

# Employing Artificial Intelligence (AI) Technology in Advertising Design on Social Media

Heba Alla Mohsen El-aasy

Lecturer at Faculty of Applied Arts, Damietta University

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## KEYWORDS:

Artificial intelligence technology, Midjourney, Social media

## ABSTRACT:

With the rapid development in advertising, it has become necessary to keep pace with this development to ensure the continuity of influence on the recipients, so AI techniques have become one of the most important emerging technologies that designer can employ in advertising, AI is a comprehensive term for applications that perform complex tasks that in the past required a long intellectual effort from designer, such as access to an unconventional innovative idea that is unparalleled. The problem is how AI technology can be employed innovatively in advertising as one of the recent trends? And how it can be compatible with the requirements of advertising era, where the research assumes that employing midjourney technology as one of artificial intelligence applications can be a helpful tool for designer in developing ideas on social media. Research aims to employ AI technology as a recent trend in advertising. The importance lies in the continuous competition and the need for modern technology to develop presented advertising ideas with higher efficiency in a way that doesn't replace the presence of the designer and keeping pace with recent developments in advertising. Following the experimental approach on Facebook and Statistical approach using a closed questionnaire. Resulting in employing AI technology is an aid to designer does not cancel his innovative role, a strategy helps him get the largest possible number of ideas according to the words or sentences he enters that enable him accomplish more designs in less time creating attractive new ideas positively in any subject.

## 1- Introduction

Artificial Intelligence or AI has become a very important part in many aspects of life, starting from mobile phone and ending with smart cameras and self-controlled cars, but it is a complex field that looks at defining human intelligence, determining its dimensions, and then simulating some of its properties. This new science aims to understand the complicated mental processes that the human mind performs while practicing thinking and then translating these mental operations into equivalent accounting operations that increase the ability of the computer to solve complex problems, which is artificial intelligence.

AI technology imposed a new reality on advertising in general and on social media in particular. It has become a modern trend in design that can be worked on and developed to reach the best possible results, where social media has sought to implement this technology in order to enhance its important role in competing with each other, which drives a large percentage of recipients to rely on it to follow advertisements, obtain information, entertainment and shopping.

AI has great power on social media; this intelligence drives rapid social analytics and exact automated searches to drive innovative solutions, better planning and faster knowledge sharing.

The AI revolution has a profound impact on art and advertising industry more than anything else, hence the importance of employing artificial intelligence techniques on advertising designers and the extent to which they accept these new technologies and their realization of the expected benefit from them on social networking sites, and how they can employ it in light of the expected changes that it will affect the advertising industry and its impact on the advertising message presented.

**The problem of Research is** How can artificial intelligence solve advertising design problems on social media?, How it can be employed innovatively in advertising as one of the recent trends? And how it can be compatible with the requirements of the era

in the field of advertising?. Where the **Research assumes that** employing midjourney technology as one of artificial intelligence branches can be a helpful tool for designer in developing his solutions and advertising ideas on social media.

**Research aims to** employ artificial intelligence technology as one of the recent trends in advertising on social media. **The importance lies in the** Rapid development and continuous competition in advertising field on social media, the need for modern technology and an auxiliary tool to develop presented advertising ideas with higher efficiency in a way that doesn't replace the presence of the designer and keep pace with recent developments in advertising and considering this research as the beginning of more future studies on using artificial intelligence technology in all areas of advertising.

**The research follows the experimental approach** by conducting some applied models of advertisements of different styles using artificial intelligence technology on Facebook and **Statistical approach** by extracting statistical results using a closed questionnaire with analysis and graph applied on random sample of 100 advertising recipients, men, young men, women, and girls of all ages.

**The search will be applied to** Facebook as a social media as it is number one in the list of the highest viewed social media sites for ads according to Google search charts, Facebook advertising is the most developed of all social media; where advertising can be directed according to age, gender, interests and buying behavior.

### **Artificial intelligence technology AI:**

- I. A relatively recent science of computer science, which aims to innovate and design smart computer systems that simulate the method of human intelligence and behavior in various fields, so that the computer can perform some tasks instead of the human, which requires thinking, attention, perception, understanding, hearing, speaking, movement then reasoning and reacting in a logical manner. (محمود، عبد الرازق، مختار ٢٠٢٠)
- II. Artificial intelligence is interested in designing systems that demonstrate human intelligence represented in reasoning and problem solving, and it detects aspects of human mental activity such as understanding, creativity, education, perception, problem solving and it includes all

theoretical and applied methods interested in completing the decisions making process instead of humans, whether in a complete or partial way with humans. (محمود، سلوي؛ قردش، محمد؛ إبراهيم، حسين، أميرة، ٢٠٢٢)

### Midjourney

1. An independent research lab that produces a proprietary artificial intelligence program that creates images from textual descriptions, the open-source stable diffusion first entered open beta on July 12, 2022.
2. Used to help Users create artwork using Discord bot commands on official Discord, by direct messaging the bot, or inviting the bot to a third party server to generate images, so users use ready-made code the /imagine command and type the exact words The bot then creates more than an image. (Parsons, Guy, 2022)

### Social media

A system of electronic networks in which subscriber can create his own website and link it through an electronic social system with others who have the same interests and hobbies that facilitate active interaction between them. (الحسين، ٢٠١٦)

**The researcher will address this topic through several points as follows:**

### I. Artificial Intelligence technology (AI)

One of the modern computer sciences and one of the main pillars on which technology industry is based in the current era. It means the ability of the computer to perform tasks or do behaviors that describe a person as intelligent when he performs them, such as learning, planning, facial recognition, problem solving, perception, mental and logical thinking, with the ability to think highly and quickly analyze data more than it is relating to a specific form or function and its work is similar to visual perception, it aims to build computer capable of carrying out tasks that require human intelligence and simulating its operations that take place within the human mind so that computer can solve problems and make decisions in a logical and arranged manner similar to the way human mind thinks. It is a study of how to direct the computer to perform things that humans do, but in a better way. (حمدي، يماني ٢٠٢٢)

### II. Features of AI technology (محمود، عبد الرازق، مختار ٢٠٢٠)

1. Variety of results and access to an infinite number of possibilities and visual images without restrictions.
2. Speed of analyzing the written codes and suggesting more than one modification to design without error and with high quality.
3. It helps to eliminate the frustration that can affect the designer due to the lack of ideas, their weakness, or their similarity with others.
4. It is a good opportunity for the designer to use to develop his imagination.
5. It does not require high drawing skill or quality from the designer.
6. It does not require obtaining a high - quality design, as the designer can modify it later with various graphic programs.
7. It can be used to solve advertising design ideas problems with limited written words.
8. It can predict the features of the whole design idea.
9. Able to integrate and employ the designer's old experiences in new situations and ideas.
10. Able to respond quickly to new words or codes.
11. Able to handle difficult advertising topics.
12. Able to support the imagination and creativity of the designer and understand the visual matters.
13. Spark new ideas for the designer leading to innovative design.
14. A good opportunity to develop advertising ideas for some local products that are no longer able to keep pace with advertising development.

### II. Advantages of AI technology in social networking sites

- 1- Artificial intelligence techniques have been taken advantage of in social networking sites such as Facebook through the ability to identify the psychological characteristics of advertising recipients by following their digital footprint on social networking sites, and the changes that may occur to them over a certain period of time.
- 2- Combating cyberbullying through monitoring to monitor abusive comments and behavior or harmful language used in bullying or insulting and slander and intervene to detect and prevent them in a timely manner.
- 3- Social sentiment analysis of advertising recipients is one of the ways in which artificial intelligence is used to analyze social data, as it

helps intelligently in decoding what people say on social media.

- 4- The ability to quickly analyze and process the data collected directly from the recipients of the advertisement, which allows social networking sites to discover patterns of recipients most related to the type of advertisement provided.

### III. Disadvantages of AI technology in social networking sites

Artificial intelligence has become an important tool for designers in all fields of advertising, but it raises several ethical issues:

- 1- How can we ensure that applications of AI technology do not violate basic human rights to privacy?
- 2- How can we ensure that AI applications technology will not reveal the secrets of advertisements recipients or expose the confidentiality of their data? (Sultan, Ahmed, Aboabkr 2021)
- 3- How can freedom of choice be ensured for recipients of advertisements without directives?
- 4- How can we ensure that AI technology applications are developed in a transparent manner so that the recipients whose lives are affected by it have a say in its development?
- 5- The low cost of creating a personal account on midjourney, and therefore how can it be guaranteed to be employed legally or ethically?

### IV. AI technology goals

(حمد، العتل، محمد؛ غازي، العنزي؛ سعد، العجمي، عبد الرحمن) (٢٠٢١)

- 1- Access to innovative visual processing patterns that are similar to and superior to what is done inside the advertising designer mind.
- 2- Developing the skills and capabilities of the advertising designer.
- 3- Solving problems of traditional advertising ideas.
- 4- Helping the advertising designer to generate new advertising ideas.
- 5- Saving time and effort of the advertising designer.
- 6- Improving advertising designer life and relieving the intellectual pressure on him.
- 7- Improving the communication process between advertising designer and the recipient.

### V. AI technology Midjourney application

- Midjourney is a text to image generation app uses huge or tons of images (around 650+ million) found on the internet to generate creative and stunning images based on the words that designer prompt provided.
- Although it is now in the beta phase, but it is adding more features every week and the future is yet to be imagined.
- Designers generally use direct words like man, woman, sports and so, but he can generate some of advanced settings as the more descriptive the designer in his words, the more vibrant and unique outputs will get. (Hughes, Alex, 2023)

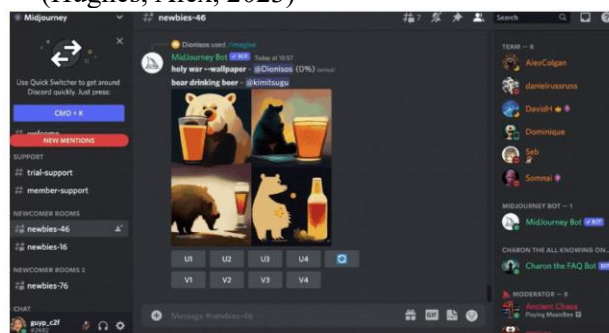


Figure No. (1) Parsons, Guy, (2022) Midjourney public channel <https://dallery.gallery/midjourney-guide-ai-art-explained/> (15 feb. 2023).

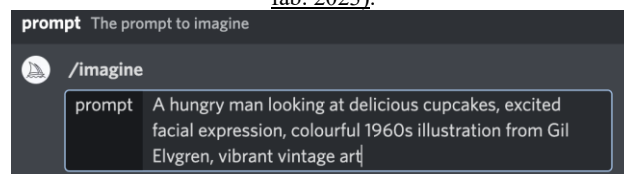


Figure No. (2) Parsons, Guy, (2022) Codes in Midjourney. <https://dallery.gallery/midjourney-guide-ai-art-explained/> (15 feb. 2023).

### VI. Classifications of the words types written in Midjourney



Figure No. (3) Nielsen, Lars, (2022) Image generated according to style. <https://medium.com/mllearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aal2a1e33b6> (15 feb. 2023).

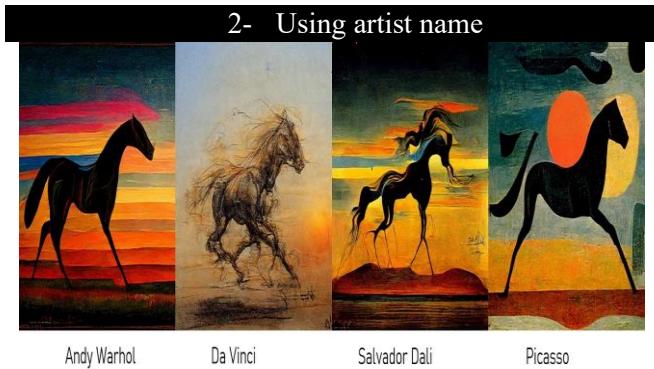


Figure No. (4) Nielsen, Lars, (2022) Image generated according to artist name. <https://medium.com/mlearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aa12a1e33b6> (15 fab. 2023).

### 3- using render / lighting properties



Figure No. (5) Nielsen, Lars, (2022) Image generated according to lights. <https://medium.com/mlearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aa12a1e33b6> (15 fab. 2023).

### 4- Defining the output



Figure No. (6) Nielsen, Lars, (2022) Image generated by adding some number denoting style. <https://medium.com/mlearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aa12a1e33b6> (15 fab. 2023).



Figure No. (7) Nielsen, Lars, (2022) Image generated by adding number from 0 to 100 to increase or decrease the level of abstraction in the subject. <https://medium.com/mlearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aa12a1e33b6> (15 fab. 2023).

### 6- Aspect ratio

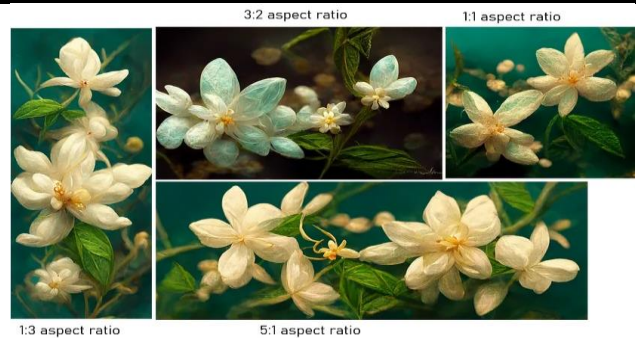


Figure No. (8) Nielsen, Lars, (2022) When defining the default output is a square image (1:1 aspect ratio), designer can get cinematic view by changing the aspect ratio. <https://medium.com/mlearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aa12a1e33b6> (15 fab. 2023).

## VII. AI technology and advertising design

It is possible to benefit from the AI applications technology in advertising design field, where it helps the designer to create multiple visual images and processors for one single idea for any product or topic and to create an infinite number of designs with innovative colors, patterns and visual processors through the inputs determined by the designer. Artificial intelligence has become a partner and a design tool that the designer can use to meet ever-evolving business requirements.

### VIII. Models of employing AI technology in advertising field

The following advertising templates were completely designed using midjourney technology in just 10 days.

- Designs often feature familiar shapes, like the plane wing of a British Airways plane, or the signature of Uber; just as often, however, shapes are computer inputs which make the imaginings surreal and varied from bright and strong colors.
- Inputting the minimal words to allow AI platform to run free delivering four completely unique and unrepeatable images and inventing new designs for advertising and products, possibilities are endless.
- Using AI Midjourney platform , 10 Days for each brand, each piece of artwork is generated using simple, genre-based words, like ‘sci-fi’ or ‘cinematic’, the entire process took just five minutes to churn out and every image is one of a kind.
- While the midjourney technology isn’t quite ready to be final to depend on, the range of visual ideas created could be huge advertising industry change, but the speed at which these artworks are created is the most impressive, as one work for Wimbledon example took months to produce; while others took just under 60 seconds.
- AI creativity has a huge future in advertising field, designers and AI are going to be working hand-in-hand, AI is just one of many ways we’re doing just that.

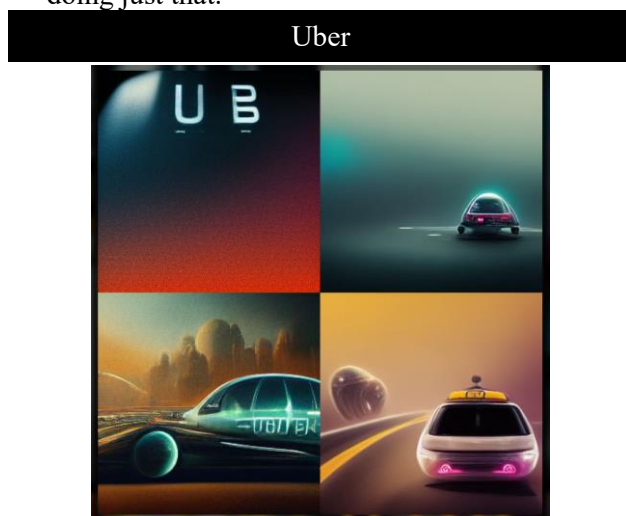


Figure No. (9) (2022) 10 iconic brands' advertising using AI, Uber advertising using midjourney in AI technology <https://www.adintelligence.ai/> (2 feb. 2023).

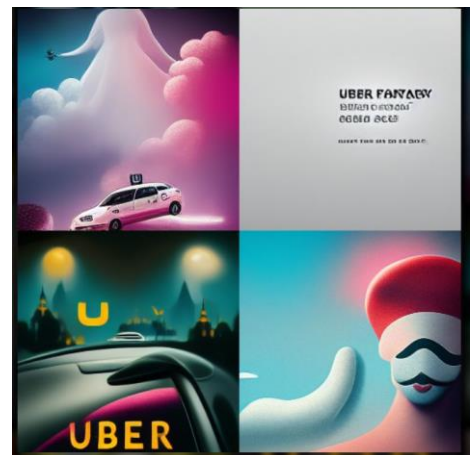


Figure No. (10) Uber advertising using midjourney in AI technology

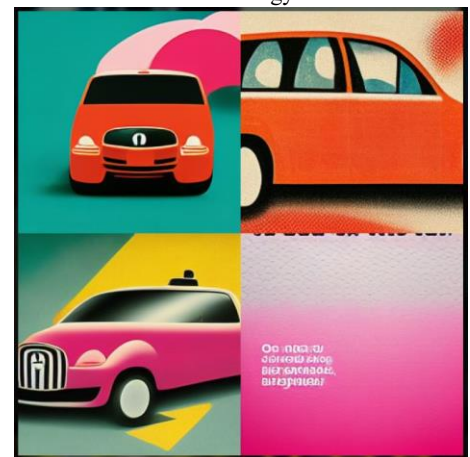


Figure No. (11) Uber advertising using midjourney in AI technology



Figure No. (12) Uber advertising using midjourney in AI technology

The championships Wimbledon



Figure No. (13) (2022) 10 iconic brands' advertising using AI, Wimbledon advertising using midjourney in AI technology <https://www.adintelligence.ai/> (2 feb. 2023).

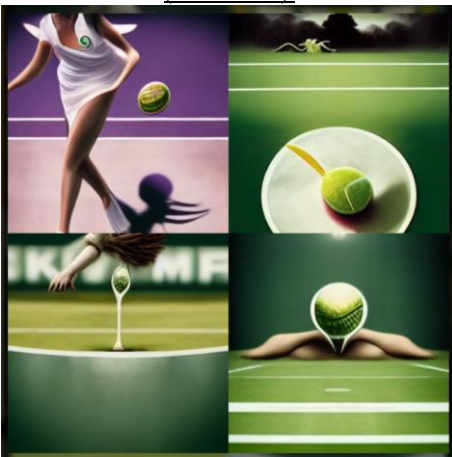


Figure No. (14) Wimbledon advertising using midjourney in AI technology

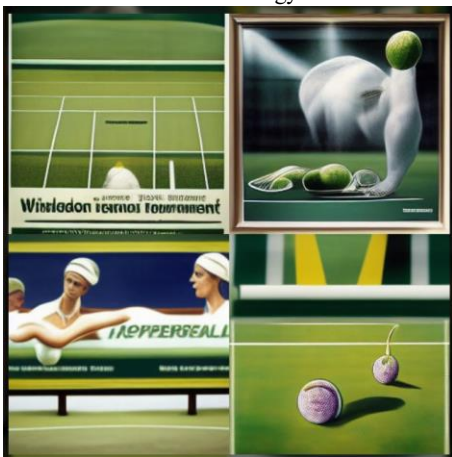


Figure No. (15) Wimbledon advertising using midjourney in AI technology

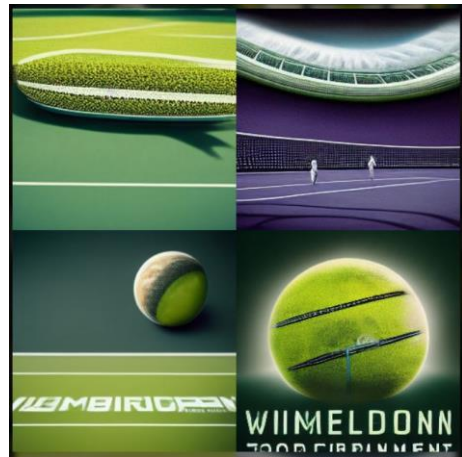


Figure No. (16) Wimbledon advertising using midjourney in AI technology

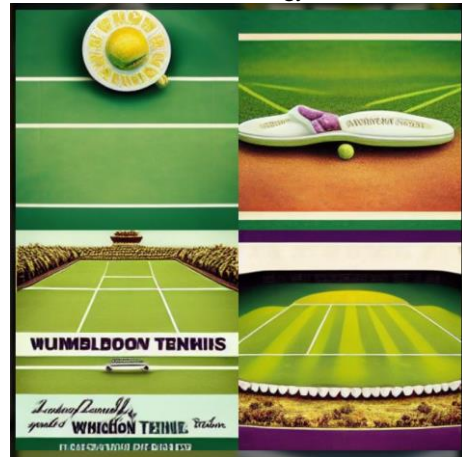


Figure No. (17) Wimbledon advertising using midjourney in AI technology



Figure No. (18) Wimbledon advertising using midjourney in AI technology



Figure No. (19) (2022) 10 iconic brands' advertising using AI, British Airways advertising using midjourney in AI technology <https://www.adintelligence.ai/> (2 feb. 2023).



Figure No. (20) British Airways advertising using midjourney in AI technology



Figure No. (21) British Airways advertising using midjourney in AI technology



Figure No. (22) British Airways advertising using midjourney in AI technology

**Ray ban**



Figure No. (23) (2022) 10 iconic brands' advertising using AI, Ray ban advertising using midjourney in AI technology <https://www.adintelligence.ai/> (2 feb. 2023).



Figure No. (24) Ray ban advertising using midjourney in AI technology



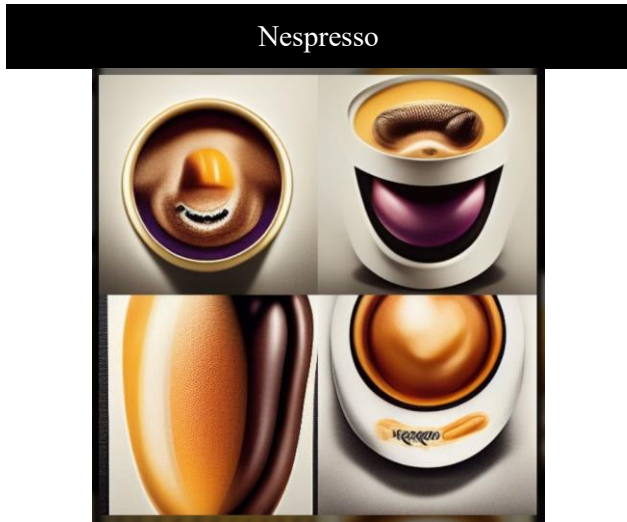


Figure No. (25) (2022) 10 iconic brands' advertising using AI, Nespresso advertising using midjourney in AI technology <https://www.adintelligence.ai/> (2 feb. 2023).



Figure No. (26) Nespresso advertising using midjourney in AI technology

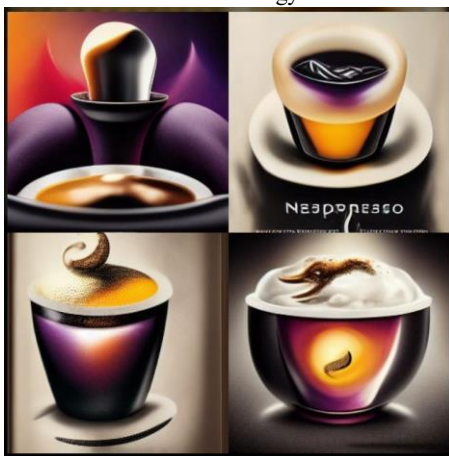


Figure No. (27) Nespresso advertising using midjourney in AI technology



Figure No. (28) Nespresso advertising using midjourney in AI technology

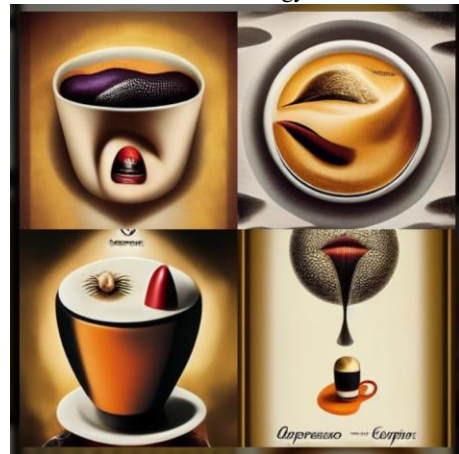


Figure No. (29) Nespresso advertising using midjourney in AI technology

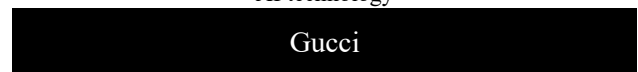


Figure No. (30) (2022) 10 iconic brands' advertising using AI, Gucci advertising using midjourney in AI technology <https://www.adintelligence.ai/> (2 feb. 2023).



Figure No. (31) Gucci advertising using midjourney in AI technology

### IX. Research application framework

Some application models for various ads on Facebook as Social Media

- Using midjourney platform, designs are characterized by familiar images such as shape of woman, bride and some animals, but with color treatments and innovative visual vision.
- Images and shapes were created through some words as inputs to AI, such as bride - Giza zoo - cancer, woman hope expressing advertising idea.
- There is no doubt that there is an infinite number of other words related to the advertisement topic can be entered to get the largest possible number of treatments and ideas that resemble surreal fantasies and posters with strong colors, these processors took only five minutes to come up with these unique images.

#### Awareness Topics

The first applied proposal of the study designed by the researcher: **Baheya Foundation** for early detection and treatment of breast cancer for free.

#### The Main Idea

In all of the following applied experiments, the researcher focused on:

- Employing the shape of both man and woman and their suffering from breast cancer, with a focus on their facial expressions of both to express survival and the continuity of hope for treatment.
- Employing the color shade (pink) of Baheya Foundation because it is a disease associated with women more than men, according to statistics that breast cancer can affect men, but in a very small percentage (1:10) compared to women.

- Having an innovative visual treatment for women fighting this disease.
- Using some words and sentences that express the idea, such as woman - treatment - hope - cancer - pink color.



Figure No. (32) Baheya Foundation advertising using midjourney in AI technology



Figure No. (33) Baheya Foundation advertising using midjourney in AI technology

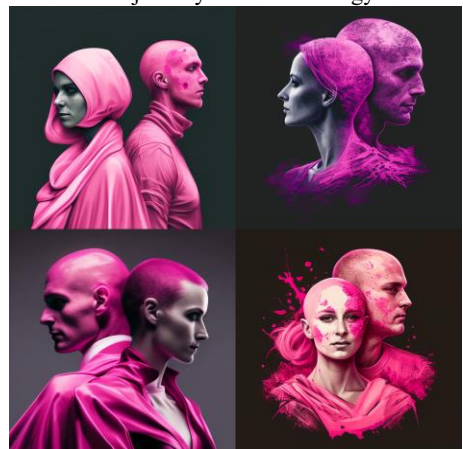


Figure No. (34) Baheya Foundation advertising using midjourney in AI technology

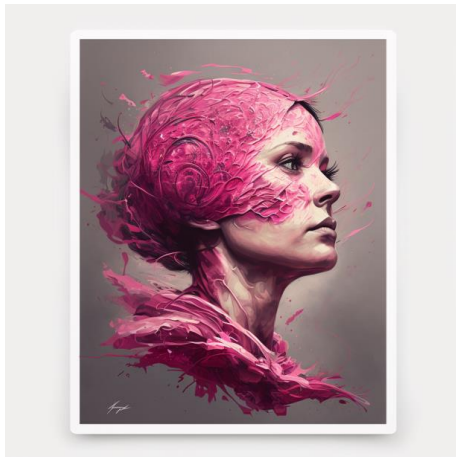


Figure No. (35) Baheya Foundation advertising using midjourney in AI technology



Employing one idea from the previous ones in Facebook

### Commercial Topics

The second applied proposal of the study designed by the researcher: **Bride's Tea.**

### The Main Idea

**In all of the following applied experiments, the researcher focused on:**

- Employing the shape of a girl in a wedding dress linking her with the Egyptian environment through the pyramids shape or the distinctive Egyptian cups and teacups that are found by the majority of women in Egypt.
- Employing green color in the background relative to the natural tea tree.
- Developing the advertising image of the bride's tea and abandoning the traditional cartoon bride.

- Using some words and sentences that express the idea, such as the bride tea – the bride female – Egypt – tea - girl.



Figure No. (35) Bride's Tea advertising using midjourney in AI technology



Figure No. (36) Bride's Tea advertising using midjourney in AI technology

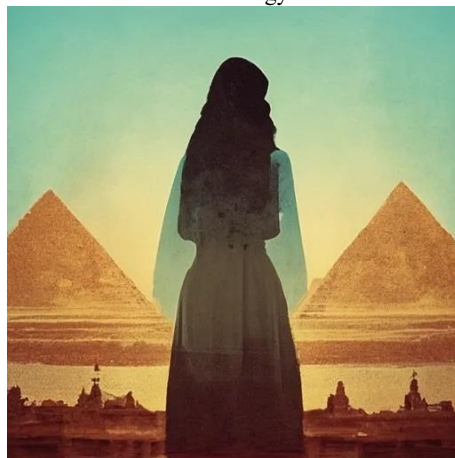


Figure No. (37) Bride's Tea advertising using midjourney in AI technology



Figure No. (38) Bride's Tea advertising using midjourney in AI technology



Figure No. (41) Bride's Tea advertising using midjourney in AI technology



Figure No. (39) Bride's Tea advertising using midjourney in AI technology



Figure No. (42) Bride's Tea advertising using midjourney in AI technology



Figure No. (40) Bride's Tea advertising using midjourney in AI technology



Figure No. (43) Bride's Tea advertising using midjourney in AI technology



Figure No. (44) Bride's Tea advertising using midjourney in AI technology



Figure No. (47) Bride's Tea advertising using midjourney in AI technology



Figure No. (45) Bride's Tea advertising using midjourney in AI technology



Employing one idea from the previous ones in Facebook



Figure No. (46) Bride's Tea advertising using midjourney in AI technology

### Entertainment Topics

The third applied proposal of the study designed by the researcher: **Giza Zoo**

### The Main Idea

**In all of the following applied experiments, the researcher focused on:**

- Employing different forms of animals in the park both traditional such as monkeys and elephants and non-traditional, realistic and imaginary to attract the recipient attention with employing green trees and forests within the park in a picturesque imaginary environment.
- Employing imaginary shapes for animal houses, while illustrating the Egyptian environment through Giza Pyramids shape and the Pharaonic obelisks in the background.

- Focusing on displaying free-flowing animals to express the meaning of pleasure inside the park.
- Focusing on shades of green relative to the garden and some shades of yellow to express animals homes.
- Using some words and sentences that express the idea, such as Giza – zoo – animal – Egypt – Cairo.

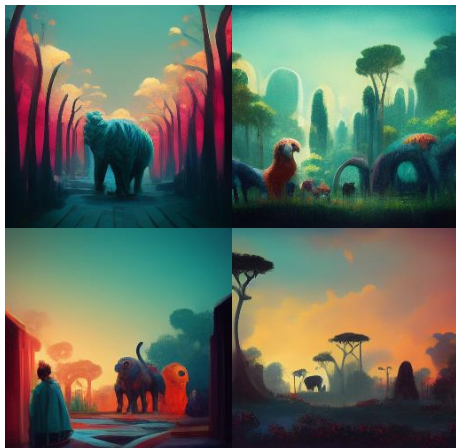


Figure No. (48) Giza Zoo advertising using midjourney in AI technology

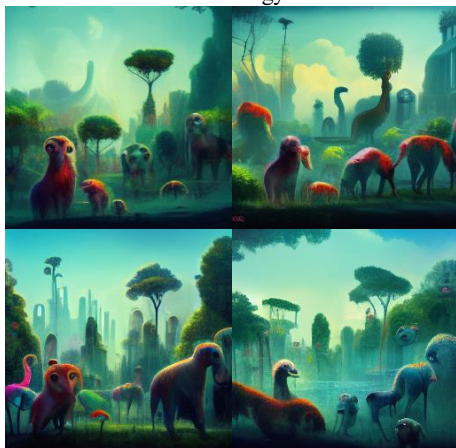


Figure No. (49) Giza Zoo advertising using midjourney in AI technology

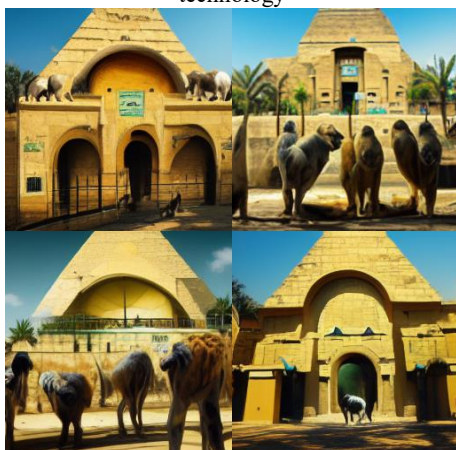


Figure No. (50) Giza Zoo advertising using midjourney in AI technology

technology



Figure No. (51) Giza Zoo advertising using midjourney in AI technology

technology



Figure No. (52) Giza Zoo advertising using midjourney in AI technology

technology

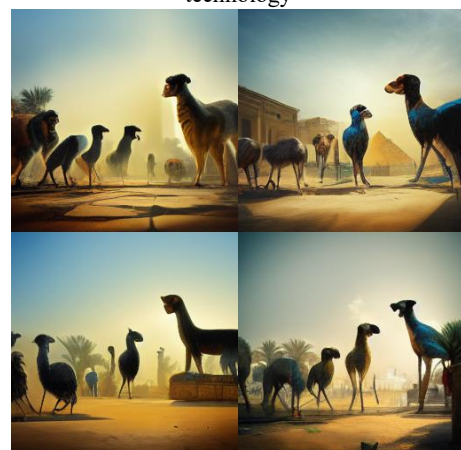


Figure No. (53) Giza Zoo advertising using midjourney in AI technology



Figure No. (54) Giza Zoo advertising using midjourney in AI technology



Figure No. (55) Giza Zoo advertising using midjourney in AI technology



Employing one idea from the previous ones in Facebook

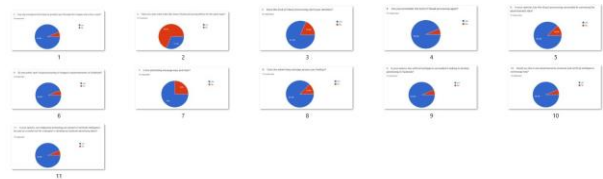
### X. Questionnaire:

A closed - ended questionnaire was applied to a random sample of 100 men, boys, women, and girls of all ages. The researcher finds that the subjects of

the proposed applied models have different criteria, but they share the same advertisements on the same social media (Facebook), and the research sample has a common age range from 18 to 70 years.

**The result of the questionnaire was as follows:**

**The first applied proposal of the study designed by the researcher: Baheya Foundation for early detection and treatment of breast cancer for free.**

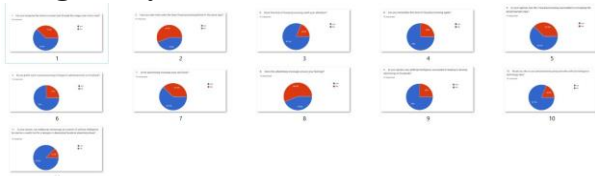


Awareness Topics		
Baheya Foundation		
Survey Questions	Yes	No
1- Can you recognize the brand or product just through the images and colors used?	94%	6%
2- Have you seen what looks like these Visual processing before for the same topic?	31%	69%
3- Does this kind of visual processing catch your attention?	81%	19%
4- Can you remember this kind of visual processing again?	94%	6%
5- In your opinion, has this visual processing succeeded in conveying the advertisement idea?	88%	12%
6- Do you prefer such visual processing of images in advertisements on Facebook?	94%	6%
7- Is the advertising message easy and clear?	75%	25%
8- Does the advertising message arouse your feelings?	88%	12%
9- In your opinion, has artificial intelligence succeeded in helping to develop advertising on Facebook?	94%	6%
10- Would you like to see advertisements produced with artificial intelligence technology help?	94%	6%
11- In your opinion, can midjourney technology as a branch of artificial intelligence be used as a useful tool for a designer in developing Facebook advertising ideas?	94%	6%

The research sample was able to identify the brand or product from images and colors by 94%, the research sample agreed on the originality of the visual processing and not seeing something similar before with a percentage of 69%, the visual processing attracted the attention of the sample by 81%, the sample agreed on the possibility of remembering the visual processing used by 94%, 88% of the research sample believes that this visual processing used has succeeded in delivering the advertising message, 94% of the sample prefer seeing such visual processing of images in advertisements on Facebook, 75% of the research sample agreed on the ease and clarity of the advertising message, the advertising message succeeded in raising the feelings of 88% of the sample, 94% of the sample believed that artificial intelligence had succeeded in developing advertisements on Facebook, 94% of the sample

preferred seeing future advertisements using artificial intelligence technology and 94% of the sample agreed that Midjourney technology as one of artificial intelligence branches can be used is an aid to designer in developing ideas for advertisements on Facebook.

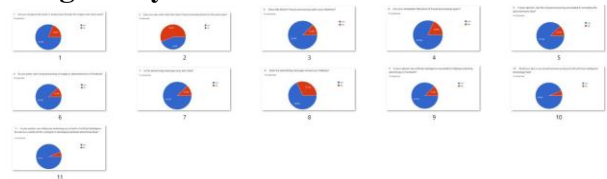
**The second applied proposal of the study designed by the researcher: Bride's Tea.**



Commercial Topics		
Bride's Tea		
Survey Questions	Yes	No
1- Can you recognize the brand or product just through the images and colors used?	63%	37%
2- Have you seen what looks like these Visual processing before for the same topic?	44%	56%
3- Does this kind of visual processing catch your attention?	81%	19%
4- Can you remember this kind of visual processing again?	75%	25%
5- In your opinion, has this visual processing succeeded in conveying the advertisement idea?	63%	37%
6- Do you prefer such visual processing of images in advertisements on Facebook?	75%	25%
7- Is the advertising message easy and clear?	63%	37%
8- Does the advertising message arouse your feelings?	44%	56%
9- In your opinion, has artificial intelligence succeeded in helping to develop advertising on Facebook?	75%	25%
10- Would you like to see advertisements produced with artificial intelligence technology help?	81%	19%
11- In your opinion, can midjourney technology as a branch of artificial intelligence be used as a useful tool for a designer in developing Facebook advertising ideas?	88%	12%

The research sample recognized the brand or product from images and colors by 63%, the research sample agreed on the originality of the visual processing by 56%, the visual processing was attractive to the sample by 81%, the sample agreed that the visual processing used could be remembered by 75%, 63% of the sample believes that this visual processing used succeeded in delivering the advertising message, 75% of the sample preferred to see these visual processing of images in advertisements on Facebook again, 63% of the research sample agreed on the ease and clarity of the advertising message, the advertising message raised the feelings of 56% the sample, 75% of the sample believes that artificial intelligence has succeeded in developing advertisements on Facebook, 81% of the sample prefer to see future advertisements using artificial intelligence technology, 88% of the sample unanimously agreed that Midjourney technology as artificial intelligence branch is an aid to designer in develop ideas for advertisements on Facebook.

**The third applied proposal of the study designed by the researcher: Giza Zoo**



Entertainment Topics		
Giza Zoo		
Survey Questions	Yes	No
1- Can you recognize the brand or product just through the images and colors used?	81%	19%
2- Have you seen what looks like these Visual processing before for the same topic?	44%	56%
3- Does this kind of visual processing catch your attention?	88%	12%
4- Can you remember this kind of visual processing again?	81%	19%
5- In your opinion, has this visual processing succeeded in conveying the advertisement idea?	88%	12%
6- Do you prefer such visual processing of images in advertisements on Facebook?	88%	12%
7- Is the advertising message easy and clear?	88%	12%
8- Does the advertising message arouse your feelings?	69%	31%
9- In your opinion, has artificial intelligence succeeded in helping to develop advertising on Facebook?	88%	12%
10- Would you like to see advertisements produced with artificial intelligence technology help?	94%	6%
11- In your opinion, can midjourney technology as a branch of artificial intelligence be used as a useful tool for a designer in developing Facebook advertising ideas?	94%	6%

81% of the research sample recognized brand from images and colors, the research sample agreed on the innovation of the visual processing used by 56%, the visual processing was attractive to the sample by 88%, the sample agreed to remember the visual processing used again by 81%, 88% of the research sample confirmed that the visual processing succeeded in delivering the advertising message, 88% of the sample preferred to see these visual processing of images in Facebook advertisements again, 88% of the sample agreed on the ease and clarity of the advertising message, the advertising message raised the feelings of 69% of the sample, 88% of the sample believe that artificial intelligence has greatly succeeded in developing advertisements on Facebook, 94% of the sample prefer to see upcoming future advertisements using artificial intelligence technology, 94% of the sample agreed that Midjourney technology as a branch of artificial intelligence is a means helping the designer develop ideas for advertisements on Facebook.

**XI. Research results**

1. Employing AI technology in ads on Facebook is an aid to the designer that does not cancel his basic innovative role.
2. AI technology is a strategy that helps the designer get the largest possible number of



- ideas according to the endless words or sentences that he enters.
3. AI technology enables the designer to accomplish more designs in less time while creating attractive new ideas.
  4. The implementation of advertising ideas with midjourney technology is a new image that affects the recipient visually, and it may quickly turn into a competitive advantage for many products.
  5. Midjourney technique in AI technology enables the designer to test a wide range of ideas at the same time smoothly, quickly and with great accuracy in performance.
  6. Midjourney technique in AI technology can be employed positively in any subject because it prevents writing any words with an immoral meaning, which contributes to raising the awareness of the targeted recipients. **Research recommends that** the necessity of employing AI applications in advertising design stages for any project to save time and effort and the importance of including learning AI and studying its applications related to advertising in the curricula of students of colleges and institutes of applied arts in Egypt.

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