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A Conceptual Model for Engagement Through Chatbots

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Abstract

Customer engagement is an important construct in explaining deeper connections and strong relationships with a brand. Marketers find new tools to engage customers from time-to-time. Chatbots are emerging as an important and growing innovation in servicing customers especially for information search but its success as a tool in engaging customers is possible only if this technology is adopted by the customers. Using Diffusion of innovation as a conceptual background we have identified variables that are responsible for customer brand engagement through chatbots. Finding of this paper is a framework that suggests antecedents and consequences of Customer brand engagement through chatbots. We hereby declare that this paper is an outcome of our original work and we have acknowledged the sources referred for this paper

Keywords: Chatbots, Customer Brand Engagement, Diffusion of innovation

1. Introduction:

Marketing in the digital era involves online and offline interactions, by using machines and human interaction to strengthen consumer involvement (Kotler, Kartajaya, & Setiawan 2018). Technology in the form of website, mobile apps, artificial intelligence, social media offer practical value, serve as a service delivery system, a channel to communicate and stay connected with customers and allows brands to develop effective customer relationship and serve as motivational drivers thereby fostering greater customer engagement (Calder, Malthouse, & Schaedel, 2009; Dolan et al. 2016; Hollebeek, 2011;Kim, Wang, & Malthouse Ruyter, 2015; A. Kumaret et al. 2016, Kleijnen, de, & Wetzels, 2007; Lin, 2011; Wang, Lin, & Luarn, 2006). Customer engagement leads to favourable outcomes such as build a long-lasting deeper relationship, greater brand loyalty, favourable attitude toward a brand, and revenue growth (Bowden, 2009; Pansari, 2016; Vivek, Beatty, & Morgan, 2012).

Chatbots are emerging as a new innovation, that marketers are employing to connect, interact and provide information to customers (Garner 2018, Gartner 2019, Juniper 2019)(Drift, SurveyMonkey Audience, Salesforce, and myclever (2018). Chatbots are capable of timely responses which is of paramount importance for lead generation, delay in such response reduces the chances of lead conversion (Elkington, 2011). Chatbots can solve issues of information overload faced by online medium such as websites due to availability of huge information (McGaughey, Mason, 1998).

Although the rate at which chatbots are deployed are increasing on account of improvement in the linguistic capabilities (Deloitte, 2018), success of chatbots is largely dependent on its adoption by customers. The likelihood or customer willingness to adopt artificial intelligence (AI) such as chatbots has not been studied as yet (Davenport, Guha, Grewal, Bressgott, 2019; Grewal, Roggeveen, & Nordfält, 2017; van Doorn et al., 2017). Hence, we are studying this gap through chatbots. The primary objectives of our paper are; To find out whether customer engage through chatbots and to determine the antecedents and consequences of customer brand engagement through chatbots. For the purpose of the study we have considered chatbots available on websites that text typing or choosing questions from tab.

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2. Literature Review

2.1 Chatbots

Chatbots are defined by Cambridge dictionary as: "a computer program designed to have a conversation with a human being, especially over the internet" and form a part of AI that use natural language processing systems and acts as a virtual conversational agent (Davenport et al., 2019; V. Kumar, Rajan, Venkatesan, & Lecinski, 2019). Chatbots offer advantages like quick, interactive, continuous service (24x7) communication(Chung, Ko, Joung, & Jin, 2018) over methods like customer support on phone, email (Tezcan & Zhang, 2014) thereby saving time and effort for customer and also unburdening staff from routine queries.

2.2 Customer brand engagement through chatbot

Based on definition from Hollebeek 2011 customer brand engagement is defined as 'the level of an individual customer's motivational, brand-related and context-dependent state of mind characterised by specific levels of cognitive, emotional and behavioural activity in direct brand interactions' p. 790. Another definition of Customer brand engagement, hereby referred as (CBE) states that it manifests itself in behavioural actions that involve brand focus that is an outcome of motivational drivers (Van Doorn et al., 2010, p. 254). Therefore, we can infer that customer engagement is a multidimensional concept, that includes cognitive, affective and behavioural dimensions of a consumer's experience (Brodie et al. 2011, Vivek et al. 2012, Hollebeek 2011 Bowden 2009 and Sashi 2012).

Previous research has been done in the area of individual engagement with media channel (Calder et al., 2009), social media, websites mobile apps online brand communities (Gruner, Homburg, & Lukas, 2014; Hollebeek et al., 2014; Thompson & Sinha, 2008). Calder et al. (2009) p. 330 have suggested extending principles of engagement to other areas like social media, mobile media. Shankar et al. (2010) suggested that smartphone devices can be used to enhance customer loyalty, as it allows retailers to engage and interact with customers. Extending this concept of engagement to chatbots, and considering it as a motivational experience the findings of the current research proposes to shed light on the interaction of users with chatbots and understand relationships that foster engagement. To identify the antecedents of engagement through a chatbot with the help of theory of diffusion of innovation (Rogers, 1995) through five variables involved relative advantage, compatibility, complexity, trialability, and observability. This theory has been used previously in the adoption of technology in higher education and educational environments, mobile service delivery, mobile apps, technology based services TBS, (Choudhury & Karahanna, 2008; De Ruyter, Wetzels, & Kleijnen, 2001; Handrich, 2015; Kim et al., 2015; Kleijnen et al., 2007). As explained by Rogers (2003, p. 12) "a technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome".

3. Conceptual Framework:

3.1 Relative advantage

Relative advantage is the degree to which the innovation is perceived to be better than the previously available option (Rogers 2003). In line with previous study on adoption of mobile service delivery (Kleijnen et al., 2007) and mobile apps Kang et al., (2015) relative advantage refers to the advantage a customer views while interacting with a chatbot, viz., time convenience and interactivity as compared to other modes of service delivery or information.

Time convenience refers to services being available at user's convenience. Interactivity involves reciprocity, two-way communication (Alba et al., 1997) between users. Both time convenience and interactive have positive influence on customer brand engagement through a chatbot. Thus, we propose

Proposition 1a: Time convenience has positive influence on CBE through chatbot.

Proposition 1b: Interactivity has positive influence on CBE through chatbot

3.2 Compatibility

Compatibility is the degree to which an innovation matches with existing values, past experience and needs of the users and will positively influence customer brand engagement through chatbot. Compatibility enhance likelihood of adoption (Rogers 2003, Lin 2011). Thus,

P2: Compatibility has positive influence on CBE through chatbot

3.3 Complexity

Complexity is the degree to which an innovation is considered to be difficult to understand and use. If the innovation is complex it will not be easy to adopt and thus will negatively influences adoption (Venkatesh & Davis, 2000; Wang et al., 2006) hence

P4: Complexity has negative influence on CBE through chatbot

3.4 Observability

Observability of an innovation is the extent to which an innovation is visible to the members and the benefits can be easily observed and communicated (Rogers 2003). Thus,

P5: Observability has positively influence on CBE through chatbot

3.5 Trialability

Trialability refers to the extent an innovation can be experimented, on a limited basis. An innovation that can be tried are more readily adopted (Agarwal & Prasad, 1998, Rogers 2003)

**P6**: Trialability of chatbot has positively influence on CBE through chatbot

3.6 Consequences of engagement through chatbots

As outlined earlier customer brand engagement involves dedication, involvement commitment of the customer enthused by their experiences and can be stimulated through many forms and interactions with the brand. Prior research in the field of customer brand engagement suggest that it positively influences satisfaction (McLean & Osei-Frimpong, 2017) with the brand, brand usage intention (Hollebeek et al., 2014). While using chatbot a customer initial queries are satisfied and adds to their positive experience thus increases their brand usage intention. As per Tezvan et al. (2014) process satisfaction contributes to overall satisfaction. Following this we propose that, outcomes

P7: CBE through chatbot will positively influence customer satisfaction and experience.

P8: CBE through chatbot will positively influence brand usage intention.

The above relationship can be explained with the help of following diagram

Conceptual Model:
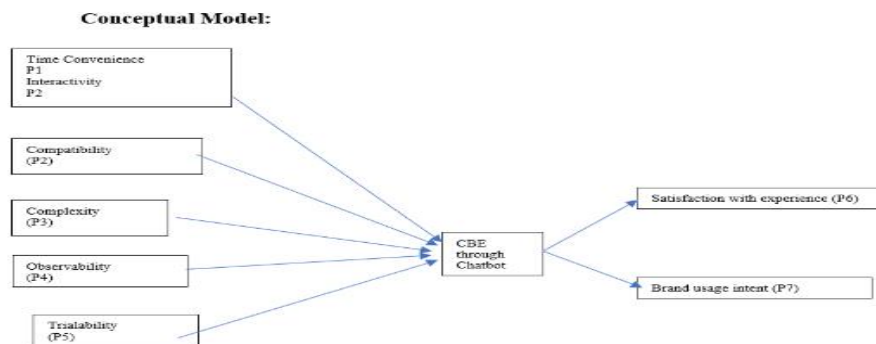
4. Conclusions and limitation of the study:

Our contribution comes in the form of a framework along with propositions outlining the antecedents and consequences of customer brand engagement through chatbots. Empirical testing of this framework is required. With vast amount of information available through many digital mediums, seeking and sorting information is increasingly becoming challenging for the customers. Our research has limitations and future studies could also look into these areas one of them is role of trust in this framework, (Poon, 2008; Randall, Gravier, & Prybutok, 2011).

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