.*	The study makes known that personalization can deliver five to eight times the ROI on marketing spend and lift sales 10per cent or more. Secondly, 50per centof US consumers want to receive personalized messages from companies and brands, while 38per cent for French, 37per cent for UK and 29per cent for Germany consumers. Consumers significantly respond to a personalized marketing messages involving discounts and promotions across all region markets. ***Preferred Personalization Channel***: email and SMS/push messages were the primary channels across the markets.***Benefits***: it can deliver significant value, including 10-30per cent revenue uplift and higher customer acquisition rates and engagement.
Gartner Consulting (2018) research, on "The Essential Guide to Marketing Personalization".	The research finding shows that 78per cent of consumers want personalized marketing communications, and marketing leaders are responding with significant investment, attention and resources.56per cent of marketing leaders increased their personalization spend in 2018.87per cent of marketing leaders say their organizations are pursuing personalization. 14.2per cent of marketing budgets are spent on personalization on average, with some verticals such as retail and travel and hospitality investing upward of 16per cent. Finally, the study concluded that providing tailored help can drive 20per cent improvement in completed purchases, repeat purchases, future purchase intent and other commercial benefits.***Preferred Personalization Channel***: 8per cent for email frequency preferences, while websites is the primary method of data collection, and third parties.***Marketing Challenge:*** Lack of digitaltechnology, data analytics skills and 65per cent of marketers indicated more content to support personalization.***Benefits***: 20per cent improvement in completed purchases, repeat purchases, future purchase intent and other commercial benefits.
Accenture Interactive Research on "Personalized Marketing Index: The New Travel Experience"(2017), *study focuses on travel and tourism: airlines, cruise lines, hotels and online travel agents (OTAs).* *A consumer perception survey of 2300 people across the US and UK.*	The research reveals that at least 75per cent of consumers are more likely to buy from companies if they are recognized, remembered and if consumers receive relevant recommendations on travel decisions based on their purchase history.More than two-thirds of consumers (67per cent) want travel companies to provide personalized communications. 44per centbelieve the communications they receive from travel brands are good.90per cent of brands have technology in place to help them deliver a personalized content experience. 100per cent of brands have an analytics tool in place that allows them to see how users navigate their website. 90per cent of brands have the ability to test and target communications. 95per cent of brands have a digital marketing tag management tool in place. ***Preferred Personalization Channel***: Email preference and websites.***Marketing Challenge:*** --- ***Benefits***: Consumerswant brands to use previous travel information to help them make better travel decisions.Online Travel Agents are enhancing customer experience as the leaders in advanced digital capability, while a few innovative brands are beginningto use *chatbots* as a tool for ongoing

	conversation and engagement with the customer, includingbuilding stronger customer relationships and improving service.
Infosysresearch on "Rethinking Retail - Insights from consumers and retailers into an omni-channel shopping experience", surveyed1000 US Consumersand50 Retailer Marketing decision marketers.	The research result shows that 86per cent of consumers claimedpersonalization significantly contributetotheir purchasing decisions. 74per cent of retailers say it increases their sales, 61per cent say it increases their profit, 58per cent say it increases online traffic, and 90per cent claim consistency across brand's engagement points increases their customer loyalty.***Preferred Personalization Channel***: 89per cent engage retailers via social media. ***Marketing Challenge****:* Lack of technology. ***Benefits***: Increase in sales, increase in profit, increase customer loyalty, increase in online traffic.
Sailthru (2017) research on"Decoding Personalization", study of 146 retail, ecommerce, media and publishing leaders and marketers regarding how they define personalization today and where they are investing in the future.	The study reveals that only 15per cent of respondents are already personalizing customer experience, while 43per centsay theyare close to executing level.41per centare focusing on content andproduct personalization using data. Secondly,the study finds that Marketing (83per cent) and Data Science (60per cent) were the most commonly-listed teams, followed closely by I.T. (51per cent) responsible for implementingpersonalization. Finally, when measuring success impactof personalization within the organization, 65per centuse email response, 56per cent use site engagement (i.e. to build traffic), and 40per cent use customer lifetime value (i.e. customer loyalty and retention).***Preferred Personalization Channel****:* 91per cent of consumers prefer emails, 44per centprefer website and 26per centsay social media. ***Marketing Challenge***: lack of resources (time/people/budget and others) at 43per cent, 23per centare concerned about their data, 17per cent for internal knowledge of how to accomplish, and 14per centface technology challenges.
Chung et al., (2018), "Title: Chatbot e-service and customer satisfaction regarding luxury brands", study on 157 Korean students' experiences with Chatbot services providing personalized care regarding luxury fashion brands.	The study shows that online service agents, such as Chatbots-AI, provide convenience and quality communication that positively affect customer perceptions. Secondly, that Chatbots-AI performances can be measured according to interaction, entertainment, trendiness, customization, and problem-solving components of marketing in the digital era. Finally, the study reveals Chatbots-AI provides interactive and engaging brand/customer service encounters, thereby increasing customer engagement, due to its 24/7 availability, offers highly customizable flexibility, and gives simple and natural customer experiences. ***Preferred Personalization Channel***: Intelligence Chatbot.
Salesforce (2018) Research on the "State of Marketing", surveyed over 4,100 marketing leaders across the world, evolving in theFourth IndustrialRevolution.	The results show 80per cent of consumersreported that, their experiences with company'swhile shopping is as significant as its products and services provided. More so, Marketers' adoption of AI has grown by 44 percent since 2017. 37per cent of marketers use artificial intelligence (AI), and 69per cent of business purchasersare expecting Amazon-like purchasing experiences, for instance, personalized recommendations. Furthermore, averagely from all regions, 86per cent of the participantssay personalization improves their overall marketing program, while 29 percent of the respondentsuse voiceactivated personal assistants.***Preferred Personalization Channel***: 82per centof participantsare usingwebsites, 74per centusing email marketing, and the lowest channel used to reach out to consumers are;connected devices/Internet of Things (IoT)and voice-activated personal assistants (44per cent and 32per cent) respectively, but recorded 40per centas among the most significant to be used in the next 12 months, and 42per centas the highest for Virtual Reality (VR) or augmented reality (AR). ***Benefits***: Revenue growth, sales effectiveness, marketing qualified leads metrics, customer satisfaction metrics,web traffic and analytics,return on marketing investment (ROMI) AND customer acquisition rates.

Nowadays, consumers have high expectations of what their shopping experience should be, such as: immediate, convenient, and personalized, no matter where they choose to interact with your brand. However, lack of time and resources, siloed departments and data, competition, and constant innovation make it hard to deliver the experiences your customers demand [13]. According to survey by [14], many marketers see room for improvement in the current level of personalization in their marketing efforts. Furthermore, findings show that men across all markets surveyed prefer to receive personalized messages from grocery stores, restaurants and bars and hotels, airlines and car rental companies, while women in the U.S. and U.K. like to hear from fashion retailers, grocery stores and restaurants and bars [8]. Notwithstanding, [15]shows that the more companies can find out about a customer, the more they can tailor and customize their marketing strategies to win that customer over. The report ascertains that a customer relationship management (CRM) system can help create high-value segmentation marketing

strategies and that organization marketing technology should match their marketing ambitions by using personalized marketing tools to help companies reach their customers. According to[16], Big data enhance CRM strategies by understanding better customers' habits and behaviors so that business can deliver CRM to be more personalized and customized for each and every customer. Finally, CRM with big data will make better tools and strategies more personalized and customized to the customers because they understand well their target audiences and intended messages to send.

5.   Conclusion

Customers' expectations of personalized services are getting ever more sophisticated. To make consumers happy, companies have to adopt new technologies that allow for humanlike communication in real time.However, application of intelligence conversational agent, Chatbots-AI, is still at infancy for personalized marketing globally. Thisresearch attempted to dive deeperinto some aspects of personalized marketing by assessing consumer and marketing professional perception. The researchindicated that, overall, companies are increasing their personalization budget, as well as investing in artificial intelligence,which is estimated to double in the coming year.Finally, inasmuch as personalization improves consumer satisfaction, marketers are revolutionizing how to cope with the increasing demands of consumers, by forecasting to deliver personalized experiences in real time, and utilizing Chatbot-AI to drive campaigns and experiences, then it will lead to successful marketing and improved sales and profits as well.

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