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Artificial Intelligence vs Human in Advertisement Text Writing

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Reklam Metni Yazımında Yapay Zekâ İnsana Karşı

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Abstract

This research was conducted to compare the effectiveness of human-generated advertisement text and artificial intelligence (AI)-generated advertisement texts. In this context, data were collected by applying a questionnaire to 208 university students using convenience sampling method. In the questionnaire form, consumer involvement and purchase intention scales were included. Two advertising texts produced by AI and the text used in the original advertisement of the company were presented to the participants. They were asked to answer the scale statements for each ad text. Regression analysis was applied on the collected data. According to the results of the analysis, the most effective ad text on the participants is the ad text printed on ChatGPT, even if with a small difference. As a result, AIs have shown close to human-like success in ad text writing despite using limited data. It is thought that the use of AI in ad text writing will bring efficiency and productivity to the sector.

Keywords: *Advertisement, artificial intelligence, consumer involvement, purchase intention.*

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Öz

Bu araştırma insan üretimi olan reklam metniyle yapay zekalara (YZ) yazdırılan reklam metinlerinin etkinliğinin karşılaştırılması amacıyla yapılmıştır. Bu kapsamda, kolayda örnekleme yöntemiyle 208 üniversite öğrencisine anket uygulanarak veriler toplanmıştır. YZlar tarafından üretilmiş iki reklam metni ile firmanın orijinal reklamında kullanılan metin katılımcılara sunulmuştur. Her bir reklam metni için ölçek ifadelerini cevaplamaları istenmiştir. Toplanan veriler üzerinde regresyon analizi uygulanmıştır. Analiz sonuçlarına göre, katılımcılar üzerinde en etkili olan reklam metni küçük farkla da olsa ChatGPT'ye yazdırılan reklam metnidir. Sonuç olarak, YZlar reklam metni yazımı konusunda kısıtlı veri kullanılmasına rağmen insana yakın başarı göstermiştir. Reklam metni yazımında YZ kullanımının sektöre etkinlik ve verimlilik kazandıracağı düşünülmektedir.

Anahtar Kelimeler: *Reklam, yapay zekâ, tüketici ilgilenimi, satın alma niyeti.*

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1. Introduction

The study of artificial intelligence (AI) is growing in popularity among computer scientists since it has greatly improved human lives in many ways (Pannu, 2015: 79). In the previous two decades, AI has significantly boosted performance in the manufacturing, service, and educational sectors (Verma, 2018: 5). AI is a set of computer tools that support human intelligence by responding to queries, comprehending them, gathering data, and communicating with things to provide responses (Bhosale et al., 2020: 35).

When AI and marketing technology are combined, traditional marketing techniques can be effectively innovated, and the overall quality of marketing development is improved. By analyzing the status of AI's application in the field of marketing and outlining its advantages, individuals can better promote the overall quality of AI (Sun, 2021: 669). Marketing innovation has been mostly supported by AI. The benefits of AI are already being used by marketers to learn more about their target audiences, rival companies, and marketplaces. On top of that, AI improves processes, reduces costs, and automates operations (Kalicanin et al., 2019: 472). The use of AI in advertising, which is one of the marketing activities, will offer advantages especially for advertising agencies. In addition, businesses that have difficulty finding the budget to work with an advertising agency will be able to do this work themselves with the help of AI. Reshetkova's (2019: 145) research concluded that AI has the potential to increase advertising effectiveness.

The rapid advancement of technology has invariably permeated various facets of daily life, including the advertising industry. Traditionally regarded as the exclusive domain of human creativity and comprehension, the writing of advertising copy is now undergoing a significant transformation as AI and machine learning technologies begin to play a critical role in this realm.

From the marketing perspective, Zaichkowsky (1986) proposed that involvement is consisted of three domains which are the advertisement, product and purchase decision. It is also mentioned in the study that the advertisement domain of the concept of involvement leads inducing the consumers to purchase the advertised product. Therefore, in this study, the effect of consumer involvement on purchase intention was tried to be measured.

In this study, an ad text produced by humans for a new product of a company was selected and AI was asked to write a similar ad text. Afterward, the impact of the company's original ad text and the two ad texts produced by artificial intelligence on consumers was measured. A chocolate product that was launched in Turkey in 2022 and whose commercial was presented to consumers in the same year was used as an example in the research. The text in the commercial of the product was analyzed and texts with similar features were written on ChatGPT and ChatGPTPro. The text in the brand's commercial and the texts produced by AI were presented to university students, who are the target audience of the product, in an online form that also included consumer involvement and purchase intention scales. If there is no significant difference between the effectiveness of ad texts produced by professional advertising agencies and ad texts produced by AI with using limited information, or if the texts produced by AI are more effective on consumers, it can be said that a new era has begun for the advertising industry.

2. Literature Review

2.1. Artificial Intelligence (AI)

Several ideas might come to mind when we use or hear the term AI. The majority of these ideas tend to bring an informal way of defining the term. This kind of informal use of a term can cause

misunderstanding in general, but it can be far more detrimental in a legal setting (Martinez, 2019: 1016). AI mostly focuses on data processing carried out by computers. Since AI is a subject taught in engineering and computer science fields, according to the usage or the demands of the faculty, the definitions of AI have also changed throughout time. The extent of AI has been severely constrained by these criteria, and the genuine spirit of intelligence is not taken into consideration (Gerwal, 2014: 9). Therefore, defining intelligence first will help to better understand the definition of AI.

There is no established definition of what AI encompasses, in spite of the rising interest in the field from the public sector, business, and academia. Several perspectives on AI have compared it to human intelligence or intelligence in general (Samoili et al., 2020: 7). The ability of a system to respond appropriately in an uncertain environment is referred to as intelligence. Appropriate behavior is that which raises the likelihood of success, and success is the accomplishment of behavioral smaller objectives that support the system's main objective (Albus, 1991: 474). In other words, a system can be regarded to be intelligent if it develops adaptive behavior to achieve goals in a variety of situations (Fogel, 1995: 1590). Intelligent systems must function effectively in a variety of settings. As a result of their intelligence, they can increase their chances of success even when all the facts are not yet known. Intelligent systems' functioning cannot be seen independent from their surrounding environment and their specific context, which includes their intended goal (Gudwin, 2000: 2080). Another approach to define AI is to think of it as having two dimensions: thought process/reasoning, and behavior. According to this approach, a system's effectiveness is determined by how closely it is comparable to human performance and by the performance criterion known as rationality. In this context, a system is considered to be rational if it acts rationally in light of its knowledge (Russell and Norvig, 2010: 1). In other words, the ability of a system to accurately understand external data, to learn from it, and to use those learnings to accomplish particular tasks and goals through flexible adaptation is referred to as AI (Kaplan and Haenlein, 2019: 15).

For more than 50 years, AI was a field of comparatively little scientific interest and little usage in practice. Today, Big Data has become a topic of discourse in the business world (i.e., marketing applications) as a result of its growth and advancements in technology (Haenlein and Kaplan, 2019: 5; Kaplan and Haenlein, 2019). Chatbots for instance, have been used widely in business context, specifically in customer relations (Adam, et al., 2021; Borsci et al., 2022; Klein and Martinez, 2022; Nguyen et al., 2022; Hsu et al., 2023). Especially AI based live chat interfaces have been very commonly used in e-commerce settings. By using these interfaces, companies have been able to communicate with their customers in a more efficient way (Adam et al., 2021: 427).

It is to be better understood marketing's connection with technology and, in the context of this study, AI, by first defining what it is. American Marketing Association (AMA) defines the concept 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.". Given this definition, information is the key instrument that connects these parties with the marketer, which is the function called "marketing research" (AMA, 2017). Information is used in various ways such as defining the opportunities and issues of marketing, develop, improve, and assess its actions, and monitor it as a process. Recent technology developments have made it possible for AI to operate in almost all of these fields (Mustak et al., 2021: 390).

Martínez-López and Casillas (2013: 489) pointed out that AI can be used as a supportive instrument for the businesses in terms of marketing management. Although the implementation of AI can be numerous within the context of marketing, authors mentioned some areas such as customer relationship management (CRM), pricing decisions, managing personal selling, services management in business markets, segmenting and targeting business markets (Martínez-López and Casillas, 2013: 489), sales management (Flathery et al., 2018), communication (Paschen, 2020), and advertising (Kietzmann et al., 2018).

As previously mentioned in Kaplan and Haenlein's (2019: 15) definition, AI is a structure that acts by processing the external data and making inferences from this data. This situation, which can also be called as personalized engagement marketing, can be used in marketing applications in the form of presenting them with choices that match the preferences of customers or users such as products, prices and even advertising messages (Kumar et al., 2019).

Fake news produced to defame brands and products in the business environment poses a significant problem for companies. Paschen (2020) states in her study that AI is an important tool for marketing communication experts to detect this type of fake news and take the necessary steps to eliminate its damaging effects. Moreover, AI can also be useful for marketing communication specialists to communicate more effectively and efficiently with their target audiences and the society in general. Businesses also benefit from AI in advertising activities, which is an important and frequently encountered function of marketing communication (or promotion in general).

The way advertising comprehends and directs consumers has changed as a result of AI. Future consumer insights will be driven by new consumer-generated data mining techniques, and AI will serve as the privacy standard. Advertisers will be able to discreetly gather customer data from numerous sources, integrate that data, and mine it for real-time consumer insights with the aid of machine learning. The advertisers can then actively engage with consumers by using these insights (Kietzmann et al., 2018: 266-267).

2.2. Advertising

Being one of the activities of promotion, American Marketing Association (AMA, 2011) defines advertising as "*the placement of announcements and messages in time or space by business firms, nonprofit organizations, government agencies, and individuals who seek to inform and/or persuade members of a particular target market or audience regarding their products, services, organizations or ideas.*" In today's competitive environment, it has become difficult for businesses to convey messages about their products and services to their target audiences through advertising activities. Therefore, regarding AMA's definition, Pongiannan (2011: 39) stated that advertising is a crucial component of promotion since it has a significant role in building awareness for consumers and encourage potential customers to purchase business' products and services.

According to another common definition that advertising is any kind of non-personal, paid marketing of ideas, products, or services by a sponsor who can be identified (Kerin and Hartley, 2016: 354; Armstrong et al., 2023: 400; Kotler et al., 2023: 460). This definition's paid component is crucial because the space for the advertising message must often be purchased. The public service announcement, in which the advertising time or space is donated, is an occasional exception (Kerin and Hartley, 2016: 354). Several content formats such as digital, print, online, broadcast, outdoor, etc. can be used for advertising while communicating with consumers (Bradley, 1995: 638; Armstrong et al., 2023: 401). Although advertisements are created for a variety of reasons, there are essentially only two types which are product and institutional advertisements. Product advertisements mainly focus on making a sale of a good or service where institutional advertisements aim to promote an organization's reputation or goodwill instead of a particular good or service (Kerin and Hartley, 2023: 532).

Advertising mainly focuses on making a sale of a good or service. This type of advertising can be created in three forms: informational, persuasive and reminder (Kerin and Hartley, 2023: 532; Kotler et al., 2023: 461). Informational advertising is generally used to inform the target audience about the product or service while it is in the early stages of its life cycle (Kerin and Hartley, 2023: 532). When launching a new product category, informative advertising is employed extensively. Building primary demand is the main goal (Kotler et al., 2023: 461). Persuasive (or competitive) advertisements highlight the advantages and attributes of a particular brand. The main goal is

persuading the target market to choose the firm's brand. It has become increasingly common that firms tend to compare competitive brands with theirs, which is called comparative advertising, while trying to reach this goal (Kerin and Hartley, 2023: 532; Kotler et al., 2023: 461). Kotler et al. (2023: 461) informed that increasing competition makes persuasive advertising more important. Reminder advertising is a way for a firm to consolidate target audience's existing opinions and knowledge (Kerin and Hartley, 2023: 533). This is also useful for the firm to keep the mature products in customers' minds as well as maintain its relationship with them (Kotler et al., 2023: 462).

The use of advertising in a company's promotional mix has a number of advantages. It can draw attention and convey to potential customers the certain advantages of the product. A business can somewhat control what it wants to say and who receives the message by purchasing the advertising space. Additionally, using advertising lets the business choose when and how often its message is delivered. There are also some disadvantages of advertising. It is expensive to create and distribute a message, and it is difficult to determine how well it was received because there is no direct response (Kerin and Hartley, 2016: 354-355). This disadvantage has started to disappear due to developments in technology, the use of big data by firms to better understand their consumers, and the ability of individuals to communicate their reactions to the activities of firms more quickly, particularly through social media.

Media and communication experiences of individuals have been significantly enhanced by developments in customization algorithms and other machine-learning applications (Sundar, 2020: 74). AI for instance, is being used by many marketers to convert this big data into insightful consumer information (Kietzmann et al., 2018: 263) and it has been and continues to be an important factor in the personalization of communication material (Sundar, 2020). The ability to personalize communication content and messages at a never-before-seen level at both the individual and mass audience levels is made possible by the sophistication and computational power of AI applications combined with the accessibility of big data (such as people's digital footprints) (Winter et al., 2021).

In general, managers need to pay more attention to marketing strategies, such as advertising and communication, in order to stay in line with changes in customer decision-making processes, perceptions of time, and confidence brought on by AI (Lemon and Verhoef, 2016). Same insight has been made by Kietzmann et al. (2018: 265). In their research, the authors mentioned that AI in advertising can be implemented differently during a consumer's decision-making process. The authors also mentioned that AI affects the consumers differently in each phase of this process (Kietzmann et al., 2018: 265).

Although there are many more technologies, such as cloud computing, big data, and so on, as a result of technological improvement, machine learning, and AI have outperformed other technologies in terms of effectiveness. AI and machine learning improve business marketing techniques. The implementation of machine learning and AI techniques will make it much easier to design innovative ads, target advertising, and optimize performance compared to what it was in the past (Shah et al., 2020: 13).

3. Methodology

In this section, the purpose, design, and model of the research, the research question and hypothesis, data collection method and scales, population and sampling issues are explained.

3.1. Purpose and Design of the Study

The aim of the research is to measure the effectiveness of human-produced and AI-produced ad texts on consumers. The process followed for this purpose is presented in Figure 1.

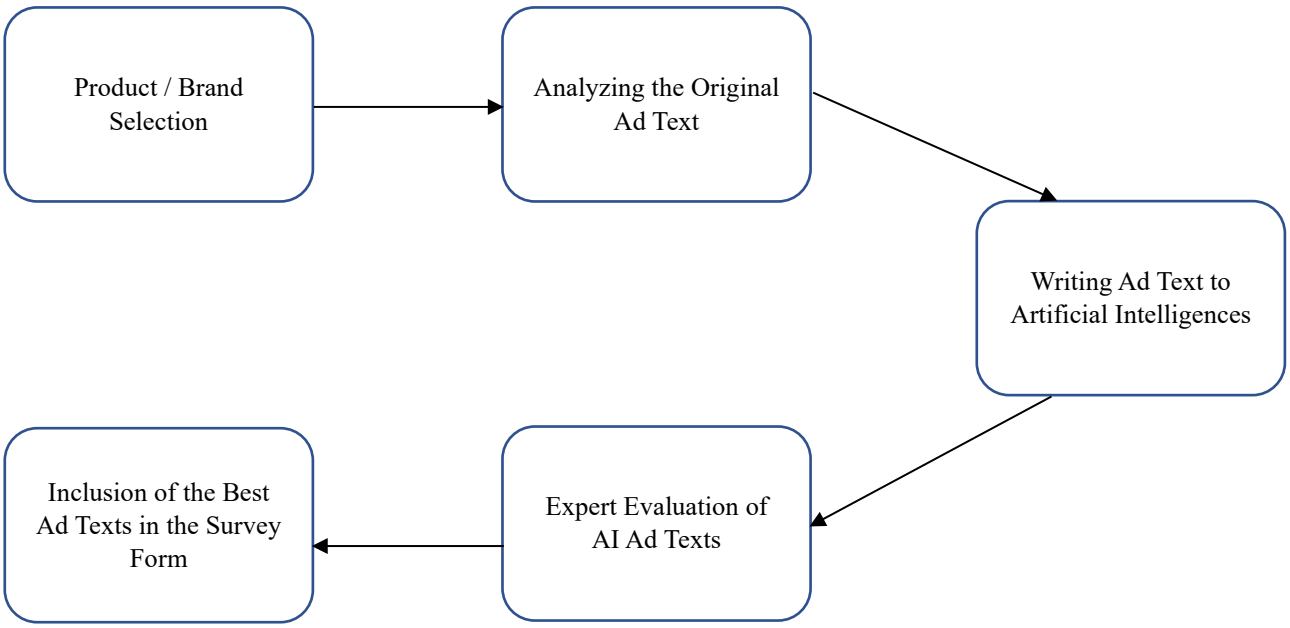

Figure 1. Research Design

3.1.1. Product / Brand Selection

It is preferred that the product and brand selected within the scope of the research was launched after September 2021. The reason for this is that the data of ChatGPT, the AI tool used within the scope of the study, belongs to before this date. In this way, it is aimed that the artificial intelligence preferred for the company's advertisement text does not have a memory.

3.1.2. Analyzing the Original Ad Text

The selected product / brand was launched in 2022 and its advertisements started to be released on television and digital platforms in the last months of 2022. The text used in the advertisement film consists of a title of 5 words and a content of 11 words.

3.1.3. Writing Ad Text to Artificial Intelligences

For the text to be prepared by AI, a paragraph describing the brand on the company's website was taken (52 words in length) as well as the content information on the package of the product. Moreover, the prompt given to ChatGPT is as follows: "*Your role is copywriting. Using the information above, I want you to think like a copywriter and create an advertisement text. The text should have a maximum of 5 words in the title and a maximum of 15 words in the text. I want the brand name '.....' to appear in the headline.*" Using the information provided to ChatGPT and ChatGPTPro (for which a monthly fee is paid), five advertisement texts with the requested features were written. The ones that did not comply with the criteria were removed from these ad texts and the next stage was carried out with three ad texts each.

3.1.4. Expert Evaluation of AI Ad Texts

The 6 texts (3 for both ChatGPT and ChatGPTPro) obtained were shared with a group of marketing scholars through an online questionnaire and they were asked to choose one of the advertisement texts written using ChatGPT and ChatGPTPro that they think is the best. The advertisement texts to be

included in the survey form to be presented to the final consumers were decided after 75 participants replied to the questionnaire.

3.1.5. Inclusion of the Best Ad Texts in the Survey Form

The most preferred (50.7%) of the three ChatGPT produced advertisement texts, the most preferred (42.7%) of the three ChatGPTPro produced advertisement texts and the original advertisement text used in the advertisement of the company were included in the final questionnaire form.

3.2. Research Model, Question and Hypothesis

Within the scope of the research, the effectiveness of the text in the commercial film published by the selected company and two advertisement texts written by artificial intelligence on consumers was tried to be measured. Consumer involvement and purchase intention variables were included in the measurement. These two variables were measured for each advertisement text and the level of influence of consumer involvement on purchase intention was tried to be revealed. The model of the research is presented in Figure 2.

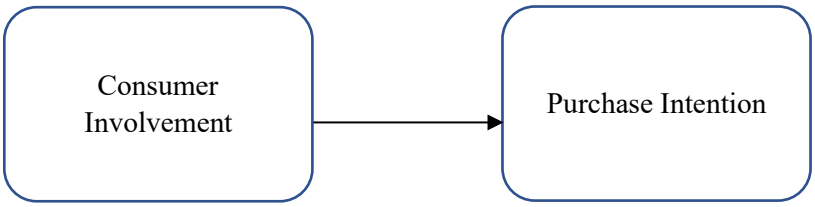

Figure 2. Research Model

RQ: Can AI-generated ad texts be more effective than human-generated ad texts?

H_1: Consumer involvement has a significant effect on purchase intention.

3.3. Population and Sample

Due to time and economic limitations, convenience sampling method was preferred. Considering that the target audience of the product used in the advertisement text is young consumers, university students constitute the population and Sakarya University of Applied Sciences students constitute the sample. Since the two scales in the questionnaire form consisted of 14 statements in total and these statements were asked for 3 different advertisement texts, the answers of the participants were collected with a form of 42 statements. Bentler and Chou (1987: 91) suggested that the sample size can be sufficient as five times the number of statements. In the study, a total of 208 questionnaires were collected and it is considered that the sample size is sufficient.

3.4. Data Collection Method and Scales

Understanding how consumers make decisions and make purchases is made possible by first understanding the concept of customer involvement. Comprehending the kind and extent of consumer interaction gives advertising strategists an advantage when developing advertising campaigns (Çakır, 2007: 163). For this reason, consumer involvement scale was used to measure the effectiveness of advertisement texts. The reason for using the purchase intention scale is that companies try to ensure that consumers purchase their products as a result of marketing activities.

In the study, data were collected with a questionnaire. Two different scales were included in the form. These are consumer involvement scale developed by Zaichkowsky (2012: 527) and purchase

intention scale developed by Dodds et al. (1991: 318). Sakarya University of Applied Sciences Rectorate Ethics Committee approved the research with the number E-26428519-050.99-92564 and decision number 34/6.

4. Findings

Demographic information of the participants is presented in Table 1. Since the sample consists of university students, only gender and age are included in the demographic information section.

Table 1. Gender and Age Information of Participants

Gender	Number of Participants	Ratio (%)	Age Average
Male	82	39.4%	22.2
Female	126	60.6%	21.6
Total	208	100 %	21.9

The number of respondents that have participated to the research is 208 and 82 of them (39.4%) were male and 126 (60.6%) were female. The age range of the respondents is 18 to 34 and the average age is 21.85. According to gender, the age range is 18-34 for males and 18-33 for females. The average age of the respondents is 22.2 for men, 21.6 for women and 21.9 for the participants in general.

Descriptive statistics of the collected data are given in Table 2.

Table 2. Descriptive Statistics

Advertisement Text Writer	Scales	Mean	Standard Deviation	Skewness	Kurtosis
ChatGPTPro	Consumer Involvement	4.22	1.342	-0.071	0.096
	Purchase Intention	4.78	1.416	-0.777	0.090
Original Text	Consumer Involvement	4.28	1.446	-0.126	-0.219
	Purchase Intention	4.61	1.575	-0.502	-0.594
ChatGPT	Consumer Involvement	4.38	1.459	-0.289	-0.135
	Purchase Intention	4.75	1.556	-0.689	-0.455

According to the Table 2, skewness and kurtosis values between -1 and +1 indicate that the data exhibit a normal distribution (Hair et al., 2014: 34). The fact that the data analyzed in the study are within this range shows that they are suitable for further analyses.

When the mean values of the scales are examined, it is seen that they are close to each other. The values of the consumer involvement scale vary between 4.22 and 4.38, and the purchase intention scale vary between 4.61 and 4.78. According to these results, it can be said that the participants gave close responses to the company's advertisement text and the advertisement texts produced by artificial intelligence.

Cronbach's α value was calculated for the reliability of the scales and factor analysis was applied to explain a large number of variables with a small number of variables. The findings of these analyses are presented in Table 3.

Table 3. Exploratory Factor Analysis and Reliability Values

Advertisement Text Writer	Scales	Number of Items	Factor Loadings	Cronbach α	Variance Explained (%)	KMO Values
ChatGPTPro	Consumer Involvement	10	0.690 – 0.803	0.908	54.83	0.901
	Purchase Intention	4	0.916 – 0.940	0.944	85.53	0.852
Original Text	Consumer Involvement	10	0.884 – 0.736	0.947	68.03	0.936
	Purchase Intention	4	0.961 – 0.942	0.965	90.53	0.864
ChatGPT	Consumer Involvement	10	0.876 – 0.756	0.948	68.26	0.939
	Purchase Intention	4	0.964 – 0.954	0.970	91.73	0.87

The Kaiser-Meyer-Olkin (KMO) result used for sampling adequacy is unacceptable to be below 0.50 (Özdamar, 2016: 150), the range of 0.50 - 0.60 is interpreted as poor, 0.60 - 0.70 as moderate, 0.70 - 0.80 as good, 0.80 - 0.90 as very good and above 0.90 as excellent (Sharma, 1996: 116). Accordingly, it is seen that the sampling adequacy is excellent for 3 different advertisement texts of the 10-statement consumer involvement scale and very good for the purchase intention scale.

The explained variance is an important value for factor analysis. An important criterion for factor analysis is that the explained variance exceeds 50% of the total variance. When it comes to the ability to represent, if the factor structure created represents less than half of the total variable variance, it would be wrong to accept it (Yaşlıoğlu, 2017: 77). According to Table 3, the explained variance values are between 54.83% - 91.73% and can be accepted as sufficient.

Cronbach's alpha value of at least 0.60 is required for scientific research to be considered reliable (DeVellis, 2003: 95; Özdamar, 2016: 126). In order for this value to be accepted as high, it must be 0.80 and above (Kalaycı, 2014: 405). The fact that the values obtained in the study are above 0.90 shows that the reliability is at a high level.

Factor analysis is used to reduce the relationships between a large number of variables into a smaller number of basic dimensions to facilitate understanding and interpretation. The basic principle of factor analysis is that a complex phenomenon can be explained with the help of a smaller number of variables (Altunışık et al., 2012: 264). The factor loadings of the scale statements should be at least 0.30 (Kline, 1994: 52). When the factor loadings are 0.60 and above, it is expressed as high (Büyüköztürk, 2002: 474). When the loadings of the scale expressions used in the study are analyzed, it is seen that the lowest one is 0.69 and therefore it is at a satisfactory level.

In order to answer the research question of the study, the same hypothesis was tested separately for the company's original ad text and the ad texts written by AIs. The effect of consumer involvement on purchase intention was tested with regression analysis and the results are presented in Table 4.

Table 4. Results of Regression Analysis

Advertisement Text Writer	Anova		Modal Summary		Coefficients		
	F	Significance F	R	R^2	B	t	Significance
ChatGPTPro	69.935	0.000	0.503	0.253	0.531	8.363	0.000
Original Text	92.413	0.000	0.556	0.310	0.606	9.613	0.000
ChatGPT	116.878	0.000	0.602	0.362	0.642	10.811	0.000

Independent Variable: Consumer Involvement, Dependent Variable: Purchase Intention

According to the results obtained, it is seen that significant results are obtained for all 3 advertisement texts (Significance = 0.000). It is concluded that consumer involvement has an effect on purchase intention and the hypothesis is accepted for all advertisement texts. However, the effect

of consumer involvement on purchase intention varies slightly according to the advertisement texts. In the text used in the commercial movie of the brand, the effect of consumer involvement on purchase intention was determined as 31%. The results obtained for artificial intelligence are 25.3% for ChatGPTPro and 36.2% for ChatGPT.

As the bonus question of the research, it was stated that one of the 3 ad texts in the form was human produced, and the participants were asked to guess which text was human produced among the AI produced ad texts. 105 out of 208 participants, i.e., more than half of them, stated that they thought that the company's original ad text was human-generated. Of the remaining 103 participants, 56 of them guessed that the ad text printed on ChatGPTPro and 47 of them guessed that the ad text printed on ChatGPT could be human generated.

5. Conclusion

As with most technological developments, AI will expand its area of use. This innovation, which has been in our lives for less than a year, differs from other technological developments in one fundamental aspect. In particular, its ability to perform human-produced tasks in the knowledge pool "like a human" has attracted attention in the initial stages. In the past, it was said that machine-produced jobs, no matter how successful they were, could not resemble human-produced jobs. Today, however, it is thought that there are jobs that require special skills, such as writing stories and drawing pictures, and some of them are indistinguishable from human-produced ones. At this point, it was thought that it would be useful to try to get AI to write ad copy, considering how it would affect advertising, which is a very important activity for marketers. Before digitalization, it was not even possible to measure the results of the advertisement production, let alone getting contribution from technology.

Calculating the return on investment in advertising was one of the most important issues for businesses. In fact, John Wanamaker, one of the pioneers in the field of marketing, said, "Half of the money I spent on advertising was wasted. The problem is, I don't know which half" (Lindstorm, 2008: 28) shows how difficult it is to measure the performance of advertising. With the development of technology, measuring the effects of advertising has become much more accurate, especially for advertisements published in digital media. It is thought that the technological assistance in the measurement of outputs will continue to be effective in the creation of inputs with machine learning and AI.

In this study, the effectiveness of AI-generated ad copy and the company's original ad copy was tried to be measured in the context of the effect of consumer involvement on purchase intention. As a result of the analysis, it is seen that the ad text written to ChatGPT is the most effective (36.2%), the second place is taken by the company's ad text (31%), and the third and last place is taken by the ad text written to ChatGPTPro (25.3%). Thus, one of the AI-generated ad texts surpassed the company's ad text, while the other one lagged behind. Since the difference between them is not large, it can be said that there is not a big difference between AI-generated ad texts and human-generated ad texts. In addition, when we look at the averages of consumer involvement and purchase intention variables, it can be said that there are no significant differences. In summary, AI-generated ad texts are close to human-generated ad texts in terms of effectiveness.

In the study, the participants were asked to guess which ad text was human-generated. The fact that half of the participants thought that the ad texts generated by AI were human-generated is another important finding that artificial intelligence gives human-like results.

This research shows that AI can be used as an effective tool in ad text writing. It can be said that AI will make significant contributions to shorten the production process and increase the number of options for the many meetings and experts that advertising agencies make while creating

advertisements. Considering the limitation of the data presented to AI in this study, it can be thought that much more effective results can be obtained when AI is supported with more data.

In future academic research, it is known that other elements such as visuals, videos and music can be produced with the help of artificial intelligence. It can be said that field research on these will contribute to the literature.

It can be said that AI will become an indispensable assistant for marketers. It is thought that the studies to be carried out with the support of AI in public relations, sales development, personal sales and direct marketing activities, which are other promotion mix elements, are very important for both practitioners and academicians.

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