

**THE REPUBLIC OF TURKEY  
BAHÇEŞEHİR UNIVERSITY**

**EMERGING MARKETING AUTOMATION TOOLS:  
CHATBOT IMPLEMENTATION IN INDUSTRY**

**Master's Thesis**

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**THE REPUBLIC OF TURKEY  
BAHÇEŞEHİR UNIVERSITY**

**GRADUATE SCHOOL OF SOCIAL SCIENCES  
MASTER OF BUSINESS ADMINISTRATION**

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## ABSTRACT

### EMERGING MARKETING AUTOMATION TOOLS: CHATBOT IMPLEMENTATION IN INDUSTRY

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Development of the digital transformation and development in marketing automation tools with the support of CRM systems have led all businesses to find innovative and creative approaches to engage with existing and future customers especially in B2B. In such a competitive environment, marketing strategies, the different approach to customers are important to differentiate companies from one another in order to sell their products to their customers in more efficiently.

Theoretical framework and literature review that includes marketing, B2B marketing, digital transformation, Artificial Intelligence (AI) and marketing automation tools are the foundation of this thesis. Moreover, further information to understand the industry equipment and machinery market in Turkey are given.

The methodology of the study based on the Company X that using the marketing automation tools, CRM systems efficiently and in 2018 implemented chatbot application to their website. Study covers the 2017-2019 website performances of Company X and effect of chatbot implementation on sales in 2019.

**Keywords:** Marketing, Digital Transformation, Marketing Automation Tools, Artificial Intelligence, Chatbot

## ÖZET

### GELİŞEN PAZARLAMA OTOMASYON ARAÇLARI: ENDÜSTRİDE CHATBOT UYGULAMALARI

Anıl Muharrem

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CRM sistemlerinin desteği ile pazarlama otomasyon araçlarındaki dijital dönüşüm ve gelişim, tüm işletmelerin özellikle B2B işletmelerinde mevcut ve potansiyel müşterilerle etkileşim kurmak için yenilikçi ve yaratıcı yaklaşımlar bulmasını sağlamıştır.

Böyle rekabetçi bir ortamda pazarlama stratejileri, müşterilere farklı yaklaşım, ürünlerini müşterilerine daha verimli bir şekilde satmak ve şirketleri birbirinden ayırmak için önemlidir.

Pazarlama, B2B pazarlama, dijital dönüşüm, Yapay Zeka (AI) ve pazarlama otomasyon araçlarını içeren teorik altyapı ve literatür taraması bu tezin temelini oluşturmaktadır.

Ayrıca, Türkiye'deki endüstriyel ekipmanları ve makine pazarını anlamak için daha fazla bilgi verilmektedir.

Pazarlama otomasyonu araçlarını, CRM sistemlerini verimli bir şekilde kullanan ve 2018'de web sitelerine chatbot uygulaması uygulayan X Şirketi'ne dayanan çalışmanın metodu, X Şirketi'nin 2017-2019 web sitesi performanslarını ve chatbot uygulamasının 2019'daki satışlar üzerindeki etkisini kapsamaktadır.

**Anahtar Kelimeler:** Pazarlama, Dijital Dönüşüm, Pazarlama Otomasyon Araçları, Yapay Zeka, Chatbot

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## INDEX OF ABBREVIATIONS

Ad	: Advertisement
Ads	: Advertisements
AI	: Artificial Intelligence
B2B	: Business-to-business
B2C	: Business-to-consumer
BI	: Business Intelligence
Etc.	: Et cetera, and other similar things
Ie.	: Id est, in another words
Et al	: Et alii, and others
Comp.	: Comparison
CRM	: Customer Relationship Management
NLP	: Natural Language Processing

## 1. INTRODUCTION

Peter Drucker wrote in his famous book *Management: Tasks, Responsibilities, Practices*, in 1973: Despite the emphasis on marketing and the marketing approach, marketing is still rhetoric rather than reality in far too many businesses. “Consumerism” proves this theory. Consumerism demands from business is to market the service or product. It demands that businesses should start out with the needs, realities and the values of the customer. It demands that businesses should base its rewarding system on its contribution to the customer. Therefore, after twenty years of marketing rhetoric, consumerism could become a powerful movement that proves not much marketing has been practiced. Consumerism is the shame of marketing.” (Drucker 1973, p.64).

Digitalization and digital transformation have affected businesses, processes, even the day-to day life. As Peter Drucker mentioned above, the relationship with the consumer is also changing its shape. Behaviors of the customers are changing.

Through digital transformation, the medium of the sales and marketing for B2B is also evolving. Customers look for prompt solutions and answers from the companies. Customer and their satisfaction become the core issue for the companies if they are in the long run.

In the age of digitalization and digital transformation, companies seek for new marketing approach to differentiate them from their competitors. The value of the product is not only measured by its price or quality, customers are looking for actual added value.

In the study; marketing, digital transformation, customer relations management (CRM) and Artificial Intelligence (AI) will be briefly explained. The case study is based on Company X who operates more than 100 years worldwide, driver of the change in industrial equipment/machinery sector with innovative and energy efficient products and solutions. An overlook to chatbot implementation in industrial equipment sector has been analyzed if the implementation has affected the sales.

## 2. LITERATURE REVIEW

### 2.1 MARKETING

Although there are many definitions of marketing, the simplest version would be that marketing is a form of study and management of exchange relationships.<sup>1</sup> As Peter Drucker mentioned in the 1950s, marketing is one of the essential elements of business management and commerce.

Phillip Kotler has defined marketing in 1980 as the human activity to satisfy the needs and wants through exchange process and in 1991 revised marketing definition as *“a social and managerial process by which individuals and groups obtain what they want and need through creating, offering and exchanging products of value with others”*.

American Marketing Association defines and approves marketing definition in 2017 as *“the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large”*.<sup>1</sup>

In every decade, there are different definitions to give meaning to marketing that also affects the approach to marketing. While the production and the product were at the core of marketing, nowadays the relationship, value, and consumer are on the rise.

One of the most important differentiation between the marketing and sales are not the same processes as marketing begins way before the production. Marketing studies to identify the needs of executives, measure the size and magnitude of needs and examine if there will be a profitable opportunity. The sales penetrate after production. Marketing continues throughout the lifecycle of the product in order to find new customers, increase the attractiveness and performance of the product, analyze and learn from the product sales result and manage the repeated sales (Kotler 2002, p. 26).

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<sup>1</sup>American Marketing Association: <https://www.ama.org/the-definition-of-marketing-what-is-marketing/> [Accessed 5 December 2019].

### 2.1.1 Eras of Marketing

The Industrial Revolution took part between the 1760s to 1840s have a great impact on techniques and evolution we have today. Continuous and mass production led managers and business owners to find better solutions and strategies in the light of technological improvements.

Enterprises have become more and more attentive to the needs and wants of consumers. From inbound thinking to outbound thinking, marketing contribution has never been this coherent

There have been major stages in the history of marketing: <sup>2</sup>

The Trade Era: The production exists in goods that were limited and exchanged.

The Production Orientation Era: Begins with the industrial age when goods were deficient, and the enterprises focused on production. Where production continued the demand would be extended. Product orientation caused deficits in the market thus led to idea of the supply creates its own idea.

The Sales Orientation Era: The saturated markets have led enterprises to penetrate more opportunities to perform more strategically. The companies have begun to focus on what company would produce, its distribution and pricing strategies as well as gaining marketing knowledge in order to set the bases for consumers.

The Relation Era: Major focus in this era is to develop a relationship with the consumer and create customer loyalty. According to Kotler, the cost of attracting a new customer is estimated to be five times the cost of keeping current customer happy. (Kotler 1997)

The Social/Marketing Era: Social interactions and real-time communication with the consumer become the core of this era. Businesses engage with their current and potential customers 24/7 and this communication is crucial for their success indicator.

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<sup>2</sup> <http://morethanbranding.com/2012/04/30/the-evolution-of-marketing/> [Accessed: 07 December 2019]

Marketing has changed and impact business in the last century and the practice of the profession is being transformed where being responsive, building a relationship with the customer and continue to shift channels with communication influence the consumers' point of view by the time.

### **2.1.2 Marketing Mix**

One of the important contributions of modern marketing is the companies' organizations became market and customer focused instead of being product centric (Kotler 2002, p.xi). The marketing process begins with understanding the dynamics of the market and identifies the opportunities to meet current or hidden needs where the market is divided into segments and the company sections to meet these needs. It necessitates an advanced strategy and extended marketing mix with an action plan. The execution of the plan analyzes the outcomes and requires more development according to that outcomes (Kotler 2000, p.36).

The marketing mix is defined as all kinds of marketing activities of an enterprise. However, there are some discussions around marketing mix which are considered insufficient, limited and impracticable.

Strategic marketing planning develop and execute according to marketing mix components and the maneuvers in line with these components. Strategical plan is crucial for the selection of the product and the market, to define qualitative and quantitative objectives, communication plan, to decide on a production and investment plan, to position the brand and product in the market and also to understand the responsibilities and liabilities. Strategic plan also provides the benefit of understanding the market and the company itself.

Marketing mix enables the companies to respond how to reach their targets after defining the strategy and maneuvers. Furthermore, marketing mix is the manageable marketing variables to get the desired reaction from the targeted market and take the all necessary steps to affect the demand on its product by the enterprises.

### 2.1.3 Transition Through 4P to 4C

The marketing mix, 4P, can be found in the 1940s, Professor James Culliton is the first one mentioned marketing mix as “mixers of ingredients” in his “The Management of Marketing Costs” article, 1948. Professor Neil Borden was inspired by Professor Culliton and detailed the early history of marketing mix and popularizing the “marketing mix” concept.

The marketing mix is defined as 4P of marketing: product, price, place, promotion.

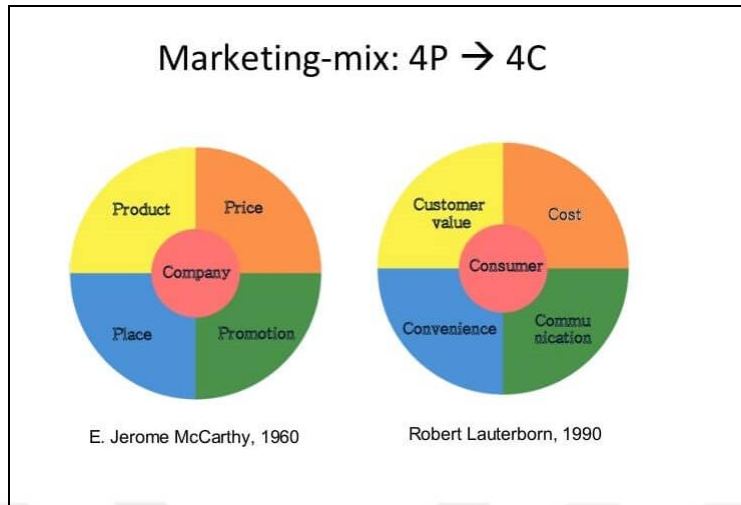
- a) Product: The concrete or abstract materials that meet the demands of the consumer and make money to the producer in return.
- b) Price: The value defined in this exchange.
- c) Place: The procedures and processes after producing the product to meet with the consumer.
- d) Promotion: The actions taken to be as a competitor in the market.

Although the 4P marketing mix model has survived through many years, the company point of view evolved to consumer point of view.

4P model which focuses on the company with product, price, place, and promotion become inadequate and 4C that focus on to consumer model developed.

4P marketing mix model’s perception is based on the sales and the seller on the contrary 4C marketing model puts the customer on its core. Customers need more than the product they want to purchase value or solution, asses the cost and total cost of ownership instead of price, look for convenience and communication. (Kotler 2000)

**Figure 1: Marketing Mix 4P to 4C**



Source: Pazarlama İletişimi <sup>3</sup>

- i. Customer Value: Customers will only purchase what they want or need. The marketer should focus on and examine the consumer's wants and needs to attract them.
- ii. Cost: Price is of the elements that consumer consideration as a cost, total ownership would indicate the cost of time and conscience. This represents not only price but to change or implement the new product or service and the consumer's cost for not selecting the competitor.
- iii. Convenience: within the new age of digital, consumers need to be convinced to go somewhere fascinate their need or want or marketers should study how the target group prefers to purchase. Place is becoming less applicable in this era and convenience becomes more important.
- iv. Communication: Communication incorporate every marketing communication tool such as advertising, public relations, personal selling though it is not considered as manipulative as promotion and contemplate as cooperative.

<sup>3</sup> Pazarlama İletişimi, <https://pazarlamaitisimi.com/pazarlamada-4p-ve-4c-kavramlari> [Accessed: 2 November 2019]

## **2.2 MARKETING COMMUNICATION**

It is certain that in the constantly evolving world of business, marketing communication is an essential and undeniable aspect of the marketing process. Marketing communication is defined as communication between the enterprise and the consumer. Communicational objectives have changed from 'inform, persuade and remind' to 'inform, listen and respond'. (L. Porcu 2012) According to Kotler and Keller (2012), the relevant definition considers marketing as the processes of companies' communication with consumers to reach more profit and market share. As we review further, we see that even the medium or the purpose has changed, sharing information and communication with the consumer standstill. Communication is a process of message being delivered and transmitted between two or more people in the form of thoughts, ideas, feelings, and actions with the intent of shared understanding. (Parikh 2000)

### **2.2.1 Communication Process**

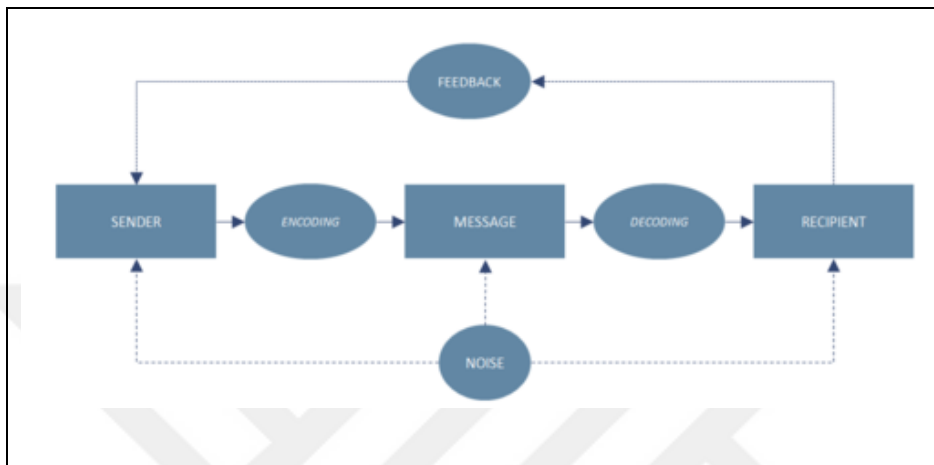
Communication is one of the important aspects of the marketing mix. Marketing communication becomes the largest component of communication among the enterprise which presents the brand, core values, objectives, products, services to customers. Communication objectives with specific messages meet targeted customer groups or individuals to create demand and attract the brand interaction.

The communication process includes to a message from a person and/or group to another person and/or group. (Chand 2014) This interaction should be continuous and dynamic for both parties affected.

- a. Sender, who convey the message
- b. Message, which is a meaningful idea encoded, however the sender, transmission and the receiver expose to noise that obscures the message
- c. Encoding, conversion of subject as words, actions, figures, etc.
- d. Recipient, who receives and efforts to understand the message
- e. Decoding, the recipient who convert the message into a meaningful understanding

- f. Feedback, ensuring that the received message is being understood as the sender meant
- g. Noise, is defined as any external interference and unplanned distortion during the communication process

**Figure 2: The Communication Process**



Source: *Managementmania* <sup>4</sup>

Marketing communication is an essential part of the business, although it is important to examine the current developments in today’s marketing communication. Kotler and Armstrong define marketing communication activities as promotion mix, specific blend of advertising, sales promotion, public relations, and personal selling that the company used to seek its advertising and marketing objectives.

As Philip Kotler described that: “*The communicator must start with the audience because the audience determines what is to be said. how it is to be said. when it is to be said. where is to be said. and who is to say it.*” (1991) This description mostly related with the 4P’s of the marketing mix; product, price, promotion, and place, developed by McCarthy. Marketing communication is usually defined as promotion and should be informative, persuasive and reminders as well as have an important duty to build the image of a product or brand.

<sup>4</sup> Manegementania, <https://managementmania.com/en/basic-model-of-social-communication> [Accessed: 3 November 2019]

Marketing communication mix stated as below:

- a) Advertising: According to American Marketing Association (AMA) advertising means any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor.
- b) Personal Sales: The opportunity to reach directly or indirectly to customers. It enables to receive direct feedback in that moment and disable the customer loss which differentiates personal sales from others.
- c) Sales Promotion: Sales promotion is the process to persuade a potential customer to buy the product which is used as a short-term approach to boost sales.
- d) Public Relations: The efforts and contribution to promoting the image of company, program, product or core business functions. The promoted message is toward the image rather than boost the sales. The targeted groups could be employees, stakeholders, media, government or other key parties.
- e) Direct Marketing: A promotional method to present the information about the company, product, service to the target customer via letter, e-mail or the internet.
- f) Digital marketing: Promotional information provided to customers through a web site that involves the same messages, design and offers follow in the others. Digital marketing involves social media channels such as Facebook, Twitter, YouTube, and others.

### **2.3 B2B MARKETING**

Business-to-business (B2B) marketing also known as industrial marketing which focused on transactions of products produced for consumption by other business as well as the items that went into the production process of those other organizations. Industrial marketing terminology has moved to a wider range, business-to-business line which also includes value-added, value-generating relationships both for products and services, between organizations and the individuals themselves.

On the contrary business-to-consumer (B2C) marketing mostly focuses on the final transaction between the enterprise and the customer.

Business-to-business (B2B) covers the organizations of all activities sell, resell or purchase the raw material in order to use their production. In another words, the markets who produces the service or goods to sell other markets in exchange (Ersoy 1999).

Table 1 showcases key differences between B2B and B2C marketing. Unlike B2C marketing, B2B marketing is predominantly driven by less and diverse customers and needs more complex and technically stemmed sales approach. This need resulted in a new area of study called organizational buying behavior. Due to the fact that the main revenue drivers are the low number of strong players in the target customer base, many common and proven statistical approaches, data mining, and other useful research tools applied in B2C are either should be revised or considered inappropriate to meet needs of B2B market.

In order to create long-term customer experience and satisfaction, sales and marketing teams aim to create and improve tailor-made solutions. Thus, important to achieve the sustainable and profitable growth in the international B2B selling (Homburg, Müller and Klarmann et al. 2011).

**Table 1: Key Differences between B2B and B2C marketing**

4 Handbook of business-to-business marketing	
Table 1.1 Some key differences between B2B and B2C marketing	
Business-to-Consumer	Business-to-Business
Marketing culture	Manufacturing/Tech culture
Market to end of chain	Market to value chain
Perceptual proposition	Technical proposition
Value in brand relationship	Value in use, quantifiable
Large customer segments	Small number of customers
Smaller-unit transactions	Large-unit transactions
Transaction linkage	Process linkage
More direct purchase	Complex buying sequence
Consumer decides	Web of decision participants

Source: Handbook of Business-to-Business Marketing

### 2.3.1 Strategy of B2B Marketing

Marketing communication is based on the communication process; therefore, this process is being handled with marketing. Messages communicated through marketing communication are expected to affect the purchasing process for the consumer.

Conclusive communication aims to create a new and changed attitude to consumer. Desired behavior is to receive encoded message through this process, decoded as aimed and show the targeted behavior by the consumer (Bozkurt 2005). As Kotler mentioned modern marketing needs more than the development of a good and useful product, where should be accessible to its targeted consumers, attractively priced and requires communicate information about the products and serviced as four P's of the marketing (Kotler 2003). Based on various definitions, marketing communication can be stated as the whole of the actions between the brand and the targeted group to increase profit, market share, and business image. As Parente and Strausbaugh-Hutchinson (2015) mentioned in their book for the effective product selling the 4P's of marketing should be perfectly aligned with marketing programs. It must be the right product, at the right price, at the right place and with the right promotion.

Meanwhile, the competition between the products has declined due to the standardization of the manufacturing processes and shorter lifetime of the products. Opposite to this decline, service competition becomes more and more important.

One of the important contributions of modern marketing has shown the significance of the companies who establish their strategies and organizations around the market and customer instead of product (Kotler 2002, p. xi).

According to Gronstedt (2002) the customer and the communication built with the customer are the core of the enterprises and the strategy developed around this communication will directly affect the business outcomes. Gronstedt (2002) emphasizes that even the integrated marketing communication term stated the production point of view, and it should be changed as integrated communication which includes the dialogue, interaction and learning process.

Marketing communication activities are executed to be interacted with the target audience in a strategical approach which is vital to create and maintain a strong relationship with consumers.

### **2.3.2 Purpose of B2B Marketing**

Marketing communication is usually defined as the actions of promoting products or services of an enterprise to the target audience.

According to Baines, Fill and Page (2011) the audience is at the core of the marketing communication which subsists on three main aspects.

- a) Engagement: This method has considered as the most effective communication approach that the audience desired. Communication could be one way, two ways or based on a conversation.
- b) Audience: The target audience and their characteristics are identified. Audience could be defined as consumers, shareholders or organizations.
- c) Responses: The unforeseen results from this communication are estimated. Outcomes of these activities such as increased sales, or desired feelings and actions to be taken by the consumer being targeted.

### **2.3.3 Objectives of B2B Marketing**

According to Duran (2001) the objectives of marketing communication can be reviewed in two approaches, sales-wise and communication-wise.

#### **a) Sales-wise Approach**

The sale is the core of the business which indicates all marketing communication is arranged to reach this goal.

#### **b) Communication-wise Approach**

This approach indicates that all marketing communication tools aim to reach the next step in the mind of the consumer.

Duran listed these approaches in general <sup>5</sup> (Duran 2001):

- a) Increase of the sales
- b) Establishment of the product and brand awareness
- c) Establishment of the company and the product awareness
- d) Improve the brand image of the company and products
- e) Influence the attitudes and behaviors of the target audience
- f) To give information about the company or product
- g) To give information to the target audience about product use
- h) Customer loyalty
- i) Remind of the product or the company
- j) Launch new products

As a summary, it can be explained as the main objective of communication is to develop the attraction and provide the feeling among the target audience. The development of a structured communication strategy includes an understanding process as well as implementation operation.

Marketing communication is constantly improving. As Hatton mentioned that the marketers should always be aware of the changes of the communities and technology and continuously explore the potentials and dynamics of the markets (Hatton 2000, p.2).

The academic attitude of marketing communication was created during 1920s to 1950s when advertising was an important component of the developing economy. The population growth and market influence of the intuitions have created an enlarged market. From this moment on, between the growing markets to saturated markets, the consumers become more and more dominant and less impressed by the marketing messages that companies conveying through marketing communication methods. Egan states that the transmission should be more creative as the consumers are getting more suspicious and question the methods of the marketers, especially in the saturated markets.

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<sup>5</sup> Duran, Mustafa, 2001: Pazarlama İletişimi ve Stratejileri, [online], <http://www.danismend.com>, [Accessed 29.11.2019]

## **2.4 CUSTOMER RELATIONS MANAGEMENT (CRM)**

Enterprises aim to understand the customers' needs, analyze their behaviors, gain new customers and sustain the existing customers' loyalty. Customers are the core of the marketing therefore, their needs become the core of the marketing strategy of the enterprises. Understanding the behavior of the customers and their thinking process through the decision making become more important (Karabulut 1989).

Consumers choose the brand they prefer based on different variables. This could be a random choice, based on a commercial activity or one could be loyalty to the brand.

Customer Relationship Management applications are designed for the businesses to organize and analyze their data that collected from existing customers.

### **2.4.1 CRM applications**

CRM applications become an effective and efficient way for the enterprises to understand and evaluate the pattern of the consumers' behavior. CRM becomes a value-added system enable enterprises to define their concepts according to customer behavior and changing the environment become more customer focused (Greenberg 2002).

CRM became a powerful tool to focus customers' need and giving them a tailor-made product or service. Enterprises have the knowledge to give the customer specific needs in value chain (Barnes 2000). CRM could be defined as a transition customer focus rather than the product focus in the marketing. Restructuring the marketing and sales approach, defining the processes and procedures could only become realization through the CRM systems.

The aim of the CRM is to organize, follow up and manage all the customer information, activities, history, conversations and actions that support marketing, sales and customer services to get better insights about the customer and ensures to deliver the right message, at the right time with the right tool.

As a concept CRM put the customers, their needs into the core. Therefore, targeting the right customer, customer loyalty, and choosing potential customer become more essential and to reach this target need right applications and infrastructure.

Every customer has different needs and demands as well as the enterprises have different existing and potential values to give. As a result, customer segments divided into the most profitable ones, deepen the relations to give necessary services and the ones whom enterprises not to consider give services (Rigby et al. 2006).

The customer inputs and data are the materials to understand the customer needs, behaviors, sustain the relationship and adjusting the strategy. The collected data by the companies increase the ability to build and keep the long-term relationship with the customer. Marketing, sales, customer services, logistics are the different channels that customer to get in touch with the companies. Enterprises should find different channels to collect customer data to understand customer needs, find the right platform that the employees' access this updated and integrated customer information and data (Jayachandran et al. 2004).

The right strategy in CRM activities need to focus customers in the core. Customer Relationship Management indicates the process of the relationship between the enterprise and the customer, customer satisfaction and the loyalty of the customer (Atalık 2005).

According to the Peter Drucker, the relationships are the core of the social life, as a result the relationship with the customers are the core of economic life. According to this context how the relationships sustain the social life cycle between the people, the relationships associate with the customers are needed to continue the economic life cycle. His approach indicated as the purpose of business is to create and keep customer (Drucker 2015).

The CRM approach is aiming to understand and attract the customer behavior, acquire new customers, keep the existing ones and increase the customer loyalty, satisfaction and the profitability through the meaningful and value-added communication (Mursallı 2013).

Like all tools and software, the purpose of marketing automation tools is to attract customers by follow up their actions and analyzing the progress of the marketing campaigns. This software has measured when customer first meets the product as a lead, when that lead converts to opportunity and when purchase process completed.

This customer specific data has analyzed by marketing professionals and classified as profiles. <sup>6</sup>

According to Cummings, a study, run by Learn Marketing Automation in Business to Business marketers, showed that marketing automation tools and supporting processes are nearly three times more likely to have better and powerful communications with sales (Cummings et al. 2010).

While the CRM market has rapid growth in worldwide customer experience and relationship management software market grew 15.6 percent in 2018 (Gartner Newsroom).

**Table 2: CRM Software Spending by Vendor, Total Software Revenue Worldwide, 2018 (Millions of USD)**

<b>CRM Software Spending by Vendor, Total Software Revenue Worldwide, 2018 (Millions of U.S. Dollars)</b>				
<b>Company</b>	<b>2018 Revenue</b>	<b>2018 Market Share (%)</b>	<b>2017 Revenue</b>	<b>2017 Market Share (%)</b>
Salesforce	9,420.5	19.5	7,648.1	18.3
SAP	4,012.2	8.3	3,474.4	8.3
Oracle	2,669.0	5.5	2,492.9	6.0
Adobe	2,454.8	5.1	2,017.2	4.8
Microsoft	1,302.0	2.7	1,132.1	2.7
Others	28,371.7	58.8	24,962.0	59.9
<b>Total</b>	<b>48,230.2</b>	<b>100.0</b>	<b>41,726.7</b>	<b>100.0</b>

Source: Gartner, June 2019.

According to Table 2; the top five CRM software vendors accounted for more than 40 percent of the total market in 2018.

<sup>6</sup> Hubspot, <https://www.hubspot.com/marketing-automation-information> [Accessed: 6 December 2019]

Regarding the future of CRM, social CRM issue is one of the top topics in the marketplace. Gartner analysts are indicated all subsegments of the CRM market grew by more than 13.7 percent with marketing emerging as the fastest growing segment by the increase 18.8 percent and representing more than 25 percent of the whole CRM market. Customer service and support sustains its number one position with 35.7 percent market contribution.

CRM applications have high cost initiatives though give the companies platform to create their goals, measure their success in an accurate way, adjusting their strategy while developing the relationship with their customers.

Although the reason companies need to build and sustain relationship with the customer is economical; the objective of CRM strategy is to identify, satisfy and retain the profitable customer by managing and analyzing their data.

#### **2.4.2 Marketing Automation**

Nowadays, the relationship between the AI and marketing cannot be ignored. Market forecasting, automated processes, making decision based on the data that retrieved from the users and customer, along with the increased efficiency and enable to rapid adaptations seem to performed by humans – mostly it is - , however the science and technology behind these systems can only be described through computer programs that process data and provide valuable and meaningful output for marketing professionals.

In terms of marketing, marketing automation is a software to digitize marketing processes in effective way, performed marketing messages to target audience through tools like emails, websites, social media, text messages to generate qualified sales leads.

Competition increasing in all sectors and segment, in order to be on the top, companies should create and maintain a relationship – a good one- with their existing or potential customers and unforeseen their needs. Tools like social media, websites, calls, emails are helping companies to deliver the message to their customers, supporting them and gather

the data to analyze and forecast. This data would be beneficial to use marketing automation tools.

The operation of marketing automation helps companies in marketing processes such as customer segmentation, customer data integration, create, distribute and measure the marketing campaigns which would be more efficient and effective than perform it manually. Automated processes could be defined as the usage of business intelligence. In order to improve customer experience, business intelligence (BI) and automation tools are the invisible heroes.<sup>7</sup>

Customer Relationship Management (CRM) is a key constituent of the marketing automation in order to adjust their short-term strategies, analyses the customer database, further insights related with customers such as socio-economic aspects, purchase history (Sharma, Goval – Mittal 2010).

Data retracted from diverse system enable organizations to control and analyze over their data. Marketing automation tools give opportunity to audit marketing campaigns, improve the future campaigns according to data and present performance tracking.

Basically, customer relationship management (CRM) defined as an approach the companies' interaction with current or future customers. CRM lead the company to improve its business, addresses customer retention, driving sales leads and growth, using data analysis about customers 'experiences'.<sup>8</sup>

Marketing professionals should perceive the reasons behind why customers choose their brand and company. Through emails, online chat sessions, phone calls and from various sources, enterprises collect broad range of data in order to analyses and get further actions accordingly.<sup>9</sup>

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<sup>7</sup> Tech target, <https://searchcustomerexperience.techtarget.com/definition/marketing-automation> [Accessed: 1 December 2019]

<sup>8</sup>CRM, <https://www.bain.com/insights/management-tools-customer-relationship-management> [Accessed: 9 December 2019]

<sup>9</sup><https://www.cio.com/article/2376209/enterprise-software-9-ways-to-improve-your-company-s-crm-system.html> [Accessed: 9 December 2019]

While BI software collects current sales history, marketing automation tools and CRM systems are strong for penetration and retention.

## 2.5 DIGITAL TRANSFORMATION

The history of internet back in to 1960s to research commissioned by the federal government of the United States in order to build robust, fault-tolerant communication with computer networks. Whereas it begins as a military project, with the connection of hundreds of thousands computer and server e-mail services began, forum platforms developed, file transfers started.

**Table 3: World Internet Usage and Population Statistics**

In the first half of 2019 the internet users reach to 4,536,248,808 in the worldwide. <sup>10</sup>

WORLD INTERNET USAGE AND POPULATION STATISTICS 2019 Mid-Year Estimates						
World Regions	Population (2019 Est.)	Population % of World	Internet Users 30 June 2019	Penetration Rate (% Pop.)	Growth 2000-2019	Internet World %
<a href="#">Africa</a>	1,320,038,716	17.1 %	522,809,480	39.6 %	11,481 %	11.5 %
<a href="#">Asia</a>	4,241,972,790	55.0 %	2,300,469,859	54.2 %	1,913 %	50.7 %
<a href="#">Europe</a>	829,173,007	10.7 %	727,559,682	87.7 %	592 %	16.0 %
<a href="#">Latin America / Caribbean</a>	658,345,826	8.5 %	453,702,292	68.9 %	2,411 %	10.0 %
<a href="#">Middle East</a>	258,356,867	3.3 %	175,502,589	67.9 %	5,243 %	3.9 %
<a href="#">North America</a>	366,496,802	4.7 %	327,568,628	89.4 %	203 %	7.2 %
<a href="#">Oceania / Australia</a>	41,839,201	0.5 %	28,636,278	68.4 %	276 %	0.6 %
<b>WORLD TOTAL</b>	<b>7,716,223,209</b>	<b>100.0 %</b>	<b>4,536,248,808</b>	<b>58.8 %</b>	<b>1,157 %</b>	<b>100.0 %</b>

Source: Internet World Stats

The internet is a major part of everyday life and have impacted the way of living and doing things in large scale with the development of technology. The increasing number of internet users affect day to day life as well as the business. Developments in technology and information technology enable the enterprises reach the customers located in different regions easier which eliminates the time or place boundaries for the consumers.

SAP states the digital transformation as a “fundamental rethinking of customer experience, business models, and operations that finding new ways to deliver value,

<sup>10</sup>Internet World Stats, <https://www.internetworldstats.com/stats.htm> [Accesed: 7 December 2019]

generate revenue, and improve efficiency – and companies are using innovative technologies to do it.”<sup>11</sup>

While digital concepts are on the rise, marketing come along and adapt itself to this change. Digital marketing becomes the application of marketing concepts in digital habitat (Reino et al. 2016).

Wymbs identify digital marketing as the usage of digital technologies to create and integrated, targeted and measurable communication in order to acquire and retain customers while building an in-depth relationship (Wymbs 2011).

Digital marketing could be defined in its most general form as using marketing components in digital environment and traditional marketing applications through digital channels. However, when it's compared to conventional marketing, digital marketing has major and different advantages. Digital marketing gives the enterprises to be more competitive with its financial benefit, on time interaction with their target audience, flexibility to update easily, creativity and innovation.

One of the main objectives of digitalization and digital marketing is to understand consumers' aspiration. When the enterprises truly understand the reason behind why consumers prefer digital channels, then they can establish an efficient and effective interaction with them (Paswan 2018).

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<sup>11</sup>SAP, <https://www.sap.com/turkey/trends/digital-transformation.html> [Accessed: 7 December 2019]

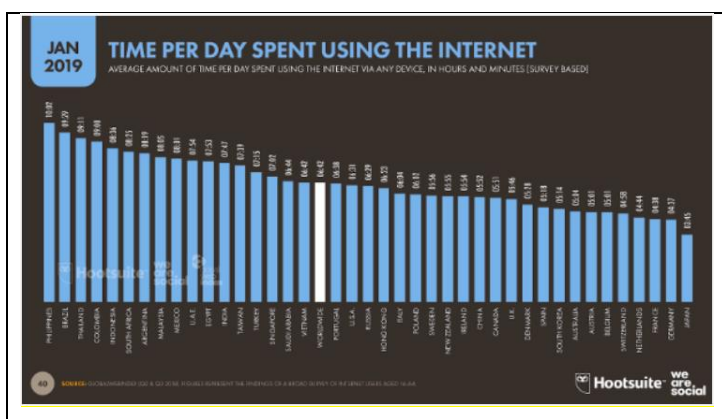
**Figure 3: Annual Digital Growth**



Source: We are social

There is no doubt that the world has been shifting to digitalization and digital platforms. Moreover, the number of people with internet access is increasing day by day. There are 4.39 billion internet users as of January 2019 and it is increased 9 percent when it's compared to previous year. Hence the unique mobile users increased 2 percent, social media users 9 percent in the worldwide (Kemp 2019).<sup>12</sup> According to Kemp and We Are Social research, internet users have spent 6 hours and 42 minutes online by the day worldwide. This number increase to 7 hours and 15 minutes in Turkey.

**Figure 4: Time Per Day Spent Using the Internet**



Source: We are social

<sup>12</sup> We are social, <https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates> [Accessed: 7 December 2019]

Another rise on the topic in business environment is big data. These figures mentioned above show that the increasing usage of internet, not only enable consumer to reach what they are looking for easily but also give opportunity to the companies to collect this data. Websites, social media platforms, CRM systems are different tools to collect these data which give the companies unlimited benefits in order to get better point of view related with consumers' values and behaviors.

Digital transformation is usually express the business culture, environment and the usage of technology among employees of companies.

Digital technology comes with variable elements and concepts. Digital transformation comes with such as smartphones and the internet have provided information access and flexibility to people and ease their day-to-day life with different technologies such as AI and robotics (Larsson et al. 2019).

Gartner Glossary defines digitalization as *“use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to digital business.”*<sup>13</sup>

There can be found many definitions of digitalization although, there is another term that often confused with digitalization is digitization. Gartner Glossary define digitization as the process of changing from analog to digital form.<sup>14</sup> In original digitization is being referred as taking analog information and encoding it into zeroes and ones so that computers can store, process and transmit into information. As Bloomberg mentioned related with enterprises context, digitization is essential both for handling information in paper-based processes where paper -based is nothing more than a metaphor for analog (Bloomberg, 2018).<sup>15</sup>

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<sup>13</sup> Gartner, <https://www.gartner.com/en/information-technology/glossary/digitalization> [Accessed: 8 December 2019]

<sup>14</sup> Gartner, <https://www.gartner.com/en/information-technology/glossary/digitization> [Accessed: 8 December 2019]

<sup>15</sup> Forbes, <https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/> [Accessed: 8 December 2019]

Digitization and digitalization are two abstract terms that related and usually used correspondently in a wider range of literature nevertheless digitalization has more way in which many domains of social life are controlled around digital communication and media infrastructures (Brennen et al. 2016).

Due to these technological changes, industries have great opportunities such as agility, awareness, product individualization as well as have diverse challenges like accelerated technological change, complex infrastructure, adjust to customer desires and legal obligations. In terms of products and service offers, companies have faced complex challenges due to these rapid changes (Lerch et al. 2015).

As a result, while digitization is the framework for digitalization which can be identified as the taking advantage of digital opportunities. Therefore, digital transformation defines as the process which used to reshape the economies, enterprises and society on a structured level (Unruh et al. 2017).

It is no doubt that digitalization become a significant game changer in society and business for short and long term. The changes in ways of working, roles and business offering by the digital technologies in organizations affect the several levels.

- a) Process level; eliminating manual procedures by adapting new digital tools and streamlining the process
- b) Organization level; new service offerings or adapting new ways to existing service offerings and discarding antiquated practices
- c) Business domain level; adapting or changing roles and value chains in organization's environment;
- d) Society level; restructuring society such as type of work, influencing decision making.<sup>16</sup>

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<sup>16</sup>Sciencephere, <http://www.sciencesphere.org/ijispm/archive/ijispm-0501.pdf#page=67> [Accesed: 7 December 2019]

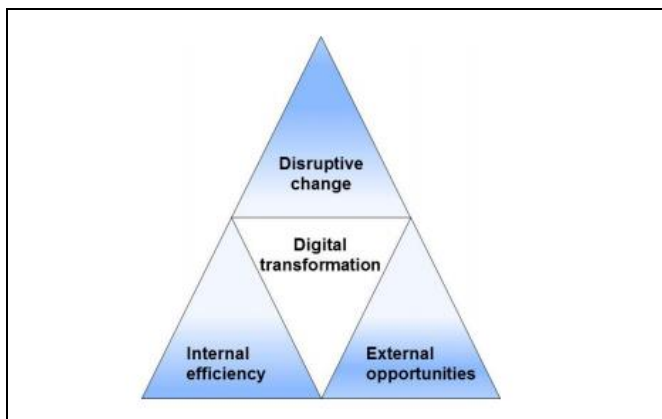
Digitalization have had impacts not only ease the processes, digitizing information but also cost cutting by up to 90 percent. Replacing manual work, paper and allow the processes to be adjusted into software accordingly, allows businesses to collect data. In order to understand performance, cost drivers or risks, these data should be mined properly. Decision makers allow to adjust their strategies based on digital processes, and real time reports.

Sabbagh et al. stated that digitalization permits at the most advanced stage 20 percent economic benefits and growth; support reducing unemployment, increasing quality in day-to-day tasks and allows governments to achieve transparency and efficiency.

Digitalization impact has already experienced in businesses, the way of doing things in corporates and rejecting digitalization would initiate a losing momentum in the game especially in the competitive markets.

As seen in the Figure 5 impact of digitalization and the targets for the organization can be classified in to three forms:

**Figure 5: Digitalization impact**



*Source:* International Journal of Information Systems and Project Management

- a) Internal efficiency to improve internal processes via digitalization
- b) External opportunities to reach new customers or extend the business and services
- c) Disruptive change as digitalization would change the roles in business

## 2.6 AI & BIG DATA

Since computer science have defined AI or machine intelligence as intelligence established by machines, in contrast to the natural intelligence showed by humans, “intelligent agents” successfully achieving their goals by taking actions in cognitive approach such as learning and problem solving.

AI have become a popular technology that intelligent routing in content delivery, understanding human speech, competing (and winning) in strategic games and so on. AI technology is not a new term that go back in thousands of years; however, it is first used as term at Dartmouth Conference in 1956.

Alan Turing questioned artificial intelligence in his paper “Mind” in 1950 computers can think and introduce his concept, Turing Test. According to his imitation game, it was possible to choose if a computer can think and if it can think or not (Hardard 2008). The Turing Test approach includes human questioner who interacts with a human and a machine at the same time.

As Marr explained in simplest way “*AI as the idea of building machines which are capable of thinking like humans.*”<sup>17</sup>

Since Turing questioned AI, the business world has adapted AI in various ways. Smartphone assistants like Siri by Apple or Alexa by Amazon, consumers everyday life is becoming dominated by AI.

### Characteristics of AI Systems

AI systems are designed and used to act like the human competences such as thinking and sensing.

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<sup>17</sup> Bernard Marr, <https://www.bernardmarr.com/default.asp?contentID=963> [Accesed: 09.12.2019]

### Symbolic Processing

In this processing, symbols are operated by the computer instead of numbers or letters. Symbolic processing give opportunity to be arranged in structures such as lists, hierarchies, or networks which display how symbols related to each other.

### Nonalgorithmic Processing

This is a step-by-step procedure that identify a solution to the problem. Knowledge-based AI system rely upon to major degree on the occasion where it is used.

### Artificial Intelligent Technologies

Artificial Intelligence technologies is a fruitful market where include variety of technologies and tools being used in different applications.

The recent and prominent technologies follow as: <sup>18</sup>

**Natural Language Processing:** This tool can be considered as a rising star that produces text from the computer data. Customer care services, business intelligence insights and report generators have huge benefits on this technology.

**Automated Speech Recognition:** Transforming human speech into meaningful computer applications which are used in interactive voice response systems or mobile applications in wider range.

**Virtual Agent:** Virtual agents are being used especially as online customer service representatives. Main aim is to lead intelligent conversation which answer to customers' questions in meaningful way.

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<sup>18</sup>Valluriorg, <https://www.valluriorg.com/blog/artificial-intelligence-and-its-a-applications/> [Accessed 7 December 2019]

Machine Learning: Wide range of statistical techniques which is given to computers ability to learn, upgrade their capacity to execute a task with training toolkits, power to design and used in enterprise applications.

Text Analytics and Natural Language Processing (NLP): This process is being used especially in automated assistants, customer experience services. Understanding sentences, supporting text analytics and converting them into meaning, sentiment through machine learning process are the key elements for this processing type.

Robot Automation Processing: Using scenarios, scripts and mimic human reactions to support efficient business processes are core for robotics.<sup>19</sup>

### **2.6.1 Big Data**

As McKinsey Global Institute define Big Data as *“datasets whose size is beyond the capacity of typical database software tools to capture, store, manage, and analyze data.”* (McKinsey Global Institute 2011).

All users leave digital evidences by using digital platforms and Big Data give the opportunity to analyze and use these data in order to get better and smarter insights.<sup>20</sup>

Big Data is defined in Gartner Glossary as *“Big Data is high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation.”*<sup>21</sup>

Big Data has an undeniable impact on marketing theory and applications. Capturing qualified data of customers lead companies and marketers to Customer Experience

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<sup>19</sup> Tech target, <https://searchenterpriseai.techtarget.com/definition/AI-Artificial-Intelligence> [Accessed 3 December 2019]

<sup>20</sup> Ibm big data, <https://www.ibmbigdatahub.com/blog/why-only-one-5-vs-big-data-really-matters> [Accessed 7 December 2019]

<sup>21</sup> Gartner IT Glossary, Big Data <https://www.gartner.com/it-glossary/big-data> [Accessed 5 December 2019]

Management and CRM systems where to use data in more efficient and effective way (Grishikashvili 2014).

Based on the Big Data marketing also explained with database marketing by Kotler, as a core of CRM (Kotler 2005).



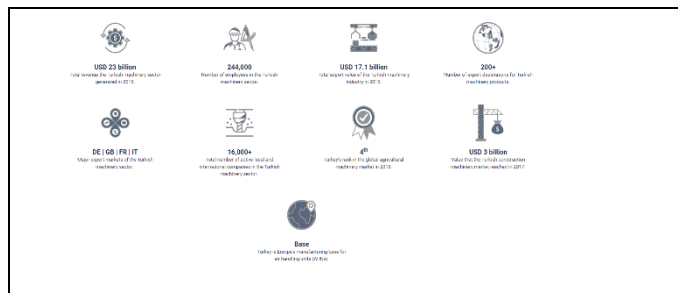
### 3. CASE STUDY: COMPANY X

During recent years, businesses become more focus to digitalization, digital transition and AI, it is inevitable to integrate these systems into marketing and sales processes.

One of the main drivers of B2B is industrial equipment due to supporting production in every sector. As an economy, Turkey is emerging market in economic crisis and behind of other countries in terms of their production potential. According to Presidency of The Republic of Turkey Investment office Turkish machinery sector more than quadrupled its revenues to reach USD 23 billion and doubled its workforce to hit 244.000 in 2018. The Turkish machinery sector more than quadrupled its revenues to reach USD 23 billion and doubled its workforce to hit 244,000 in 2018. While global exports doubled, Turkey's exports increased five times to reach USD 17.1 billion in 2018.

- a) The export/import ratio of the industry has increased from 30 percent to 60 percent since 2003, indicating an ever-growing market with less dependency on imports.
- b) As the 4th largest export industry of Turkey, accounting for a 9 percent share in the country's total exports, machinery products are shipped to more than 200 countries. 60 percent of total machinery product exports are shipped to the USA and EU countries, mostly to Germany, UK, France, and Italy.
- c) Total imports of the machinery sector surpassed USD 28 billion in 2018, endorsing the strong demand from the domestic market.

**Figure 6: Turkey Machinery Industry**



Source: Invest <sup>22</sup>

<sup>22</sup>Invest, <https://www.invest.gov.tr/en/sectors/pages/machinery.aspx> [Accessed: 10 January 2020]

Company X is the one of the important players in the industrial equipment/machinery sector imports to Turkey from Europe. In 2018, their generated income was more than 50 Million Euro. They have global competitors as well as the local manufacturers. Company X have chosen in this research due to their highly valued customer focus, being the market leader with their products and drive the digital transformation in their sector.

The methodology of the study is based on digital transition of Company X begin in 2017 with the renewal of their website, follow up with the implementation of chatbot to their website and measuring its performance in 2019. Due to company's internal laws, the data collected from their CRM system and web site experience cloud platform. In order to make the study more efficient real data is analyzed.

The study covers the reason in what ground they decided to implement chatbot, what are the benefits and downsides in 12 months period.

In the following part the Company X has chosen and examined as a case study with their chatbot application; why they choose chatbot as a sales tool, how they measure the performance, what are the benefits and challenges in this process.

The Company X was founded in the mid-19<sup>th</sup> century in Europe where they first started to manufacture industrial products. It is now operating more than 70 countries with more than 50.000 employees and have customers in 180 countries. They are sectorial leader of the industrial equipment market worldwide.

They have operations more than 60 years in Turkey. Company X have known best with their energy efficient solutions and driver as a patented solution partner with their latest technologies in industry. Company X's generated income in 2018 is more than 45 Million € in 2018.

Company X is operating in different segments in the industry; therefore, the study will focus the main business segment profiting 55 percent of their generated income.

The study focusses on the outcomes of the Company X's first year results of their chatbot application and lessons learned in this process.

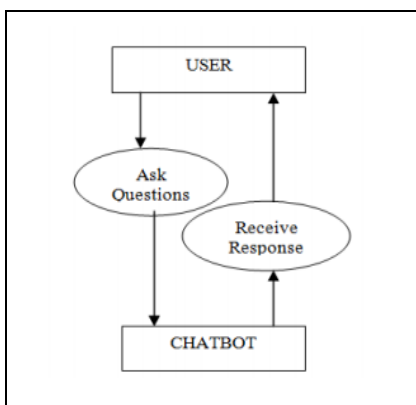
Company X have known in the market as sectorial leader and driver of the technologies. They have more than 40 percent of customer satisfaction rate in customer loyalty surveys in 2018. Their B2B marketing approach has evolved in recent years and focus on digital marketing and digitalization. They have implemented chatbot application to their website, the first company have done this among their competitors in Turkey.

### 3.1 CHATBOT AS A MARKETING TOOL

Chatbot is referring to a robot which mimicking human interaction and simulating conversation.

Chatbot is basically a program designed to be a smart communicator on a text, visual or spoken platforms which recalls the users input and creating a pattern to response accordingly. However, response should be defined previously that chatbot could not respond to complex questions.

**Figure 7: Diagram of Chatbot Design**



Source: IJCSE <sup>23</sup>

In order to start using Chatbot a software program should be written. Though, to use Chatbot effectively and efficiently main element after the program is to create different types of conversations to attract the user.

<sup>23</sup>IJCSE, <https://www.ijcsonline.org/> [Accessed: 5 November 2019]

One of the many areas Artificial Intelligence is used is robots or bots. Bot defined as in information technologies as a short version of robots which have done the given tasks.<sup>24</sup> Social bots are the artificial intelligence based that can interact with human, support them on different areas like education and entertaining machines.

The main aim of the chatbot is the computer being act and chat like human as much as possible while interacting with user. Intelligent agents pretend with emotions, share information, act intelligently like humans. These agents are tracking the consumers digital traces and through marketing automation tools companies are informed related with these traces. Chatbots come into the picture when the consumer uses the social media and communicated by the company.

Although the first chatbot history based on Alan Turing' Turing Test; the oldest chatbot developed by Joseph Weizenbaum in 1966, ELIZA. In 1995 the first open source chatbot created, A.L.I.C.E. Apple have introduced the first personal assistant based on AI and chatbot Siri and the other technology companies like Google, Microsoft, Facebook and Amazon follow their steps. These robots – interfaces – become the important part of our daily life.

### **3.2 CHATBOT MARKETING PROCESS**

The engaged process between their website and CRM system Company X, the result of the sales through website was inadequate. Although they were the driver of the innovative solutions and products, the website performance and sales were inefficient.

Company X focused on digital transformation during 2017.

As seen in Table 4 the performance of the web site comparison unique visitors and page views increase 400 percent. The requested quotes increased as well as the page views.

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<sup>24</sup> Ebi, <https://www.ebi.com.tr/blog/bot-nedir-yeni-web-teknolojilerindeki-yeri/> [Accessed: 6 November 2019]

**Table 4: Company X Web Site Performance 2017 vs 2018**

Website summary Company X - 2017		Website summary Company X - 2018	
<b>Key Metric</b>		<b>Key Metric</b>	
Page Views	58,012	Page Views	317,912
Unique Visitors	19,662	Unique Visitors	88,650
Visits	23,511	Visits	118,661
Bounce Rate	50.56%	Bounce Rate	50.96%
Daily Unique Visitors	22,101	Daily Unique Visitors	109,321
Average Time Spent on Site	4.37	Average Time Spent on Site	4.69
Average Visit Depth	2.47	Average Visit Depth	2.68
# click to call	282	# click to call	1,549
# email clicked	317	# email clicked	1,500
# request quote end	90	# request quote end	371

Source: Company X – Experience Cloud Web Site Analytics

The digital transformation and renewal in the website show that between 2017 and 2018 the quote requests increased 421 percent.

As a result, the marketing automation and digital tools become more significant with the proven the results and proactive approach to find new medium meet the customer and identify their behaviors and needs.

### 3.3 CHATBOT IMPLEMENTATION

The potential of the increased web site performance and quotes drive Company X to implemented chatbot application in the fourth quarter of 2018 due to their increasing web site visitor 34 percent due to its potential.

The vendor they are being partners is worldwide marketing automation tools company based in California, USA. The Company X created one chat conversation flow covering all his activities; sales in different sectors, service sales for the long-term contracts and maintenance requests.

**Table 5: Chatbot first 3 months performance**

<b>Sent</b> <b>7k</b> <small>7,469 visitors were shown this playbook during this time frame</small>	<b>Conversations</b> <b>9%</b> <small>Of the 7,469 visitors who were shown this playbook, 672 started a conversation</small>	<b>Emails captured</b> <b>8%</b> <small>Of the 672 visitors who started a conversation, 55 provided their email address</small>	<b>Meetings</b> <b>0%</b> <small>Of the 672 visitors who started a conversation, 0 booked a meeting</small>	
Month	Sends	Conversations	Emails captured	Meetings
11/01/18 – 11/30/18	86 —	13 15.1%	1 7.7%	0 0.0%
12/01/18 – 12/31/18	3,755 —	317 8.4%	23 7.3%	0 0.0%
01/01/19 – 01/31/19	3,628 —	342 9.4%	31 9.1%	0 0.0%

Source: Company X chatbot vendor reports

As seen in Table 5, in the first 3 months more than 7K visitors, 9 percent of them engage during conversation and 8 percent of them give email address during this conversation to be contacted.

Chatbot as a marketing and sales tool implemented end of 2018. When web site results compared between 2018 and 2019, Table 6 shows that unique visitors increased 34 percent, page views strike 61 percent.

The first 3 months performance has been tracked under Chatbot vendors page. In order to keep the study relevant, the increase in the sales and effect of the chatbot measured between 2018 and 2019, 12 months period.

**Table 6: Company X web site performance 2018 vs. 2019**

Website summary Company X - 2018		Website summary Company X - 2019	
<b>Key Metric</b>		<b>Key Metric</b>	
Page Views	317,912	Page Views	513,532
Unique Visitors	88,650	Unique Visitors	119,225
Visits	118,661	Visits	159,963
Bounce Rate	50.96%	Bounce Rate	58.26%
Daily Unique Visitors	109,321	Daily Unique Visitors	147,588
Average Time Spent on Site	4.69	Average Time Spent on Site	5.21
Average Visit Depth	2.68	Average Visit Depth	3.21
# click to call	1,549	# click to call	1,564
# email clicked	1,500	# email clicked	1,353
# request quote end	371	# request quote end	309

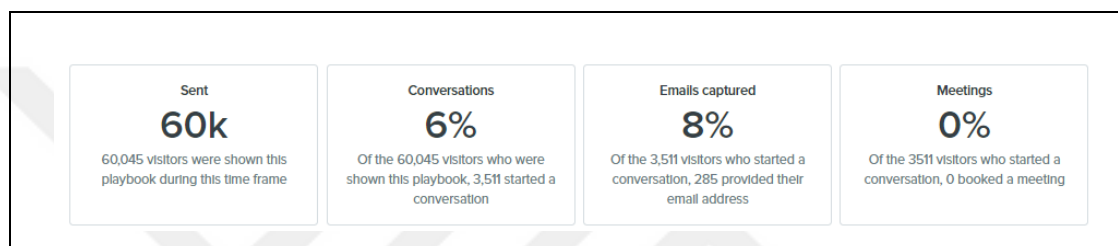
Source: Company X – Experience Cloud Web Site Analytics

Web site performance result shows that while the increasing the performance increasing in terms of page view, unique visitor; number of e-mail clicks and number of request quote has decreasing significantly, even the click to call buttons are nearly the same in the comparison.

The main reason behind this increase is the performance of chatbot.

Table 7 indicates the performance of whole year in 2019.

**Table 7: Chatbot performance for Company X 2019**

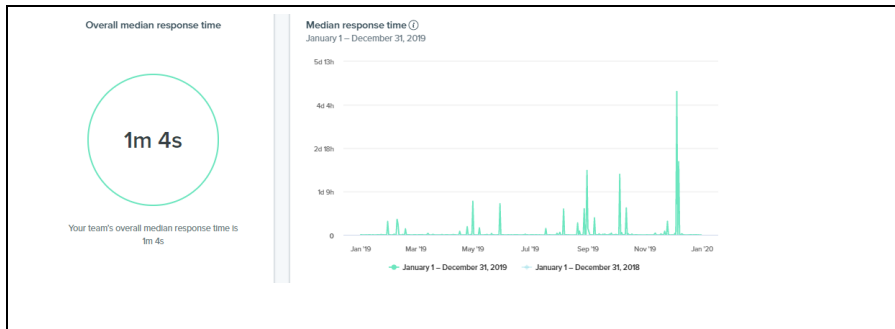


Source: Company X chatbot vendor reports

The customers who visited the chatbot implemented pages started the conversation and 60K messages sent to customers. 6 percent of the conversations started by the customer and 8 percent of the customers email captured.

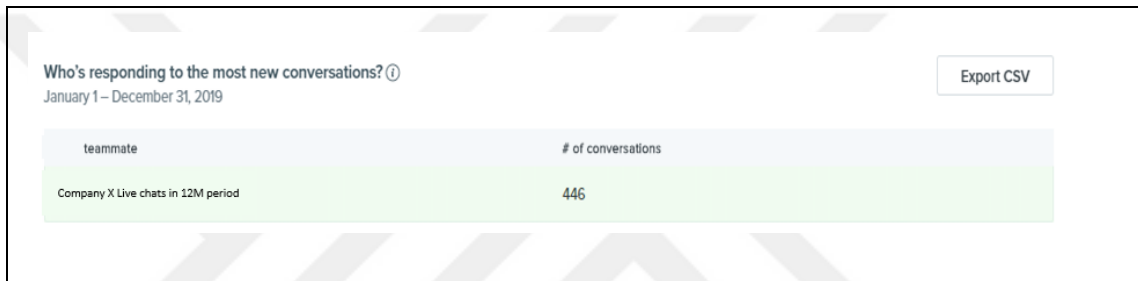
The engagement of the visitors including existing and potential customers are higher than the expectation. The reports based on the chatbot supplier's interface shows that the customers aiming to get information through the live chat or phone conversation rather than the get information via e-mail. The other benefit is the system gives the opportunity to jump into the live conversation. As seen in the Figure 8 and Figure 9 response time and live chat conversation are improving and increasing. The overall response time is measured in 12 months period for live chats are 1 minute and 4 seconds. 446 live chats conducted in 2019 by the responsible people.

**Figure 8: Chatbot median response time**



Source: Company X chatbot vendor reports

**Figure 9: Live chat performance**



Source: Company X chatbot vendor reports

These numbers are only meaningful when the numbers become generated income for the company.

The improvement in qualified leads and won orders as well as the expected values drive company to engagement between the chatbot, website and CRM reports.

As the result of full year (2019) analyzed through CRM reports expected value of the chatbot 3M € and generated income was approximately 233K €.

In order to become a successful tool and compensate its cost the won orders should be 4000 Euros. The return of the investment (ROI) become significant after 4000 Euros.

**Table 8: Chatbot Generated Income for 2019**

Visitor's first contact source	Number of the potential customer request quote	Number of the potential sales	Number of Won Sales	Expected Value	Pipeline	Number of open potential sale	Generated Income
Chatbot	349	202	41	3.041.399 €	1.601.662,78 €	73	232.924 €

*Source:* Company X CRM reports

Comparing to the generated revenue of Company X was 50 Million € in 2019 coming from the different sources including chatbot, website, other integrated marketing automation tools.

Considering chatbot in its first year, there was 233K Euro added more value in generated revenue.

In 12 months, performance it is shown that there is a huge potential considering the expected value in total and still have the potential value in the pipeline still can be converted to the won opportunity.

## 4. CONCLUSION

As a result, chatbot in generated income seem as insignificant in the ratio of generated value of Company X in 2019 whole year. Company X have generated more than 50 Million € during 2019 in Turkey with sales and service activities.

However, it should be considered that the sectorial dynamics based on the investments and incentives. The planned projects are taking longer period comparing to the other business areas in B2B. Addition to this information the potential revenue in the pipeline is still a valid value for the upcoming months and years.

Industrial equipment sector prices may vary according to its volume, performance, energy efficiency. The prices alter between 100 Euro to 2 Million Euro projects. While the sales team and marketing teams lead their direction to most profitable customers, chatbot can give opportunity to the companies to increase their market share with small to medium-size businesses.

Other performance indicator for the chatbot is different types of visitors, potential customers and their preferences. Existing customers demands different than the potential customers. Existing customers prefers to give their request communicated through chatbot to give their maintenance or breakdown requests. On the other hand, potential customers either want information that they do not know what they should choose according to their volume and needs. The prompt communication for the chatbot become a new medium to contact informal way to give their formal requests for the customers.

The disadvantage of the chatbot, reporting through the chatbot software supplier interface is the reports giving the only data captured by the bot. Although, as seen in the Figure 9 the live chat with the customers are increasing and actual number of data captured by the live chat users are more than the reports indicated. When investigate the details, chatbot is giving the medium not only potential customers but also to existing customers. The

customers prefer giving their detail and requests via chatbot rather than the writing email or phone call.

The other benefit of the chatbot is customers who were ready to buy and/or want information contacted and becomes potential customer.

When comparing to sales team performance, chatbot again seen as low generated income. However, the sales team goes through the sales projects or very well named companies, chatbot brought the customers beyond the reach of sales team.

As an unexpected result, chatbot have given the opportunity to Company X collect the data of the customers for future marketing campaigns. The customers willingly give their details such as emails, the sector they are operating, the companies' name they are working which needed for CRM systems to generate marketing campaigns.

The data collected from the customers through the chatbot medium is used in another marketing campaigns such as the e-mailings for specific services. The data enable the marketers to analyze the sectors, companies, size of the companies, the tailor-made solutions according to their needs, even the budget of the company for the projects. These campaigns created by the marketing and communication professionals with the collected data from the customers – that they gave willingly.

As a conclusion, chatbot contribution to the sales result and future opportunities more than the measured.

One of the outcomes that the customer has a platform to reach the responsible person through the chatbot, so they give prompt feedback, complaints via the chatbot application. This also effect the Company X's customer experience scores in a positive way. When they receive the feedback, they get corrective actions quicker than the previous years. Unseen and unexpected benefit of the chatbot was increase the customer satisfaction rate in 2019 and reach more than 50 percent for the first time in company's history.

The new medium has been created with the support of technology and digital age where the customers engage 24/7, however this also leads customers to seek live attention and support for 24/7.

According to first year result, chatbot prove its value for B2B marketing for Company X. The most important finding in the study is the huge potential in the growing countries are visible and recognizable by the smart and innovative companies who seeks for further engagement with their current or future customers. The creation of an effective, value-added and profiting marketing strategy and tools will be the greatest challenge for the businesses.

The case study shows that the strategies conducted by the companies should include the marketing automation tools and more important how to measure the results in the most accurate way if they want to benefit. Company X's struggle is not to engage with the customers but to properly measure the outcomes.

The next step would be to support customers whenever they needed. In business-to-business environment value-added strategies, applications and marketing approach will be more important comparing to previous ages even the years. Chatbot application shows that, there are many opportunities in the marketing as well as conducting rapidly improved sales.

The expectation of the customers getting higher by the day from the companies. Moreover, the core of the smart companies is and continue to be the customers. Finding different ways to increase sales also lead the enterprises to find different and value-added solutions which gives increased customer loyalty, create different experiences, receive more feedback.

Chatbot application result prove that instantaneous, efficient and effective marketing tools add value to the companies more than expected. Thus, the case study indicates the communication and marketing tools are changing by the digitalization and digital

transformation. Increasing potential of the AI would be the other key point for the businesses.



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