



The Impact, Comparison and Usefulness of Digital Marketing Communications Tools on Organizational Profit Maximization Using Facebook

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ABSTRACT

The importance of Chatbots in marketing, particularly in employment or training progressions and maintenance for definite promotional goals, tools as well as approaches was examined in this study. The study seeks to ascertain the opportunities associated with the usage of chatbots in marketing, with specific emphasis on its influence in the process of Human-to-Machine communications, and find out the extent to which Chatbots could be effectively use to examine competitive companies or brands. The researcher explores how chatbot can interact with users using Facebook messenger and investigate the impact and usefulness of digital marketing communications tools on organizational profit maximization, using a real estate business. The study focuses on three sub-processes in the chatbot design, which includes writing handling, language acceptance, as well as reaction generation. Additionally, the survey was piloted with arrangement of chatbot assessment methods and their examination in relation to chatbot categories as well as three central appraisal schemes, which include content estimation, user gratification, and chat function. Findings of the study established that Chatbots could be effectively used to enable companies or brands intensify organizational profit maximization and proved that the limitations of the human agents have been taken over by this automatic Bot, which have been trained to act like human, give responses to customers' requests and even suggest responses to users. It recommends that every organization marketing teams should acquire innovative communication approaches about how to preserve and advance enduring relations with standing consumers as well as how to get the attention of potential consumers.

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LIST OF ABBREVIATION

<i>IM</i>	: <i>Instant messaging</i>
<i>IOT</i>	: <i>Internet of Things</i>
<i>AI</i>	: <i>Artificial Intelligence</i>
<i>NLP</i>	: <i>Natural Language Processing (NLP)</i>
<i>DCA</i>	: <i>Detrended Correspondence Analysis</i>
<i>ICT</i>	: <i>Information Communication Technology</i>
<i>CMC</i>	: <i>Computer Mediated Communication</i>
<i>DVD</i>	: <i>Digital Versatile Disc</i>
<i>SMS</i>	: <i>Short Message Service</i>
<i>MMS</i>	: <i>Multimedia Messaging Service</i>
<i>GPRS</i>	: <i>General Packet Radio Service</i>
<i>SEO</i>	: <i>Search Engine Optimization</i>
<i>SEM</i>	: <i>Search Engine Marketing</i>
<i>TAM</i>	: <i>Technology Acceptance Model</i>
<i>CRM</i>	: <i>Customer Relationship Management</i>

1. BACKGROUND TO THE STUDY

Digital technologies have been linked to all marketing activities and this has made marketers to argue that it has turn out to be a facilitator of successive phases of the development on the way to the renovation of present-day patterns. Digital marketing communications tools have been termed a robotization of processes or cognitive automation of all work processes, which is able to result in profit maximization. With this, the ordinal uprising has stretch to a measure and level of impact and greater influence that hardly could any occupation, business or government, disregard it [1-7]. Hence, this present research will investigate the degree to which digital marketing communications tools influence organizational profit maximization.

In this century, more goods and services are promoted online since more customers are always available on social media platforms searching for what to buy as often as they could. Nevertheless, marketers get to know about the needs of these customers through their online activities such as likes on social media platforms, searches as well as previous purchases [8-15]. This is the effect of Technological determinism theory, which proposed that technology determines virtually all human daily activities such as the way we talk, what we buy, what we eat, what we wear and even how we relax [16-20]. This is because it is what the customers do with the technology that determines their needs, and it is through their needs that marketers convey the right goods or

services to them, using the same social media or other online platform that could be easily accessed by the customers [21-29].

This study will put more attention on the advancement associated with digital know-hows, which has become an essential component of marketing by permitting numerous market actors to be involved in a relaxed and more essential method than ever before. However, chatbots will be used to examine how this process enables marketers to strengthen consumer's assorted feelings and experiences while increasing their participation and gratification [29-34]. It should be noted that Facebook chatbot as mentioned above is also identified as a talkbot, chatterbot, Bot, IM bot, communicating agent, or Artificial Conversational Object, which is a mainframe software package that conduct a discussion in ordinary language through audio or written approaches, comprehends the desire of the consumer, and reply them based on occupational directions as well as data of the organization. Nevertheless, this study seeks to ascertain the opportunities associated with the usage of chatbots in marketing, with specific emphasis on its influence in the process of Human-to-Machine communications [35,36]. This will be done by examining the most significant trials that the growth of digital technologies brings to marketers, who regularly implement reconfiguration of their existing practice as well as redefinition of the designed market intelligence.

This study further investigates how chatbots could be effectively used to enable companies or brands intensify organizational profit maximization, and its contributions will be compared to the impact of digital know-hows such as the Internet of Things (IOT) as well as Artificial Intelligence (AI). Hence the following questions will be answered in the course of the study: how have digital marketing communications tools made companies or brands become cleverer and extra sensible in the galaxy of algorithmic economy? To what extent has digital marketing communications tools influence organizational profit maximization?

In the end, this study will examine how chatbots are competent to give response to certain questions, offer solutions, as well as resolve difficulties while understanding consumers'

objectives. This however formed the basis for carrying out this study.

1.1 Problem Statement

Communication scholars like Adesina, et al. [37] have proven that the concept of monitoring audience online activities leads to effective delivery of advertising messages and it shares a variety of meanings. In view of Bermejo [38] it includes the usage of websites that are connected with the choice of the audience, where the consumers may possibly be engage in sprightly chat dialogues and forums. It should also be noted that there are some creativities to back the production of a product. Before the advent of digital technologies, which introduced digital marketing communications tools, organizations marketing activities are carried out in a way that the range of media and related channels were difficult to implement [39-44]. This problem arises as a result of the promiscuous nature of today's consumers. This is why Tejuoso [45] says a consumer will prefer a product today and in the next few hours, desire another one. With this problem, employment or training procedures and backing for detailed promotional objectives, tools as well as approaches were difficult to handle. Also, it was difficult to handle messages and impetuses in a continuous and never-ending method and gathering important info about the accomplishments of competitive businesses, customer first choice or crucial market movements were also difficult to achieve. But recent studies had it that the presence of Chatbots is changing marketing activities in this century. This however, prompted this present study.

1.2 Objectives of the Study

The common objective of this research is to examine the influence and usefulness of digital marketing communications tools on organizational Profit Maximization Using Facebook Chatbots. Nevertheless, its specific objectives include to:

1. Ascertain the opportunities associated with the usage of chatbots in marketing, with specific emphasis on its influence in the process of Human-to-Machine communications.
2. Find out the extent to which Chatbots could be effectively use to examine competitive companies or brands

3. Examine how Chatbots could be effectively used to enable companies or brands intensify organizational profit maximization,
4. Compare the contributions of Chatbots to the impact of digital technologies like Internet of Things (IOT) as well as Artificial Intelligence (AI).

1.3 Research Questions

1. What are the opportunities associated with the usage of chatbots in marketing, with specific emphasis on its influence in the process of Human-to-Machine communications?
2. To what extent could Chatbots be effectively used to examine competitive companies or brands?
3. How could Chatbots be effectively used to enable companies or brands intensify organizational profit maximization?
4. How the contributions of Chatbots could be compared to the impact of digital technologies like the Internet of Things (IOT) as well as Artificial Intelligence (AI)?

1.4 The Significance of the STUDY

This study will help to meet the yearnings of consumers who are in search for easily accessible and high rewarding multichannel interactions with brands. It will help them to see the importance of Chatbots as important digital marketing communications tools that are capable of ensuring organizational profit maximization.

This study will also be useful to marketing organizations, as it will help to establish how Chatbots enhances employees' performances and makes it very essential and highlights how digital contexts can improve company-customer relations, customer gratification, as well as shopping experiences. However, this study will be useful to consumers who are lovers of mobile marketing as it will help emphasize hoe effectively mobile phones could be effectively used to ease shopping by just downloading a mere software application or through the use of Facebook or Whatsapp, which are two major social median platforms that this study will analyze.

Furthermore, it should be noted that by presenting the model the controlling effect of

humanlike design cues, additional evidence will be delivered to support marketing managers taking decisions regarding Chatbots usage. Lastly, the findings and recommendations of this study will help to improve the way Chatbots are used to maximize organizations' profits.

1.5 Scope of the Study

This research examines the impact and usefulness of digital marketing communications tools on organizational profit maximization, thus, emphases of the study will be on Facebook Chatbot and how it could be effectively used to boost organizational profitability.

1.6 Operational Definition of Terms

Marketing communication tools: There are a set of differentiated programs such as Chatbots that are selected to communicate with a firm's prospective audience effectively.

Digital technologies: These are automated outfits, software, devices as well as digital properties that produce, store or processes facts.

Marketing: This refers to the activities that a firm embarks on to stimulate the buying or selling of a product or service.

Internet of Things (IOT): This is refer to as the system of physical substances or things that are entrenched with measuring device, software, as well as other know-hows for the purpose of linking and switching facts with other devices as well as software on the Internet.

1.6.1 Introduction

This section deals with the appraisal of all appropriate studies. Here, the researcher intends to appraise previous and existing works. This chapter will discourse the related concepts of the study, also the theories based on the study as well as empirical studies for the purpose of broadening formal understanding of this research work.

2. CONCEPTUAL REVIEW

This research examines the conceptual framework of existing technologies on how these technologies are being used, their pros and cons.

2.1 The Chatbot Technology

Chatbot has been described as an artificial intelligence (AI) software that gives room for discussion or interaction between a human and the computer in an ordinary semantic by means of messaging software, websites, mobile applications or through the telephone. It could initiate a conversation and talk directly to human. This has been seen on different social media channels like Facebook, Whatsapp and other important communication channels that have been adopted for marketing activities [46-52]. For example, the recent Business Whatsapp application could initiate a conversation. If one drops a message for a user of a Business Whatsapp, it will send a message to the sender that the user is unavailable for now, but will revert as soon as he or she sees the message. These techniques have now been adopted into marketing activities too and this is what prompted this research work. This in view of Winkler [53] is "making online marketing deeds developing its connectivity with social webs, delivering an extra penetrating and concerted participation and online video users demand audiovisual content as well as value added services, with better user-friendliness and an augmented viewing experience, depending on the size of the screen they watch". Corroborating this, Lubian [54] added that "Chatbot value has been often characterized amongst the most refined and interesting expressions of human-computer communication."

This explains that this technology has been designed to act like human. It performs the functions of human and with this; there are spontaneous responses to the needs of the consumer. With this, consumers can easily get their needs or requests attended to without any delay.

This is what many marketing organizations now use to represent the 24hours availability of online personnel to attend to the needs of their consumers. Hence, it has been proven to be an effective way of maximizing profits for a marketing firm.

Corroborating this from technology point of view, Sathi [55] opined that "A chatbot is just the logical progression of using natural language processing (NLP) to provide replies to questions." This explains that the technology could as consumers on how they could be assisted on a particular difficulty they may be

experiencing during a marketing activities. Hence, marketing speed is fostered and this has been proven as the most important factors that have aided the preferences for digital marketing compared to physical marketing. It is in this same vein that Sinclair [56] argued that “conveying responses to questions in a natural language is one of the most distinctive instances of natural language processing that has been recently applied in several marketing organizations.” This is why Tegmark [57] refers to chatbots as virtual agents or conversational agents that ask questions answer the receiver and also ensure there is spontaneous feedback to the needs and expectations of all prospective customers.

2.2 Categories of automated agents – Chatbot vs. Avatar

Past studies have proved that there are different chat agents or automated agents that different firms have adopted to enhance its marketing activities. The most important of these agents according to this study will be Chatbots, which will be compared to other conversation agents like Avatar and the likes of others that have been used by social media platform like Whatsapp. Some studies have proven that avatar also delivers spontaneous feedback to consumers’ online experience, be it good or bad. As observed by Wuebben [58] avatar has been designed with the capability to enable firms participate in the relationship management with their present and prospective consumers [59-63].

Corroborating this, Barrat [64] added that despite the fact that avatars is capable of increasing the level of desirability of the website in the process of decreasing the expenses and improving the efficiency of a call agent, Chatbots have been designed to do much more. Although, it should be noted that the two technologies are designed to act as representative to call agents of the different organizations, yet their level of usage differs from one firm to another. This is because it is believed that the call agents could be tired at a point or could close for work as the time a consumer may want to buy a product, thus there is need for representational agents, who could be available 24 hours every day. This is what prompted the adoption of an ever available conversational agents like Chatbot and Avatar.

It is in this same vein that Köhler [65] opined that that “increasing the agent’s presence beyond the

firm’s website could increase the attentiveness of the agent and foster the insight of the agent as a peer rather than merely a representative of a company”. Nevertheless, as avatars remain predominantly available in software, chatbots may possibly be perceived as a potential resolution to accumulate these profits. It is in this vein that this notion is maintained by preceding study on chatbots, as many organizations have gathered the same conclusions for firms through the usage of these diverse types of representatives. This is why Chung et al. [66] established that most of the chatbots designed for use by superfluity fashion merchants are capable of providing opportuneness and excellence communication to consumers, swaying positively sensitivities of marketing determinations. According to Zarouali et al. [67] this assessed the efficiency of a chatbot in the Facebook messenger. Nevertheless, the results recommended that both emotional and intellectual contributing factor have a constructive effect on approaches in the direction of the product, as well as a subsidiary consequence on support purposes particularly the probability to vouch for the chatbot [68-72].

2.3 Digital Marketing

In this digital age where the high-tech modification immensely influences all types of media, Information Communication Technology (ICT) is gradually changing how advertising audience now source for information, get themselves educated as well as entertained. Hence, it has been argued that “not only has technology brought new innovative features, but it has also challenged the notion of what the entire online media really are” [73]. This is why online marketing has been considered as “the attributes of digitalization process, since it is entrenched in satellite, internet, telecommunication, multi-media modes as well as compatible with latest devices like smartphones, iPhone, tablets and the likes” [74].

However, Odetoyinbo [74] “Since all broadcast equipment and facilities have been changed from analogue to computer mediated communication (CMC) devices, the need for additional audio-visual material and value-added services has skyrocketed,” he said with greater accessibility and an enriched viewing experience has also been on the increase.” This has provided different approaches through which digital marketing could be viewed. Yasmin et al. [75] sees digital marketing as the campaign or

promotion of products or services with the help of digital technologies or frequencies. It makes use of the internet as the main marketing channel but also extends to other channels like mobile phones, display advertising and any other digital medium, that do not involve internet. The digital Marketing Institute appropriately intellectualized it as “the usage of digital technologies to produce an incorporated, directed and assessable message that backs the obtainment and detainment of consumers while shaping better connection with them” [76].

It is in this same vein that Ali, et al. [77] opined that for digital marketing strategies to contribute enormously towards achievement of a company goal, it is needful to consider some things in its implementation, and they include:

Market Research: This should be directed to use the suitable digital platform and the target audience of a digital marketing campaign should be reached through their preferred channels.

Digital Channels: The pros of the diverse digital channels should be considered for operational distribution of personalized content and contentment of marketing goals. For example, in e-mail marketing, long e-mails with too much information should be avoided as the focus should be on main points of interest.

Digital Marketing Strategies: This should be developed for specific times of the year. In other words, digital marketing strategies should get the most out of important dates of the year such as holiday seasons and celebration periods.

Formulate a Method: A method must be set up to evaluate the usefulness of digital marketing strategies frequently. Also, the marketing team can meet to discuss digital marketing efforts and make changes accordingly.

2.4 Digital Marketing-Selected channels

Digital marketing make use of all surfaces of internet promotion to produce reaction from the prospected customers and owing to the extensive usage of internet in all proportions of life, the obtaining in the first world countries mostly has been improved and now scattering to other countries speedily. However, Ashwini and Manjula, [78] listed the below as the selected channels of digital marketing.

Email Marketing: According to Techopedia, [79] “e-mail marketing is otherwise called direct e-mail marketing in its modest custom and it talk about using electronic mail as a means of sponsoring products or pursuing consumers”. In general, Abdullah, et al. [80] added that it includes transferring persuasive e-mail to fascinate new consumers or influence current ones to make instantaneous consumption, augment consumers’ relationships as well as accumulation of advertisement to other establishment’s e-mail, generally on a trust basis, to get acquaintance in a new market. Characteristically, Hasan and Azman, [81] added that “it relates to the distribution of commercial e-mails to a group of individuals, which have subscribed to e-mailing list but can also be focused on a person and it is often connected with data mining”.

Mobile Marketing: The connection of digital devices to the internet has made mobile marketing possible. The conception of mobile device has made it a possible tool for marketing actions. Murphy [82] defined mobile marketing as “the usage of a wireless medium to deliver consumers with time- and location-sensitive, tailored information that endorses products, services and ideas, thus promoting the identified sponsors”. Mobile phones have been used to do a lot of marketing activities in this century. In view of Ververidis and Polyzos [83] mobile marketing could be referee to as “all actions mandatory to interconnect with consumers with the aid of mobile devices so as to stimulate the marketing of products or services as well as the delivery of information about these products and services”. This makes information provision very handy.

Retargeting: Retargeting via advertisements in view of Sahni, et al. (2016) is a “power transformation and optimization tool that works best for the marketers when used energetically and knowledgeably”. This is why marketers “need to study and understand the process of retargeting, and they are required to distinguish how many people are visiting their website and how many of them bounced without interacting much, which is the most beneficial information for the marketers to improve the offers and promotion on their products and services” [75]. Nevertheless, retargeting is the technique that makes marketing specialists assured about all potential opportunity that they have approved in order to cooperate and become appealing to the

consumer by having in-depth knowledge about their interests as well as requirement.

Search Engine Marketing: Search engine marketing, which could be shortened as SEM, is a component of digital marketing that is “linked with probing, acquiescing as well as placing of a website or web page within search engines to accomplish extreme perceptibility and upturn share of paid and/or organic traffic referrals from search engines” (Malik, et al., 2013). According to Yasmin et al. [75] “the part of SEM that assist website get high ranking placement in organic or unpaid search engine results is known as Search engine optimization (SEO).” Common samples of search engine are “Google, Bing and Yahoo search engines and the foundation behind this is that the more a website spontaneously ranks in organic search results, the more probably it is to be viewed by users.” (Malik, et al, 2013).

Chatbots Opportunities and Threats: Chatbots have been described as common agents that enable marketing communication in social media, particularly on Facebook, which is the focus of this study. Despite the growing acceptance of this new marketing approach, it has been argued that these computer-generated agents have to be instigated in a cautious manner to circumvent unwanted consequences. However, the following are the opportunities and threats of Chatbots according to Chang [84]:

1. Engaging consumers through a means of regular, approachable as well as comprehensible method;
2. 24-7 facility, maintenance as well as prompt reaction;
3. Possibilities of providing additional complete, current statistics as well as the ability to examine great records at great rapidity;
4. Communication by means of conversant software to consumers, a good example of this is the Facebook Messenger, which has been labeled as augmenting consumer involvement;
5. Chatbots have been able to circumvent human qualities, so it is devoid of human qualities like mood fluctuation and drowsiness;
6. Sophisticated incomes by means of cross-selling openings;
7. Non-personified representatives are considered to be extremely brighter than

the traditional personified representatives (Deloitte, 2016);

8. Phonological is a compound mechanism, and this is because it is believed that chatbots are not capable of comprehending cynicism, dual-engenders as well as popular expression;
9. Background comprehends task, which has been clinked to examination and understanding of in-house procedure movements, consumer trip charts as well as profound product and services statistics.

However, it should be noted that there are dangers when executing a chatbot, when it is not constructed on consumer desires. Hence, [85] adds that it inclines to exasperate consumers. According to Ben, et al. [86] the undesirable gap between consumer potentials and representatives' performance has been described as the indicators to representatives' disappointment. It is in this vein that it is of exciting significance that the steadiness amongst its functionality as well as feature, to efficaciously gratify consumers' opportunities.

2.6 Chatbot Technology Attributes

Personified representatives when completely made automatic and self-directed may possibly be measured as a Self-Service Technology, which is through consumers created services for themselves devoid of support from organizational workforces. In reaction to the growing role of technology in services, academics have examined consumer opinions and practice of these service distribution machineries. It is in this vein that Aigrain [87] highlight the significance of Chatbot technology by considering it a central organizational structures prompting gratification. This is why Technology Acceptance Model (TAM) as developed by David (1989) has been used to examine how Chatbot technology has been used by different firm to enhance profitability. The model postulates that the apparent simplicity of usage as well as the apparent practicality of an innovative technology sways consumers' assertiveness in the direction of using the technology that responsively influences interactive purposes to use the technology. This is why the author describes Observe Comfort of Use as “the extent to which the potential user presumes the target system to be free of effort” and Recognize Practicality as “the potential user's independent possibility that using a

definite application system will upturn his or her job performance within an organizational context” [64]

Nevertheless, aside for the prominence on approaches and communicative purposes in the services technology literature, it has been established that Chatbot technology has the following attributes:

1. It has a chat group attributes: These attributes have been said to have significant impacts on the communication level of the consumers. Benz and Meikle [86] argued that it has fostered satisfying experiences for the customers and it has helped them to feel more comfortable with digital marketing.
2. It has spontaneous feedback: This attribute has aided quick response from the automated agents to the heterogeneous audience and it has to a large extent aided the buying and selling procedure.
3. It has one-to-one dialogue: It has aided personalized communication between just the consumers and the automated chatbots. This communication is only open to the parties involved and not to third parties.
4. It improves customers' experience with the chatbot: It has broken the boundaries of waiting for days before getting response from call agents; rather a smooth experience has now been initiated and fostered by Chatbots.
5. It has provided ease of use: Understandable languages are used and with these consumers could easily comprehend the command given and also provide accurate reaction to them.

2.7 Theoretical Studies

This research has its relevance to Technological Determinism Theory. Technological determinism theory was propounded by Thorstein Veblen (1857-1929) and American Sociologist, who assumes that “a contemporary culture's know-how determines improvement of its societal configuration as well as traditional principles” [88]. The principal main explanation of this theory originated from Karl Marx, whose conjectural context was grounded on the impression that “modification in know-how as well as useful equipment is the main effect on the organization of societal relationships” [89].

While corroborating the above, McQuail [90] says “technological determinists, specific technical expansions, communication equipment or media, or most approximately, technology in general are the major ancestor causes of transformation in the society, and technology is seen as the essential circumstance emphasizing the configuration of societal organization, particularly today's marketing firms.”

The technological determinants opined that “the new media that have been progressing due sophisticated technology not only alter their environment, but the very message they convey” [91]. This reveals why the media creates new settings while also introducing new cognitive habits. “Technology, particularly new media, authoritatively shape how individuals think, feel, and behave, as well as how societies organize and operate,” according to the idea [89].

According to McQuail [90] “technological determinism theory is commonly grounded on the resulting suppositions”

1. Communication technology remains important to humanity.
2. Technology pushes transformation in media activities.
3. Every technology stands in the direction of specific communication procedures, subjects as well as usages.
4. The classification of origination and presentation of technology sway societal transformation.
5. Communication transformations prompt societal revolutions.
6. New media destabilize longstanding foundations of influence.

The summary of these assumptions in view of Anaeto, et al. [92] is that “we learn, feel and think the way we do because of the messages we receive through the current technology or medium available.” This is to say that technological determinism theory relates to the impact and usefulness of digital marketing communications tools on organizational profit maximization using Facebook Chatbot, as it has been certified by communication scholars like McQuail [90] Anaeto, et al. [92] Oso [89] and Adeosun and Udabah [88] that the growth of new media has increased communication between people all over the world. For instance, the emergence of smartphone allows people to express themselves through blogs, websites, pictures, multi-media/broadband and other user-

generated media; this has also given marketers the opportunity to easily come up with an adverse selection method of marketing. This means that “consumers are directly selected online due to their recent activities and marketing messages are delivered to them based on their likes.” Globalization is the outcome of the adoption of cutting-edge media technology [92].

This has however proven that technology now determined not just how we feel, but also how we meet our various needs. This however confirms the view of Oloyede [93], who observes that “people acquire information, sense and reason the way they do due to the magnitudes of what they can do with their mobile phones and other devices”.

Introduction: This chapter explains the various methods employed in the collection and analysis of data for this research study. This portion explains the research technique as thoroughly as possible, keeping in mind that the focus of the study is on the research instrument sampling and sample design, as well as the data collecting technique. As a result, the chapter is linked to the research approach utilized to complete the project. The important element here is that knowing which strategy is suited for the job is beneficial.

3. METHODOLOGY

In this report I am going to explore how chatbot can interact with users using Facebook messenger and investigate the impact and usefulness of digital marketing communications tools on organizational profit maximization. It is going to be based on real estate business. Some years ago, building a Facebook chatbots required some coding knowledge and that had to work directly with Facebook’s developer console to be able to build a chatbot. Gratefully that it’s

no longer that way. We have so much ways of building chatbots that don’t need coding but there are Four most popular Facebook messenger chatbots through namely; Chatfuel, ManyChat, MoneyMonkey and Dialog flow (formerly called API.ai). Each of these solutions provides point-and-click, no coding-necessary options for creating an interactive chatbot on the Facebook Messenger platform. Among the above mentioned API.ai.

The study will focus on the three sub-processes in the chatbot architecture, which includes text processing, semantic understanding, and response generation. Additionally, the survey will be piloted with arrangement of chatbot assessment methods and their examination in relation to chatbot categories as well as three central appraisal schemes, which will include content estimation, user gratification, and chat function.

3.1 Method of Data analysis

Facebook Chatbot will be adopted for this study and it will be created in the following way, using some different steps. The needed structure for this study will include:

A Facebook page, which will be created for business and communication and not personal or private page; In creating Facebook page there are some steps you will follow which are;

Create a page: In Fig. 4 logon my normal Facebook account, then locate page at the left hand side of the desktop and click on create page. This is the first step of setting up the Fb page where I input the page name that I used.

The category of the page my products that client can easily use to search me on Facebook. E.g. Real estate, Building store and many more.

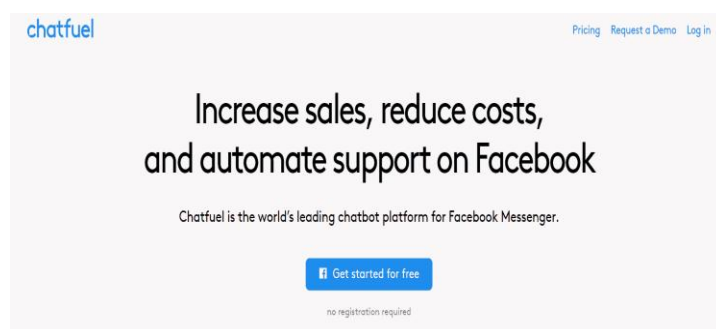


Fig. 1. Chatfuel display

Table 1. Comparing mobilemonkey, chatfuel, manychat, and dialogflow

	ManyChat	MobileMonkey	ChatFuel	DialogFlow
Price	10/months	19/months	15/months	Free
Facebook Ads File	+(pro)	+Free	No	No need to setup webhook-app app-pag retrieve postback pay-load
Comment guard	+(pro)	+Free and pro	No	No need to setup webhook
QandA	Yes	Yes	Yes	NLP based
%CTR track	Yes	No	No	No
Integration -CRM	Yes - hubSpot	Via Zapier	Zapier	No webhook
Analytic Attributes	Weak Tags	Weak Yes, QQ and Attributes	good yes	weak yes
Download contacts	No	Yes, Pro	Yes, Pro	No
GIF	No	Yes	No	No
Subscribe to sequence	Yes	No-manually setup an audience	yes	No
Notify admins	Yes – pro	Yes	yes	No

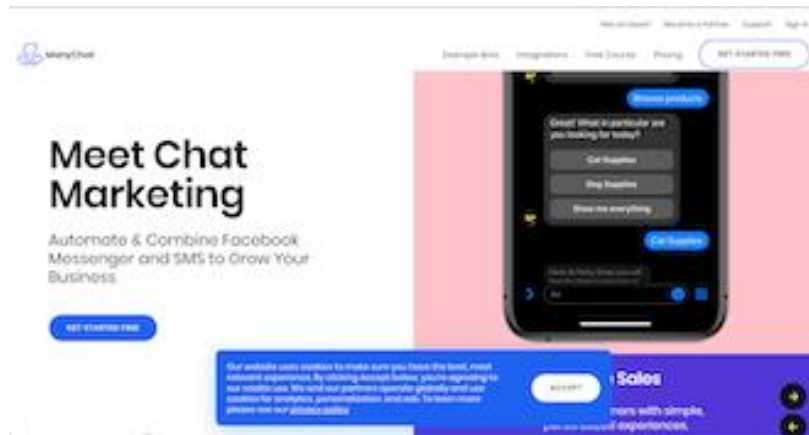


Fig. 2. Manychat marketing display page



Fig. 3. Dialogflow homepage

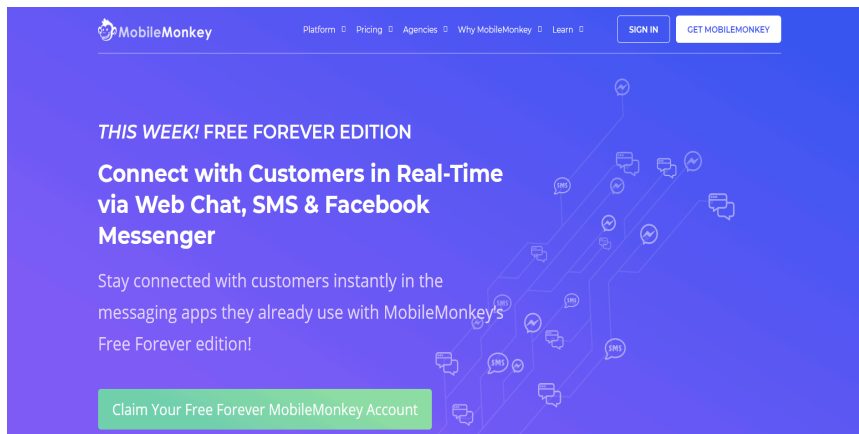


Fig. 4. Mobilemonkey homepage

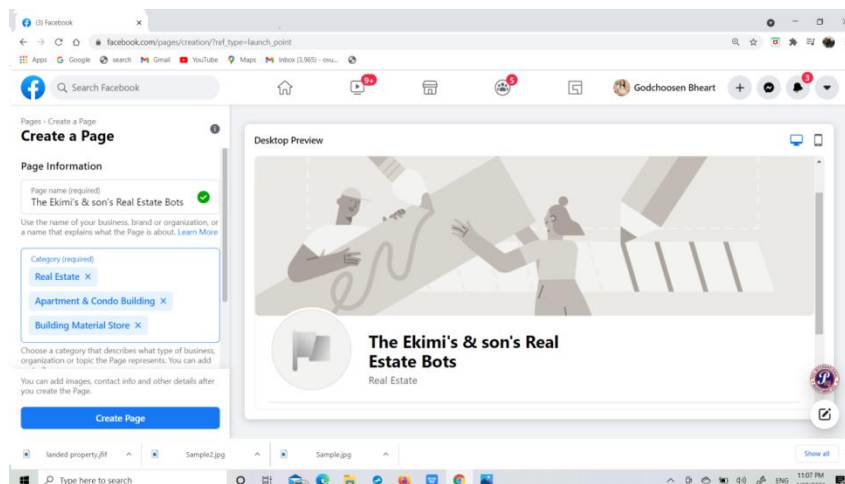


Fig. 5. Facebook Chatbot homepage

Connect Facebook page to WhatsApp: Connecting my WhatsApp business account with my Facebook Page that is displayed in Fig. 5 to run ads that click to WhatsApp. These ads let you connect with customers when they click on a Send Message button on your Facebook to start a conversation in WhatsApp.

The complete overview of my Facebook page: After the step in the above Fig. 6 uploaded profile picture on the facebook page to help attract clients to know what my market is all about and it displayed the complete overview of my page as displayed in Fig. 5.

Chatfuel as a localhost: This is the second step in creating my Facebook chatbot and it is done after successful setting up the Facebook page as stated above. This is an API.ai called Chatfuel that stand as a localhost. You go about

this by typing www.chatfuel.com on the same browser that already have your Facebook page signed-in. This will direct you to the first page as displayed in Fig. 8.

The following steps below are to be follow.

Step 1: As it was explained before in the above diagram, the first step is to log into Facebook on the same browser am going to connect to Chatfuel in. There after i will simply select the "sign in with facebook" button on the Chatfuel homepage. It will bring up a Facebook connection page that allows me to give permissions to Chatfuel to see my Facebook information and I will authorize it then it will take me back into the Chatfuel the chatbot builder, where i will select which Facebook page that I will connect to as was stated in Fig. 4.

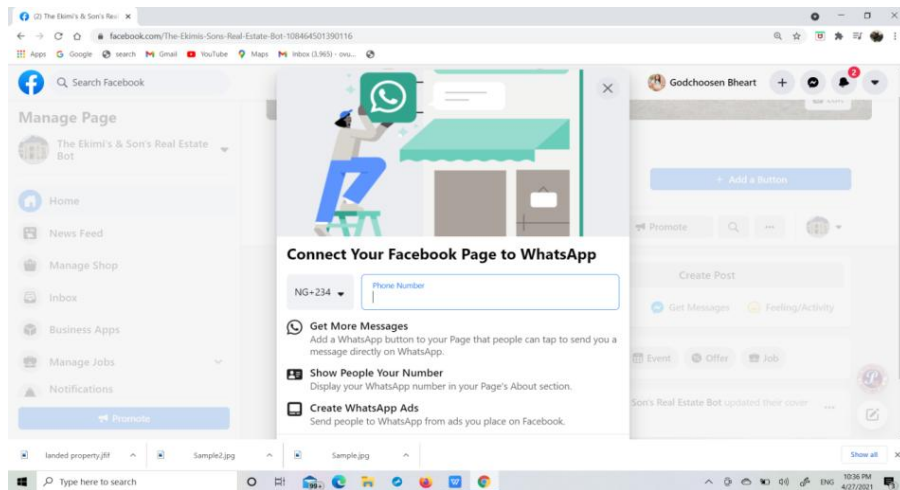


Fig. 6. Facebook page connected to whatsapp

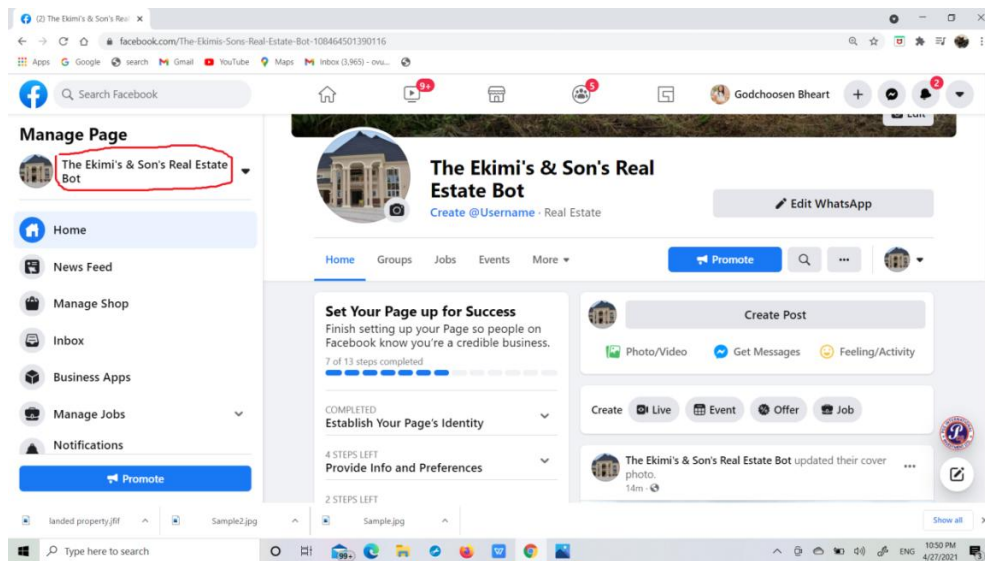


Fig. 7. Complete overview of Facebook chatbot

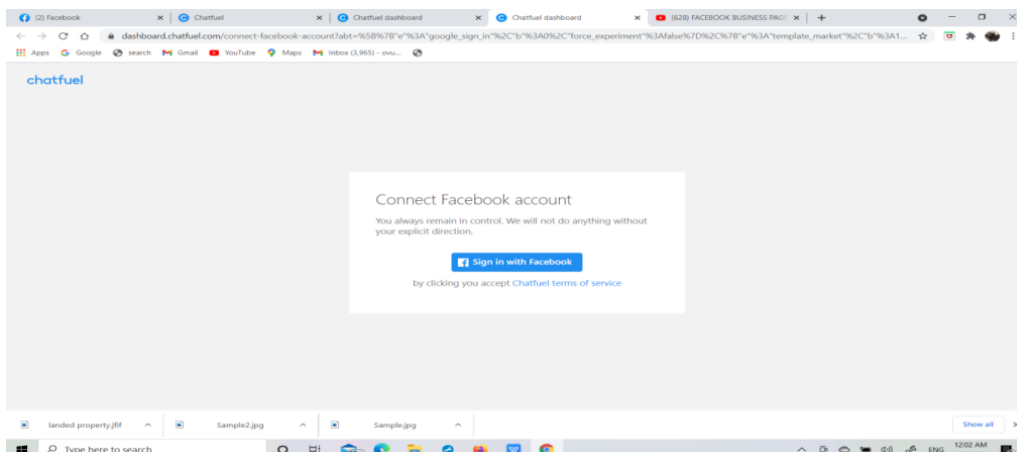


Fig. 8. Chatfuel as a localhost

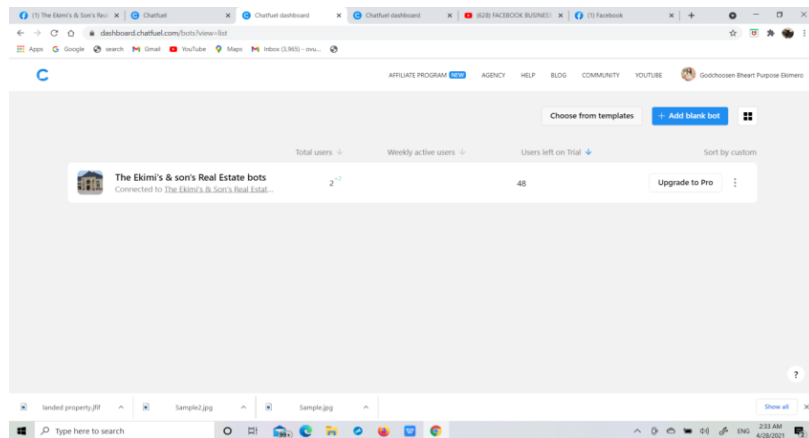


Fig. 9. Builder page

Step 2: I will connect my Facebook business page. Because like as I stated before: chatbots are tied to organizations and not to individuals. I will select my real estate page: The Ekimi's & Son's Real Estate bots in Fig. 9, after this, it took me to that API.ai which is the chatfuel home page where I created my welcome message.

In Fig. 10, the set up my AI is drop-down from the Administrator and this help to teach the bot to respond to message from users; For example: Hi Ekimi's & Son's Real Estate; The responds from the bot will be Let me help you to buy your dream home! What are you looking for? Hey; what kind of home are you looking?

Step 3: I will create my welcome message and default answer as displayed in Fig. 10. This is the first interaction my chatbot visitors will receive immediately they click on the get started.

Step 4: I will create a default message and make sure to also create a default message.

This will be shown in case the user types in a message that I do not have AI detection set up for. It should say something along the lines of, "Sorry, could you say that again?"

Step 5: Setting up my conversation navigation/Training my chatbot. In this step, i will build my conversation navigation, i.e., the means for an individual to work with my chatbot. In the example chatbot I am building, I will help my audience find answers to questions they might have about renting or buying a house. On the Facebook page chat message. These help users to pick or click on their best option shown in Fig. 12.

Step 6: The overview of chats/conversation between my chatbot and clients is explained in all above Figs. These are the output of what I trained my bot to display when clients/users access my business page.

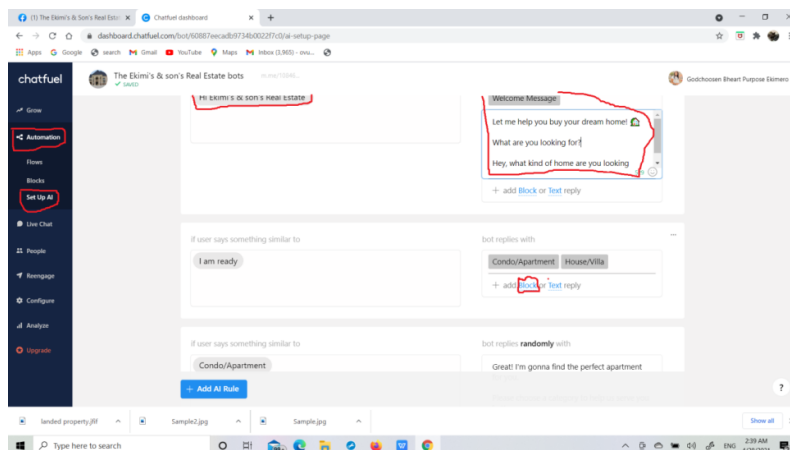


Fig. 10. Chatfuel homepage

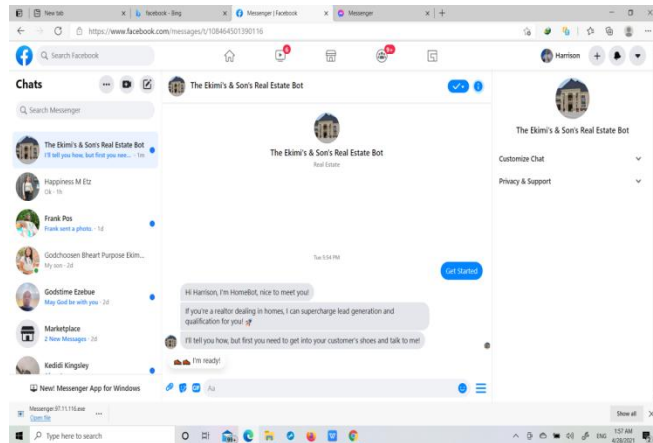


Fig. 11. Default answer page

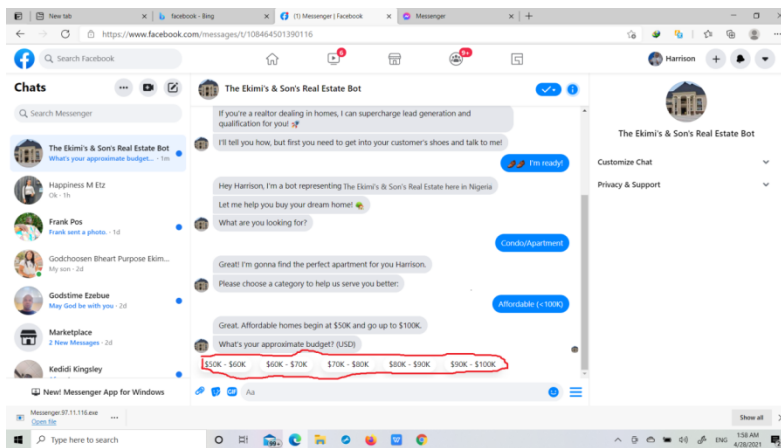


Fig. 12. Training page1

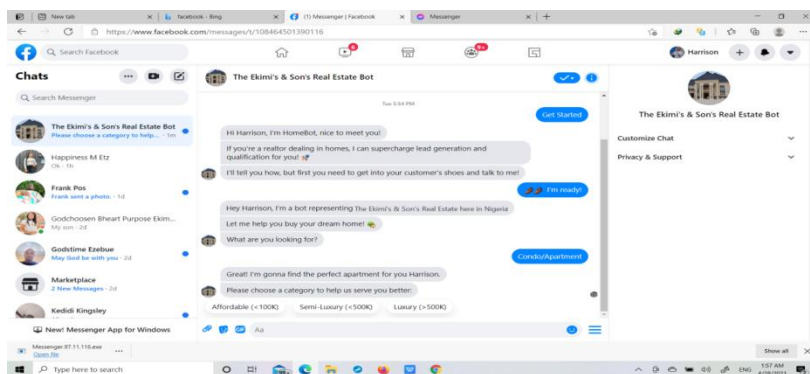


Fig. 13. Training page2

4. SUMMARY

This study examines the impact and usefulness of digital marketing communications tools on organizational profit maximization using Facebook Chabot. However, this study has established that consumers assisted in their

communication with brand's agent. They have been made to see the importance of Chatbots as significant digital marketing communications tools that are capable of ensuring organizational profit maximization. Some steps were taken in the process of creating Facebook page and it includes creating a page and setting it up so that

users can see the page name that has been used.

The effectiveness of the page was in such a way that my page can be easily viewed by the consumers to search for my products easily. But for this study, a real estate page was created and the Facebook page of the Brand was linked to the brand's WhatsApp page. A picture was uploaded as a profile picture to help attract clients to know what the brand is marketing. To complete the overview of the brand's Facebook page, Chatfuel was created as a local host using the API. With this, immediately the consumers click on www.chatfuel.com, they will be directed to the first page of the brand. However, once the brand logs into Facebook on the browser, it will be connected to Chatfuel, then it will bring up a Facebook connection page that allows the brand to give permissions to Chatfuel to see its Facebook information, where authorization to connect to desired Facebook page could be made possible.

On the other hand, the brand connects to its Facebook business page and selects the real estate page, which has been named "The Ekimi's & Son's Real Estate bots", which will direct the brand to its API, where its welcome message could be created. Then the AI is drop-down from the Administrator and this help to teach the bot to respond to message from users. For instance: Hi Ekimi's & Son's Real Estate; the responds from the bot will be "Let me help you to buy your dream home! What are you looking for? Hey; what kind of home are you looking?" All these responses have been automatically programmed into the Bots to stand in the place of human agents. So, each time any customers visit the page, the first thing they receive is the welcome message and default answer that has been programmed by the Real Estate agent. It should be noted that an AI detection is also set up to allow the Bots reply sensitively to messages or questions that the Real Estate agent did not include in its set up. With this, the Bots asks the user to repeat his or her request by saying, "Sorry, could you say that again?"

The last step that the Real Estate agent takes is setting up its conversation navigation and training its Chatbot to find answers to questions the customers might have about renting or buying a house. With this, the role of human agents have been replaced by Bots and the advantage is that it is more cost efficient and gives spontaneous feedback to whatever

requests the customers have. This however backs the Tegmark [57] reference to chatbots as virtual agents or conversational agents that ask questions answer the receiver and also ensure there is spontaneous feedback to the needs and expectations of all prospective customers.

5. CONCLUSION

This study has identified the problem of organizations difficulty in marketing activities and in effective communication with their consumers and linked it to the promiscuous nature of consumers. This promiscuity was linked to the consumers' insatiable desires or through to the disappointment they experienced in previous marketing activities with brands. This makes them to prefer a brand product today and another tomorrow. Hence, it is in a bid to address this problem that the researcher seeks to answer the question of how Chatbots could be effectively used to enable companies or brands intensify organizational profit maximization.

However, the study have revealed how Chatbots could be effectively used to enable companies or brands intensify organizational profit maximization and how many organizations are beginning to adopt this as a new marketing approach. It has been established that Chatbots are beginning to represent marketing agents. Also, it has been proved that the limitations of the human agents have been taken over by this automatic Bot, which have been trained to act like human, give responses to customers' requests and even suggest responses to users. This study however concludes that a Chatbot only represents the natural evolution of giving answers to questions leveraging natural language processing and it has practically become a conversational agent like Reshmi and Balakrishnan [94] termed it. Hence, they can accurately give responses to natural language input and hold a conversation with human in a way that imitates a real person by means of audio or written.

6. RECOMMENDATIONS

The preceding suggestions are given study and the conclusions gained from the results of this study:

1. It is important that every organization that must survive in this century must begin to adopt a digital marketing approach if they

- must successfully compete with other organizations.
2. Every organization's marketing teams must learn new communication strategies for preserving and advancing long-term relationships with existing consumers as well as reaching out to new potential consumers.
 3. There is need for every marketing firm to intentionally develop on the conception of incorporating Facebook and Whatsapp into the broader marketing approach by certifying intelligibility in the firm's professional strategy all-encompassing of the establishing of a societal guiding principle.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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