International Polytechnical Journal in Science and Engineering



- International Academic Journal -Vol. 2, No. 1, 2021, GISB Special Issue

BRAND AND SOFTWARE PRODUCTION

Anil Salman¹, Asude Güvener¹, Zehra Miray Düztaş^{*1}, Sila Çördük¹, Muhammed Esad Özen¹, Ibrahim Hakan Öner¹, Ufuk Karabağ¹, Murat Toprak¹ Consultant Teacher:: Semiha Yilmaz¹, Hülya Duyar Aydar¹

*Hüseyin Avni Sözen Anatolian High School, Turkey *Corresponding Author: e-mail: zehramirayduztas@gmail.com

ABSTRACT

Together with the increase in production, trademarks should create a good trade value to keep ahead of their competitors. Developing technology and globalization necessitate the digitalization of trademarks as well as affecting trademark value perception. In the study, the strategies, which trademarks use to improve efficiency and to economize, are mentioned. Improvements made and yet to be made in the fields of branding and software, their reflections in the society and on the individual are cited. The target of the study is to be able to lead the way for future brands starting with the importance of the software to economize and improve efficiency.

Keywords: branding, software, production, digitalization, efficiency, economizing

INTRODUCTION

Since the beginning of humanity, either abstract or concrete product has been produced because of instinct to make life easier. Due to this instinct, production is carried one step further consistently. In ancient times, humankind produced primitive weapons for hunting but in the favour of developing technology, manufacturing has started to become improve and fast over the recent past. As a result of this overproduction is being possible in a short time. In this way it causes the brand to be in search of clients and make an effort for taking the lead at intrabrand competition. In line with these developments, Henry Ford introduces "lean manufacturing" for excelling and simplification on producing. After that sense of manufacturing is revolutionized. Lean manufacturing is the most efficacious produce with use sources economically without wasting and mistake. Carrying on a business with correct methods is the basic implementation of the Ford production system. By extension, every factor should be controlled, bowdlerize unnecessary and wrong technics from beginning to end. Brands attach importance to their brand production for raising in value and surviving in a stiff competitive environment. Brand producing is as important as influence all brand fate. While producing the brand, all decisions are taken in the right way suitably land manufacturing. Brand production quality affects brand profitability and productivity. In addition to this all production type productivity accord with software. This makes software production the main part of all manifacturing. In other words, brand and software production must be done correctly through changing world conditions. Brand and software production are being the important factors for all sector rivalry. So these two words are valuable nowadays.

1. BRAND PRODUCTION

The Brand, which dates back to 3000s BC and found by the ancient people while sealing the pods can be identified as a product-distinguishing emblem. That, which highlights a product, is a kind of symbol perceived by the consumers. Brands are the guides of the consumer's decision-making process amongst its competitors in the market because today the price of a product or service only refers to its monetary

value for most of the consumers while the brand allows the product to identify its difference and originality amongst its competitors. However expensive they are, branded products manage to highlight themselves from others by attracting the interest and choices of the consumers. To give a clear example to this, even though the brand called "Starbucks" releases their product much more expensive, it can persuade the consumers to use the thing they sell because of its fame. One of the other effects of branding is that it brings permanency and reputation. According to the research of psychologists, reputation allows the brand to be preferred. Due to that, this leads people to recommend well-known brands even though they are not customers of them. Considering all of these, branding seems to be one of the most effective ways to stand out in the market competition. In the end, all the resources spent on branding are not wasted, these will be returning as efficiency in the long term.

2. BRAND IDENTITY

Brand identity is a concept firstly used by the French sociologist Kapferer in 1986. Companies reflect the vision, mission, and distinctive features of the brand through this identity by attaching certain meanings to brands. Creating a good brand identity is very important because by affecting customers it provides an emotional connection between customers and the brand. In this way, a sense of belonging on a customer is created, trust between them is gained and as a result continuity is ensured.

3. SOFTWARE

The dictionary meaning of the word "Software" is given as "All of the programs, routines, programming languages, and documentation used in computing and bringing the hardware to life in a computer. 1" by the Turkish Language Association. If Hardware, physical pieces of technological devices, is not supported with software, it gets nonfunctional. Codes that are created properly with the programming language compatible with the area, might come together in an order and become understandable for being usable by hardware and processors thanks to the software. Thus, hardware and software are working integrated into with technological devices. The software appears in all areas of life. From large machines used in industry to computers and mobile phones used in personal use, many technological tools that contain software in their system facilitate the works in daily life. The software has a wide range of usage. Software is actively used in many sectors such as education, health, security, transportation, industry, and tourism. While the software is used in the industry is designed to perform easier and unproblematic production, some industries use software systems for digitalization. The fact that the software facilitates human-power-based operations enables more work on the software. Most companies allocate a budget to software studies to survive in the competitive environment in their sector. Therefore the software industry is spreading and developing fastly. According to software development from the past to the present, it is thought that software will be more important and valuable for many sectors in the future. Moreover, it is thought that the business area of software will expand.

4. DIGITALIZATION AND USAGE OF SOFTWARE IN BRAND

Nowadays, when technological developments accelerate and effects all parts of our lives, brands cannot be expected to keep away from the innovations and not to benefit from technology. Although most of the brands actively take a place in the digital world, the brands that resist this wind of innovation, including some major brands, have lagged behind the competition and have not found a place in the market.

_

¹ https://sozluk.gov.tr/. Date accessed: 06.02.2021.

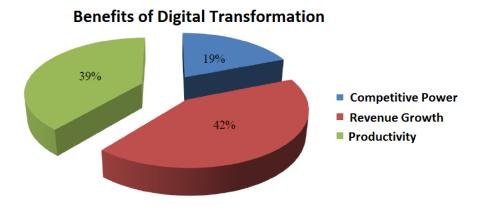


Table 1. The pie diagram that shows benefits of digital transformation

As it is shown in "Table 1", involving the research findings of Elgiz Yilmaz Altuntas in March 2017, the benefits of digital transformation technics applied in marketing provide, 42% revenue growth, 39% efficiency in customer relations, 19% increased competitiveness in products and services.

Software provide that allows brands to evaluate the data correctly and take the right steps according to this data. With this software, brands ensure the most effective usage of resources by making the right decisions. In addition, brands benefit from some software that identify the right target group and brands focus on this target audience and reach more people by making advertisements that can attract the attention of this group and grow rapidly. Thanks to software that analyzes the trends and preferences of customers, which is called CRM software, brands make the most effective marketing strategies and make a great contribution to productivity. As one of the main examples of CRM services used by firms, it can be shown to provide the use of the firm's opportunity cards. With this card, they can have important information such as the customer's shopping habits, preference orientations, while providing an advantage to the customer. These opportunities increase consumer satisfaction while enabling brands to take a step ahead of their competitors.

5. EFFICIENCY AND SAVING METHODS ON SOFTWARES AND BRANDS

Brands and software must use the right implementation and methods to reach the top of the dynamic and hardly competitive marketplace. With cost savings by getting rid of unnecessary expenses, they can have larger investment opportunities with fewer amounts. In this way, they will have financial relief and their growth will be even faster. Time, which is important for everyone, is also very valuable for brands and software. Brands and software that accelerate production with time savings have time to produce more improved and personalized products. For example, A Brand called "New Balance" performed an almost completely different production process with creating personal designs for athletes, creating a different production than its competitors. Efficiency is another keyword. Efficiency symbolizes the general process and the success rate. That is why this can be used as an active control mechanism. Increasing efficiency can be possible with effective and correct strategy in the usage of the sources such as machines, labors, and energy. Thanks to this active usage, much more output can be acquired by using the same energy and effort.

5.1. Software Effects on Saving and Efficiency

From human being's existence, they increase their efficiency with investing and developing. Especially after the industrial revolution, this situation speeded up and continued to increase continuously. The software has one of the largest parts in this development and has increased its influence. With automation programs and systems build with software, robots did not need to rest like humans, and manpower was saved and a non-stop production process was provided.² Also, industrial

² https://www.robots.com/faq/how-much-do-industrial-robots-cost

robot's expenses which are as much as the annual expense of the human worker have provided a great advantage for companies. Because of all of these opportunities given by the software, factories, companies, brands, and many other workplaces have increased their efficiency in their production as well as saving money.

5.2. Efficiency and Saving Methods Brands Use

5.2.1. Strategies

5.2.1.1. Target Market Strategy

Defining an accurate target group is one of the most important strategies because it will reduce advertisement expenses. On the other hand, choosing an accurate target group will increase your productivity by helping your brand grow faster. However here is a point to note, choosing target group with more or fewer people can be misleading for your brand. So the more important thing is choosing the accurate one. For instance, if a brand that sells expensive clocks, chooses a big target group to increase awareness of the brand, this will cost extra expenses and the brand will not get the return as expected. Just the opposite, if a brand which does not sell expensive clothes chooses a small target group, it will cause them to lose their potential customers and this will cost a lot of money for that brand.

5.2.1.2. Cost Strategy

A different strategy is the cost strategy. The purpose of this strategy is to calculate the costs of a brand properly. For example, the sale price of a product can be decreased by reducing the cost of that product. In this way, a brand can seize the opportunity of reaching more people. On the other hand, a brand can also raise the quality and recommendability of a product by increasing costs.

Apart from these two main strategies, by investing more in originality, design, and content a brand can also reach more people.

	Turkish Airlines		Ziraat Bank		GarantiBank		Türk Telekom		Turkcell	
Frequency/ Percentage	F	Р	F	Р	F	Р	F	Р	F	Р
Text	1	%1,4	39	%58,2	0	%,0	1	%4,8	9	%13,4
lmage	0	%,0	2	%3,0	1	%3,2	0	%,0	0	%,0
Text and Image	73	%98,6	26	%38,8	30	%96,8	20	%95,2	58	%86,6
Total	74	%100,0	67	%100,0	31	%100,0	21	%100,0	67	%100,0

Table 2. Content Structure of 5 Most Valuable Turkish Brands in 2019

Table 2. shows Bahadır Burak Solak's Research on Twitter Posts of 2019's 5 Most Valuable Turkish Brands. When the data is analyzed, 4 brands mostly use text and image together. However, Ziraat Bankası mostly uses text-weighted contents. Also, these 5 brands' image sharing rates are below 4%.³ As can be seen in these data, if the contents of a brand mostly consist of text and images, it will raise the interactions and vice versa. Therefore, while managing the social media accounts of a brand, the right strategy in sharing posts that posts should be visual and text-based.

³ Bahadır Burak Solak, Markaların Dijital Dönüşümü ve Sosyal Medya Kullanımı: Twitter Özelinde Bir İnceleme, Dördüncü Kuvvet, 3 (1), Aydın, 2020, s. 106.

5.2.1.3. Digitalization and Software

In this rapidly evolving era, brands that cannot digitalize lose tons of money and fall behind in competitions between companies. That's why most companies try to digitalize nowadays. However, they should not only digitalize, they should also care about savings and productivity. Some companies that do not care about those things are drowning in the seas of leading companies. The best example for this is that by e-commercing a brand only with 10 percent of its expenses it can profit 40 times more even if it has a store in the busiest street. So, digitalization provides faster-growing opportunities for companies.

There is some software that analyzes data and helps companies to take right steps. By this software, companies use their financial resources in the most efficient way. Also, software that uses advertisements by identifying the right target group can help a company to grow a lot. The CRM software which tries to analyze customers' tendencies and preferences, optimizes companies' strategies in marketing. One of the CRM services that companies use is enabling a company to use its opportunity cards.

	FREQUENCY	PERCENTAGE		
Empty	40	8,2		
Yes	165	33,7		
No	285	58,2		
TOTAL	490	100,0		

Table 3. Market Card's Impact on Market Preference⁵

As it is seen in the Table 3 While 33% of the respondents answered yes to whether they have a market card in the selection of the grocery store they constantly shop at, 58% answered no. As a result, the vast majority of customers do not care whether the markets have a grocery card or not. Brands that try to attract attention with these cards both provide an advantage to the customer and have valuable information such as the customer's shopping preferences. These opportunities increase consumer satisfaction and make brands different from their competitors. In addition to digitalization, brands needed software to make the right decisions in their production or target consumer selection. Thanks to this software, companies have increased its production and obtained error-free products. Also, they increased their sales with software that analyze the data they have. As can be understood from all these, digitalization and software provide a great deal of savings and efficiency to brands.

6. THE VARIATIONS THAT MAY OCCUR IN THE CREATION PROGRESS OF SOFTWARE AND BRANDS IN THE FUTURE

6.1. The Changing Standarads of Judgement in Production

What consumers expect from producers always differs with the changing life conditions and passing time. The people or groups that joined into the production sector strenghtened the competitive environment and made it harder and riskier to enter that sector.

⁴ https://www.webtures.com/tr/seo/. Date accessed: 09.02.2021.

⁵ Hatice Küçükhemek, Perakende Sektöründe Müşteri İlişkileri Yönetimi: Teorik ve Uygulamalı Bir Çalışma, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Konya, 2010, s.130.

⁶ Hatice Küçükhemek, Perakende Sektöründe Müşteri İlişkileri Yönetimi: Teorik ve Uygulamalı Bir Çalışma, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Konya, 2010, s.130.

In addition to this, the key to being successful and lasting when creating a new brand or software is analyzing the consumer demands and market carefully. In the future, being able to predict in which way these demands would change will affect a brand's fate.

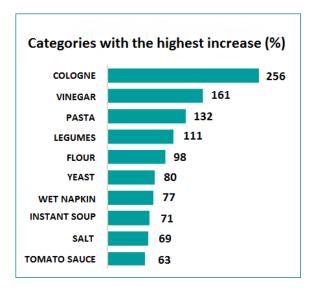


Table 4: Products with the Highest Consumption in 2020⁷

As it is shown in "Table 4" in 2020, comparing to the previous year, cologne had the biggest increase in consumption while cleaning materials and lasting foods took second and third places. This obvious result shows us that the effects of global events like pandemics could change the whole known norms about consumption.

The most important fact these data point is that the routines of consumers might be easily changed by current situations. What brands have to do in that circumstance is to embrace that matter of fact and have the flexibility to change itself by following the market actively. As agreed, the variations that occur in customers' demands will last in the future as well.

6.2. The Changes that Wait Us in The Production Area

6.2.1. Differences that may Come in Existence in Consumer Demands

Customer's expectations are the primary information source in the making of brands and softwares and these expectations will inevitably change according to the conditions. In 10 years we left behind, the performance that people expect to take from a product, increased just like their expectations from a mobile phone. Naturally, the conditions in the making and developing of a brand or software will differ with time.

6.2.2. Shrinking World and Evoluting People

The purpose to expand worldwide for both brands and software is a subject which is needed to stay on for a while. Imagine a website that you can comment on books and create personal libraries, the idea is well-thought and you manage to attract the audience; however, the lack of language support prevents you to achieve your whole potential users. To get rid of situations like this, it should be kept in mind that we are in a new, changing world and every step should be calculated by keeping that in mind.

⁷ <u>https://www.ipsos.com/tr-tr/koronavirus-hane-ici-hizli-tuketim-urunleri-harcamalarina-nasil-etki-ediyor</u>. Date accessed: 20.02.2021.

According to Canadian philosopher Marshall McLuhan, the electronic decade started with the invention of the telegraph. Also, McLuhan adds that this decade miniaturized the world and turned it into a global village. A world that everyone can share and get information as fast as in a little village. Besides that, McLuhan also mentions that technological developments are improving people's mental and physical abilities and gives an example by telling that a microscope is an extension of the eyes and a library is the extension of the human mind. In connection with this, he defends that every technological development causes evolutions in people.

6.2.3. New Fashion of Today and Future: Customizing

Although personalized product crave is brand new, it easily took over the market and it is almost certain that this interest of costumers who want to feel special will increase in the future. Now, long after the Industrial Revolution, the prevalence of mass production products is being crashed by famous brands.

Coca-Cola has been printing our names on bottles since 2013, Starbucks is writing them on our drinks, Çiçeksepeti is letting us write special notes on the gifts for our loved ones.

Now it is possible to see your name on a coffee, lighter or a notebook. That situation also has examples in the digital world too multicolored message boxes, changeable application signs, music lists that are created just for you, according to your music taste, and daily news that is chosen carefully. These are things that look little but make huge differences.

7. EFFECTS OF THE DEVELOPMENTS IN BRANDING AND SOFTWARE

When we look at the production of brands and software, we can see that brands try to develop new strategies every single day to reach a wider range of people. Similarly, software developers try to create simple and unmistakable algorithms for the solutions to the problems that become more complicated due to parameters that increase every day. What are the effects of this development on society and what are society's effects on this process then?

7.1. Effects on Socioeconomic Stratification

Society, a group of people who live together on the same land, has always changed throughout history due to various reasons. Production is a process that has a big impact on society. After the Industrial Revolution, as a result of duplicate production, overproduction came out, which increased consumption as well as changing the preferences of purchase. Although it was a necessity to produce and consume things at the very first eras of humanity, this consumption started having certain meanings as time passed. It was seen that people from lower socioeconomic class preferred specific brands to be like upper class while elites started using new brands to reveal the level difference between each other. This means a brand is a tool that its customers use to show which class of society they are in. It is said that the future brands will still have the same function since it is likely that the socioeconomic stratification will stay the same.

7.2 Effects on the Individual

At the same time, brands have an influence on the individual. We have mentioned the significance of brand identity creation, which also is a part of brand production, and what a big impact it has on society's perception. It is seen that the individual makes a purchase decision to express themselves through the meanings they give to brands, which is a consumption apart from needs. For instance, one of the purposes why individuals prefer using eco-friendly brands, is to show they care about the environment. In other words, people nowadays use the products of brands as a way of self-representation as well as meeting their needs. As the world globalizes day by day, customers' expectations from the brands increase as well. For example, they expect brands to raise awareness on social problems. Consequently, attitudes and sensitivities of brands to global crises such as the Covid19 pandemic will also determine the meanings their customers give them.

7.3. Effects on Society's Culture

The relationship between brand and society's culture plays a big role as well. That a brand has a positive influence in a region depends on people living there, that's why brands should consider those people's cultures and act accordingly. It is obvious that the images and colours which brands prefer may differently be perceived by different people. This leads international brands to include local symbols in their regional advertisements. When it comes to analyzing what type of advertisements attract more and how these advertisements can come across target groups, the software is there for it.

Similar to the impact society has on a brand's development, it is also a fact that brands and software cause several changes in society's culture, social relations, and even in economic activity. If we look at it from a perspective of software, technological devices that work with various functions -and brands to which they belong- have changed many people's way of living. For instance, with the invention of the phone, people started not to meet each other face-to-face unless it was necessary. Afterward, the development of video calls took the place of face-to-face meetings, too. These kinds of innovations resulted in weakening our bonds to old praxises as well as introducing us new lifestyles. This process of becoming acquainted with new life habits is society's adaptation to new technologies brands use which comes out of new software.

7.4. Effects of Future Brands and Softwares

Brands should pay regard to customer satisfaction to give quality service. Since the past, they have used surveys, customer scorings, and many more methods to find out more about their customers' wishes and complaints. In case of taking advantage of this digital era, they will have an opportunity to strengthen their bonds with customers, especially with the help of the software they use. Klaus Schwab, the founder of the World Economic Forum, mentions in his book The Fourth Industrial Revolution that the internet of things (IoT), wearable technology, artificial intelligence (AI) and big data are some of the elements of digital era. The network of devices that have an access to the internet and are able to communicate with each other, in other words the internet of things, will definitely be useful for the brands. Devices we use record many of our interactions from where we go to what we buy. 'Big Data' is what we call the collection of all the data taken by devices. By processing and analyzing all these data, personalized products, special promotion and advertisements can be made. Brands try to serve according to their customers' choices with the help of software like CRM (Customer Relationship Management). In the future it seems likely that brands will develop more and more personalized products as technology usage increases day by day. Of course, this will bring benefits for both brand and the individual, however, there may be a need for some legal arrangements in terms of personal data usage.

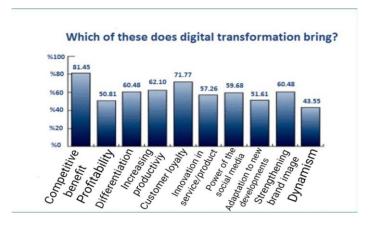


Table 5. Benefits of Digital Transformation ⁸

https://www.myexecutive.com.tr/tr/newsletter/dijital-donusumun-nabzini-tutuyoruz-123.html. Date accessed: 19.02.2021.

As it can be seen in **Table 5**, digitalization increased brands' competitive advantage by %81.45, profitability by %50.81, productivity by %62.10, customer loyalty by %71.77, and brand image by %60.48. Taking into consideration, digitalization and using software solutions bring great advantages in the fierce competition environment. In the future there will be an increase of more brands than we have today that has saving and efficiency in terms of brand management. New technologies that are used in every field, automation, robots as part of the production and so on are not part of a fantasy world anymore. It is clear that digitalization, which has a great advantage today, will for sure be a necessity for future brands as well.

CONCLUSION AND DISCUSSION

With the development of technology and the change in living conditions, the capacity of production increased. While the production in every field increasing, the competition among the companies did the same. To be able to survive in that competitive environment, limited resources must be used efficiently. Doing brand and software production properly, means saving time and efficiency in the production process. It was discovered that using the software systems in the right way helped companies to set the right strategy for themselves. Besides all these, using software in machines for production makes it possible to get correct and more efficient results. In that type of process, saving time is one of the most preferable earnings compared to manpower in production. Thanks to the software analyzing the current market and target customer data, companies manage their sale and production strategies. With the help of these data, companies can make personalized products and suitable production according to current situations. Digitalization is more important for companies while technology developing itself. It has become an obligation to allocate budgets for digitalizing. To be more known and increase the sale numbers digitalizing means more than the past. Considering the increasing customer demands and the situation of limited resources that are running out, savings and efficiency in production will clearly be more important in the future.

When these results are evaluated, brands should be informed to ensure rapid, stable, and efficient progress and also be guided on the correct use of available resources. Considering the environmental realities of the current period, saving practices should be expanded to protect limited resources and producers should be encouraged to participate in this process by the government. In addition to saving, environmentalism should be brought to the fore, nature-friendly brands that deal with global problems should be supported, and efforts should be made to increase their numbers.

Plans for the future in production should be made in advance. In addition, brands should be involved and participate in e-commerce to catch the digitalization wave, whose balance-changing power in the production world is evident even today. Under these conditions, measures should be taken for the protection of personal data, which is always on the agenda today. Education should be given in our country for software production and young people should be supported in this field.

NOMENCLATURE

IJEST International Journal of Engineering, Sciences and Technology

REFERENCES

AKGÜN, V. Özlem ve Ali Akgün, Marka ve Marka Değeri Olgusu: Marka Değerinin Tespitine Yönelik Bir Uygulama, Selçuk Üniversitesi Sosyal ve Teknik Araştırmalar Dergisi, (8), Konya, 2014, s. 1-13. ARTAN ÖZORAN, Beris, Covid-19 Salgınında Markaların Twitter Kullanımları Üzerine Bir İnceleme, Van Yüzüncü Yıl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, Van, 2020, 429-458. ÇELİK VAROL, Merve ve Erdem Varol, Kavram ve Kuramlarıyla Marshall Mcluhan'a Bakış: Günümüzün Egemen Medya Araçları Ekseninde Bir Değerlendirme, International Journal of Cultural and Social Studies (IntJCSS), 5(1), 2019, s. 137-158.

KAYIKÇI, Pınar, Kudret Armağan ve Nil Esra Dal, Marka Kimliğinin Belirlenmesine Yönelik Bir Çalışma: Özel Eğitim Kurumunda Bir Araştırma, Karadeniz Uluslararası Bilimsel Dergi, 2019, s. 375-403.

KÜÇÜKHEMEK, Hatice, Perakende Sektöründe Müşteri İlişkileri Yönetimi: Teorik ve Uygulamalı Bir Çalışma, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Konya, 2010.

OH, Travis Tae, Kevin Lane Keller, Scott A. Neslin, David J. Reibstein, Donald R. Lehmann, The Past Present and Future of Brand Research, Marketing Letters, 2020.

SOLAK, Bahadır Burak, Markaların Dijital Dönüşümü ve Sosyal Medya Kullanımı: Twitter Özelinde Bir İnceleme, Dördüncü Kuvvet, 3 (1), Aydın, 2020, s. 100-112.

TÜRKAN, Özay Umut, Üretimde Yalın Dönüşümün Temel Performans Kriterleri, BAÜ Fen Bilimleri Enstitüsü Dergisi, Cilt 12(2), Balıkesir, 2010, s. 28-41.

YILMAZ ALTUNTAŞ, Elgiz, Dijital Dönüşüm Uygulamalarının Kurumların Marka Değeri Üzerindeki Etkisi. Ege Üniversitesi İletişim Fakültesi Medya ve İletişim Araştırmaları Hakemli E-Dergisi, (2), 2018, s. 1-18.

https://www.ipsos.com/tr-tr/koronavirus-hane-ici-hizli-tuketim-urunleri-harcamalarina-nasil-etki-ediyor. Date accessed: 20.02.2021.

https://www.milliyet.com.tr/teknoloji/crm-nedir-ne-ise-yarar-crm-programlari-nasil-kullanilir-6333982. Date accessed: 29.01.2021.

https://www.myexecutive.com.tr/tr/newsletter/dijital-donusumun-nabzini-tutuyoruz-123.html. Date accessed: 19.02.2021.

https://www.robots.com/faq/how-much-do-industrial-robots-cost. Date accessed: 02.02.2021.

https://sozluk.gov.tr/. Date accessed: 06.02.2021.

https://www.webtures.com/tr/seo/. Date accessed: 09.02.2021.