



Original scientific paper

Artificial Intelligence-Enhanced Innovation: Blending Contemporary Aesthetics with Islamic Heritage

*¹ Maryam Obaid, ² Osama Omar

¹ & ² Department of Architecture and Interior Design, Faculty of Engineering, University of Bahrain, Bahrain

¹ E-mail: 20052319@stu.uob.edu.bh, ² E-mail: oomar@uob.edu.bh

¹ ORCID: <https://orcid.org/0009-0002-0884-2387>, ² ORCID: <https://orcid.org/0000-0002-8334-1059>

ARTICLE INFO:

Article History:

Received: 6 March 2025

Revised: 3 July 2025

Accepted: 15 July 2025

Available online: 20 July 2025

Keywords:

artificial intelligence, generative design, Islamic geometric patterns, cultural heritage preservation, architectural innovation.

ABSTRACT

Artificial intelligence has transformed various disciplines, including architecture. This study examines the potential of three generative artificial intelligence tools — Midjourney, Leonardo AI, and Prome AI — in representing modern Islamic architectural designs that draw inspiration from traditional principles. The contribution of this study is based on both quantitative and qualitative approaches. The quantitative methodology was conducted through two surveys that assessed public awareness and perceptions of Islamic architecture and evaluated AI-generated designs in terms of architectural authenticity, cultural relevance, and spiritual identity. The study also adopts an experimental and comparative approach as a qualitative methodology to analyse how each AI-driven tool interprets Islamic principles within a contemporary context, focusing on visual aesthetics and cultural appropriateness. The results demonstrate how artificial intelligence tools can support designers and architects in blending innovation with heritage, offering new possibilities for enhancing design solutions and creativity in Islamic architecture. However, the study indicates some limitations, including a lack of deep understanding of the cultural and authentic aspects of Islamic architectural principles. This research adds value to the integration of artificial intelligence in Architectural and interior design schools. It concludes with futuristic possibilities for integrating AI-driven design into the architecture and interior design industry.

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY) license.



Publisher's Note:

Journal of *Smart Design Policies* stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

SMART DESIGN POLICIES (2025), 2(1), 31–60.

<https://doi.org/10.38027/smart.v2n1-3>

www.smartdpi.com

Copyright © 2025 by the author(s).

* Corresponding Author

How to cite this article: (APA Style)

Obaid, M., & Omar, O. (2025). Artificial intelligence-enhanced innovation: Blending contemporary aesthetics with Islamic heritage. *Smart Design Policies*, 2(1), 31–60. <https://doi.org/10.25034/smart-v2n1-3>

1. Introduction

Artificial intelligence (AI) has recently impacted many disciplines and rapidly transformed various fields, including architecture and interior design. It can transform imaginative concepts and designers' ideas into stunning visualizations with remarkable speed and effectively align with design reality. It can convert textual descriptions into high-quality images showing multiple design variations. This process can be achieved through generative imagery tools such as Midjourney, Stable Diffusion, and DALL-E, which redefine the role of architects, develop the initial design stage, and generate

innovative designs (Almaz et al., 2024). These tools can also enhance design possibilities and efficiency at every stage of the architectural design process (El Moussaoui, 2025), provide detailed representations of mindful architecture (Thampanichwat et al., 2025), and improve design outcomes both academically and professionally (Obaid & Elghonaimy, 2023).

In the past, architects relied on manual drawings, which were time-consuming and difficult to modify. Then, 2D CAD software was introduced, enabling plans to be drawn and edited digitally. Later, it grew into 3D modeling and BIM, which help visualize spaces and manage building data. Later, 3D simulation applications and rendering tools added realistic visuals and interactive experiences, including software applications such as AutoCAD, Revit, and 3D Max, as well as hardware applications like CNC machines, 3D printers, and 3D plotters. These applications also support design decisions and enhance visual communication (Omar et al., 2020). Similarly, Today AI tools are pushing the boundaries of creativity, speed, and experimentation in design practice.

As AI continues to develop, it plays an increasingly significant role in shaping architectural identities and responding to cultural, functional, and aesthetic needs. This development raises important questions about how AI interacts with different architectural styles, especially those deeply rooted in tradition, such as Islamic architecture. In this field, AI presents new opportunities to explore cultural and traditional elements within a contemporary context. This research examines the potential of AI-driven tools in shaping contemporary Islamic architectural design. Based on experimental methods and evaluation surveys, the study focuses on exploring the applications of various AI tools in reinterpreting Islamic architectural elements in contemporary mosque design while preserving the cultural and spiritual identity. This section provides a background to the study context, identifies the research problem and gap, presents the aim and objectives, and highlights the significance of the study.

1.1 Background and Context

One of the most popular architectural styles is Islamic architecture, which combines spirituality and aesthetics. It developed within the rich cultural and religious context of the Islamic world and has evolved over the centuries, incorporating various influences while maintaining its unique architectural identity (Abdel Wahab, 2020). Significant changes have occurred in Islamic architecture as it merges with contemporary styles. Mosques exemplify this evolution, showcasing the cultural aspects of Islamic architecture in modern contexts. Key architectural elements of mosques include domes, minarets, mihrabs, and arches (Wazeri, 2022). These features are no longer confined to historical replicas; they are now being reimagined using modern materials, innovative spatial compositions, and technological advancements. This transformation offers new opportunities to blend spirituality with innovation, but it also raises concerns about authenticity and cultural integration. Considering these developments, generative AI tools present architects with novel ways to harmonize modern design aesthetics with Islamic cultural heritage. These tools can help reimagine historical architectural designs in contemporary styles, producing new designs inspired by tradition while meeting contemporary design expectations. However, it is important to note that these technologies rely on specific textual prompts and trained data, which often lack the deeper cultural context and sensitivity necessary for specific sacred designs, such as mosques. This study aims to explore AI-generated designs for contemporary mosque architecture, focusing on how these designs can effectively blend Islamic heritage with modern aesthetics.

1.2 Problem Statement and Research Gap

Modern mosque architecture can benefit significantly from AI technologies, but its integration of culturally significant design elements is still in its early stages. Current AI-generated mosque concepts often prioritize visual innovation over spiritual depth, spatial experience, and symbolic

meaning. A critical gap remains in understanding how effectively AI tools can generate mosque designs that honor Islamic architectural heritage while embracing modern aesthetics.

Some studies found that while AI demonstrates speed and creativity, and can achieve high functional accuracy, it still struggles to reflect deep cultural and spiritual values, especially in Architecture (Li et al., 2024; Maksoud et al., 2024). Addressing these limitations requires more culturally informed datasets, better evaluation methods, and human guidance. Despite these concerns, no existing research has specifically evaluated AI-generated mosque designs through public perception or observational analysis, and the role of AI in mosque design remains largely unexplored. To fill this gap, the current study employs public perception surveys to evaluate AI-generated mosque designs and investigate how experimenting with various AI tools might connect modern innovation with the rich history of Islamic architecture.

1.3 Aim and Objectives

This research aims to explore the role of AI in generating contemporary mosque designs that represent the cultural authenticity and spirituality of Islamic Architecture. To achieve this aim, the study sets the following objectives: (1) to Explore how AI-driven tools reimagine mosque architectural elements within a modern context, (2) to compare the capabilities and outputs of three AI platforms (Midjourney, Leonardo AI, and Prome AI) in generating contemporary mosque designs, (3) to evaluate public perceptions of AI-generated mosque designs regarding cultural authenticity and spirituality, (4) to identify the limitations and challenges associated with AI tools in reinterpreting Islamic architecture. Aligned with these objectives, the research raises the following questions:

- How are Islamic architectural elements in contemporary mosque design visualized and reinterpreted by various AI tools?
- How do the outputs of Midjourney, Leonardo AI, and Prome AI differ in generating contemporary mosque designs?
- How do users perceive AI-generated outputs in terms of the cultural and spiritual values of Islamic architecture?
- What are the limitations and challenges of AI-generated tools in reimagining modern Islamic architecture?

To address these questions and the outlined objectives, the study used a mixed-methods approach, combining qualitative and quantitative techniques, including a literature review, surveys, and experimentation with three AI tools to investigate how these tools can reinterpret Islamic architectural elements in contemporary mosque design. The study findings can support designers, architects, and urban planners in blending innovation with heritage, enhancing creativity, and offering new design solutions.

1.4 Research Significance and Structure of the Paper

This research focuses on understanding the role of AI in Contemporary Mosque Design and evaluating its impact on cultural and spiritual identity. It fills the gap between the rich cultural legacy of Islamic architecture and the cutting-edge capabilities of AI. While many studies have explored the potential of AI in Architecture and Interior Design, limited research has focused on how AI might be used to reinterpret mosque design, representing cultural authenticity and spirituality. The study contributes to a deeper integration of cultural awareness within AI-driven architectural practices by using public perception to evaluate AI-generated mosque designs. The findings may guide architects, designers, urban planners, educators, researchers, and AI developers in integrating tradition-sensitive AI approaches into contemporary architectural practices.

This study is divided into six sections, starting with an introduction that outlines the study's background, research problem, objectives, and significance of the study. Followed a literature review that explores the key concepts of Islamic architecture, the evolution of mosque design, and the

applications of AI in architectural designs and Islamic Architecture. Following this, the Materials and Methods section outlines the experimental approach for generating mosque designs using three AI tools (Midjourney, Leonardo AI, and Prome AI), the evaluation criteria, and the survey methodology. The AI-generated outputs and survey findings are then presented in the results section. At the same time, the discussion section interprets the outcomes, highlighting the capabilities and limitations of current AI tools in capturing Islamic architectural identity. Finally, the Conclusion summarizes the key findings, highlights contributions, discusses challenges and limitations, and provides recommendations for future study directions. A road map of the research is provided in **Figure 1**.

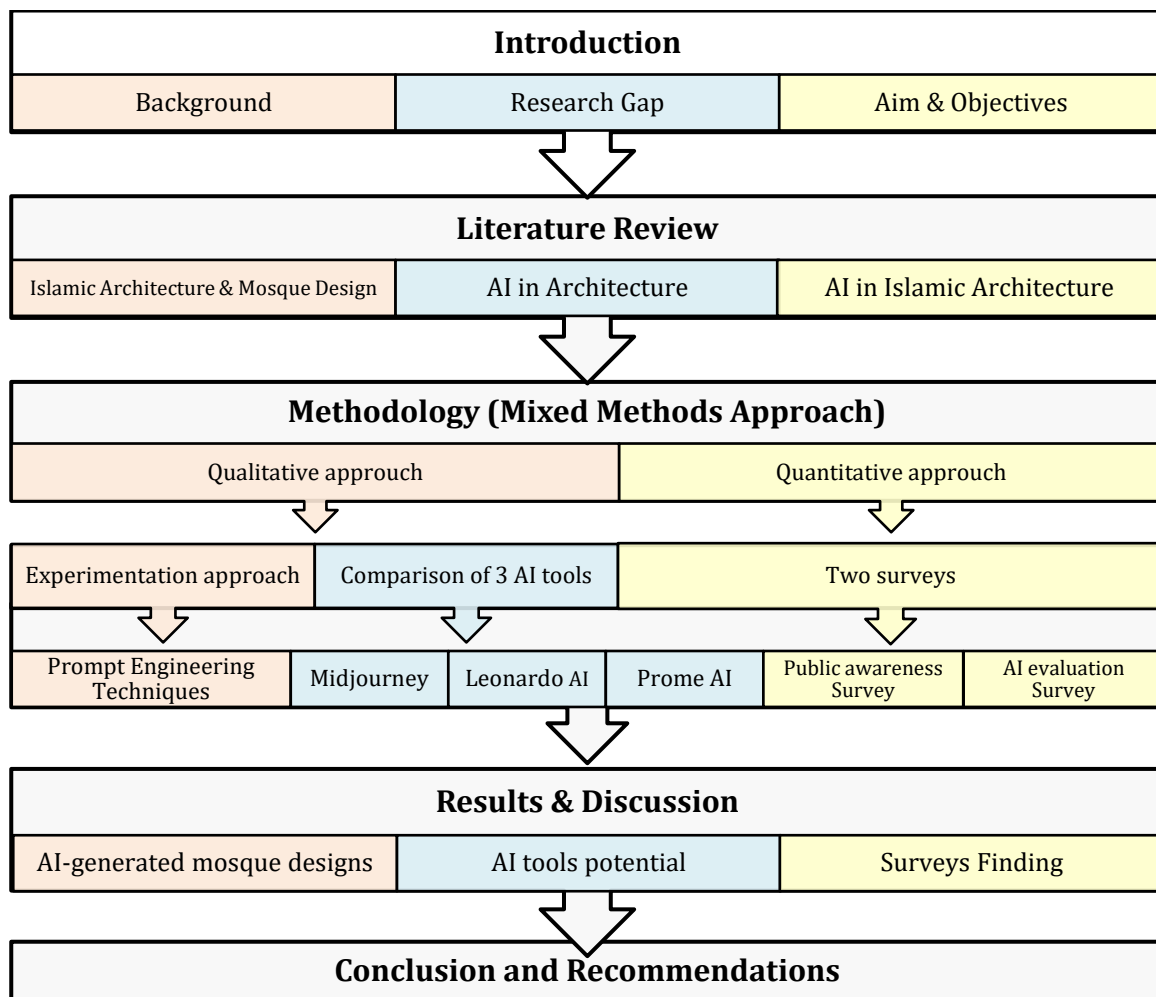


Figure 1: Road map of the study (created by the author)

2. Literature Review

This section provides a review of previous studies on three main areas that are relevant to this research. These areas include the definition of Islamic architecture and the evolution and characteristics of mosque design, as well as a comparison of traditional styles with modern designs. Followed the exploration of AI's role in architectural design and its integration in Islamic architecture.

2.1 Islamic Architecture and Mosque Design

According to Sukkar, Fareed, Yahia, Mushtaha, et al. (2024), their investigation into the definition of Islamic architecture revealed that there is still no accurate and accepted description of Islamic architecture. In a brief but significant essay, Ernst Grube described Islamic architecture as displaying a set of spatial and architectural elements, such as introspection, that are "inherent in Islam as a cultural phenomenon", while Oleg Grabar stated that Islamic architecture is that which is constructed

by Muslims for Muslims, in Islamic countries, or in locations where Muslims can use architecture to show their cultural independence (Rabbat, 2012). Al-Jasmi & Mitias (2004) emphasized the presence of specific Islamic architectural features and the importance of symbols such as the mihrab. Rabbat (2005) made further enhancements by adopting a historiographic approach and proposing that Islamic architecture is characterized by its spiritual, symbolic, social, and cultural aspects, in addition to its formal aspects.

Authenticity and symbolism are essential to maintaining cultural and spiritual identity in Islamic architecture. Authenticity refers to the faithful representation of traditional elements, such as domes, arches, minarets, and ornamentation, which have their roots in historical, religious, and cultural contexts. It also includes material use, spatial organization, proportions, and the deeper values ingrained in architectural identity (Husni, 2024). Symbolism, on the other hand, represents the spiritual meanings conveyed by elements such as the mihrab and mashrabiya, which embody values of modesty, remembrance, and divine unity; as well as features like Quranic calligraphy and geometric patterns that reflect unity and infinity (El-Daghar, 2022). To operate these ideas, prompts for the AI experiment were developed, using both authenticity and symbolism as evaluation criteria during the survey phase. This theoretical foundation made sure that the created and evaluated designs were not only aesthetically pleasing but also had spiritual and cultural significance.

Since the mosque is one of the most significant landmarks in Islamic architecture and the Muslim community, it was chosen as the primary focus of this study. It holds religious and spiritual significance as a place where Muslims gather to pray and worship, seeking peace, comfort, and relaxation away from life's troubles. It plays a crucial role in Islamic Architecture as a symbol of Islamic art and culture, reflecting authenticity and symbolism through its traditional features, including arches, domes, minarets, mihrabs, calligraphy, and geometric patterns. It also holds a social and educational Role as a center for learning and education (Winarti & Al-Obaidi, 2024). Additionally, it holds urban significance as a focal point of cities, boasting a unique and prominent design.

Mosque designs have evolved significantly over time, with contemporary designs emerging recently that incorporate modern details inspired by traditional features. Mosques in the early period were characterized by simple designs with basic elements, such as a prayer hall, an open courtyard, and a simple Mihrab that indicated the qibla direction. It was constructed with basic local materials. Later, some elements started to appear, such as small domes lacking decoration, and simple square minarets. Following this, there was a period of Ottoman influence that combined regional traditions with the design of mosques, highlighting ornate and calligraphic bands, along with other aesthetically pleasing elements such as massive arches, domes, and arcades (Sulayman et al., 2024). The modern period, following the twentieth century, witnessed a fundamental shift in mosque design, as some mosques adopted minimalist designs, moving away from traditional styles and ornamentation. In contrast, other mosques moved towards combining historical designs with modern elements (Sojak et al., 2023). Recent mosque design emphasizes simplicity and minimalism with the integration of light and space, while exploring new design philosophies that reflect social, economic, and cultural changes (El-Husseiny, 2022)

Table 1 represents a comparison of traditional and modern mosque designs. It can be noted that traditional mosque design is characterized by Islamic elements, such as a dome, a minaret, and calligraphy, with its unique and noticeable designs, which are often transformed into more abstract geometric forms and diverse minimalist styles in modern design. Basic local materials, such as stone, marble, wood, and brick, were used in traditional mosques, whereas contemporary materials like steel, glass, and concrete were employed in modern mosques. A contemporary mosque refers to a mosque that blends tradition with modernity while preserving its religious and cultural essence. These

mosques often integrate innovative materials, minimalist aesthetics, and cutting-edge technologies to create spaces that reflect the spiritual purpose of traditional mosques and align with modern design expectations (Erarslan, 2019).

Table 1: A comparison of traditional and modern mosque designs (source: created by the Author)

Aspect	Traditional Mosque Designs	Modern Mosque Designs
Architectural Style	Classical Islamic elements (mihrab, dome, tall minaret, Islamic patterns, and calligraphy)	Abstract reinterpretations of tradition (Diverse forms of Minimalism with abstract geometry)
Materials	Stone, marble, wood, brick	Steel, glass, and concrete
Functionality	Focused on worship and prayer	Multifunctional spaces (community centers)
Sustainability	Limited emphasis on sustainability	Advanced sustainable features

There are many Contemporary Mosque Designs in the Gulf and other regions that combine traditional Islamic elements with contemporary aesthetics. Each of these mosques has a specific design that represents unique inspiration. Some examples of these mosques are: 1) Sheikh Zayed Grand Mosque in UAE, which creates a unique blend of styles by merging modern and traditional Islamic architecture, taking inspiration from various cultures, 2) King Abdullah Petroleum Studies and Research Center Mosque in Saudi Arabia, which features futuristic forms with patterns inspired by traditional mashrabiya screens, focus on sustainability and natural light that draws shades and shadow in the interior spaces, 3) Masjid Daing Abdul Rahman in Malaysia, which blends modern materials of glass, brick, and steel with a random triangular geometric shape, inspired by the leaves of nature, representing traditional Islamic motifs, and 4) Yasamkent Mosque in Turkey, creates a balance between modernity and tradition, that shown in the dome and courtyard as a traditional elements, and abstract and solid geometries with minimalist design as a contemporary architecture, as well as concrete and glass finishing with abstract minaret These mosques represent different ways of blending the Islamic heritage with modernity while reflecting the religious and cultural identity.

2.2 AI in Architecture

Generative Artificial Intelligence (GenAI) is a subset of AI that enables users to generate new content, including text, images, videos, audio, and code, by analyzing and learning from a vast amount of data (Ooi et al., 2023). This technology utilizes advanced machine learning algorithms and deep learning methodologies to generate novel outputs that exhibit human-like creativity. Today, GenAI has many applications across various fields and has influenced multiple sectors. In education, GenAI is utilized to enhance learning experiences through various tasks, including intelligent tutoring systems, adaptive systems, and personalization, assessment and evaluation, and profiling and prediction (Zawacki-Richter et al., 2019). In healthcare, it generates synthetic medical images, enhances image quality, and aids in disease detection (Rao et al., 2024). In urban planning, Ferhati et al. (2024) presented various studies that integrated AI into traffic management and public transportation optimization, highlighting how AI can promote sustainable design solutions in urban planning and architecture. In Architecture, AI has been widely used in multiple design stages across design processes, from the pre-design stage to the construction management stage (M.Matter & G.Gado, 2024).

Architects and designers utilize AI-generated tools to expedite their work, save time, effort, and resources, and reduce costs (M.Matter & G.Gado, 2024). AI image generator tools, such as Midjourney, Leonardo AI, and Prome AI, can help designers generate multiple visual ideas from text

in just a few seconds. With these tools, designers can explore an infinite number of design variations, develop concept ideas, and enhance the creativity and efficiency of their designs (Adeleye, 2024).

ChatGPT is also one of the generative AI tools that generates texts and prompts that can be used in other image generation tools. However, with the latest developments, ChatGPT has revolutionized the world of architecture and interior design. It has become capable of producing images for many requirements that are significantly needed in the design process. For example, modifying any image according to the given prompt, converting 3D renders into 2D drawings that represent sections or elevations, which can be converted into CAD drawings, redesigning empty interior spaces into fully furnished living spaces, converting plans into 3D renders, sketches into renders and images into sketches, and many other options available to architects that are still in the process of discovery and investigation. With these unique strengths, ChatGPT proves highly beneficial in the architectural field (Rane, 2024).

The role of AI in Architecture is increasing rapidly, as it significantly improves work efficiency and helps architects speed up the design process, which used to take a lot of time and effort. However, some critical challenges were identified by various research, such as a lack of functional and structural feasibility, a loss of human creativity, and a lack of contextual awareness of cultural and religious significance (Enjellina et al., 2023), which is elaborated in the next section, which focuses on the role of AI in Islamic Architecture.

2.3 AI in Islamic Architecture

Many studies have explored the integration of AI in Islamic Architecture from various aspects. **Figure 2** illustrates that multiple areas of study have been investigated in various research that represent the intersection between AI and Islamic Architecture. Some studies have focused on the application of AI in preserving Islamic architectural heritage by identifying the most essential AI preservation strategies (Eyadah & Odaibat, 2024) and developing various systems and tools to manage historical data, thereby creating a large-scale digital historical archive (Das et al., 2022). Other research examined the application of machine learning (ML) in predicting missing or damaged elements in historical buildings (Karadag, 2023) and artworks (Gaber et al., 2023). In addition, Abusaleh (2024) examined how future search optimization and machine intelligence might work together to conserve architectural heritage. Another area of using AI in a traditional context was examining the AI's role in replicating Islamic patterns. For example, Gür et al.'s (2024) paper aimed to explore the potential of AI in reinterpreting traditional tile patterns in contemporary graphics and spatial designs, while preserving the spirit of a specific type of conventional ceramics. Furthermore, the integration of AI in urban planning has been addressed in other studies, while ensuring respect for cultural and religious values (Michailidis et al., 2024; Sanchez et al., 2024). Moreover, Albarqawi & Alburgawi's (2023) study reviews previous literature to map various approaches related to traditional architecture in Makkah, aiming to use AI to recreate Makkah's architectural features by identifying emerging potentials and distinctions.

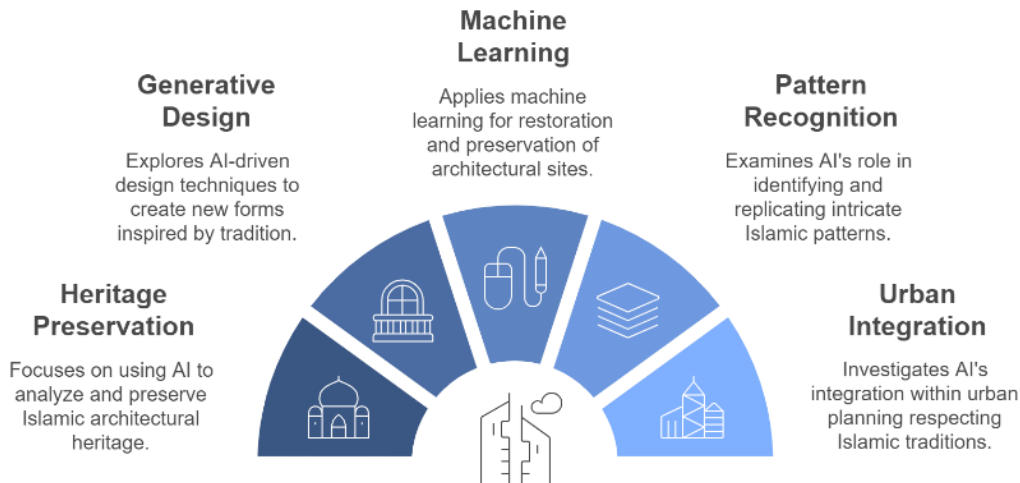


Figure 2: AI integration in Islamic Architecture in literature
(Source: AI-generated, instructed by the author using Napkin AI)

Through scholarly investigation, existing research has primarily focused on AI's applications in architecture, with few studies specifically examining AI-generated Islamic architecture or its cultural and spiritual implications. However, no publication has been found that evaluates AI's ability to reinterpret contemporary mosque design while maintaining its spiritual and cultural identity, as these designs require critical consideration and a cautious approach, giving that Islamic Architecture is a sensitive field that represents culture, history, and religion (Sukkar, Fareed, Yahia, Mushtaha, et al., 2024).

This research aims to examine the integration of AI-generated tools in contemporary mosque design and evaluate their potential to produce designs that convey the cultural and spiritual values of Islamic architecture, as perceived by the public. The most relevant publication to this research is a series of studies, consisting of two articles that adopt a theoretical and practical approach, as done by Sukkar, Fareed, Yahia, Mushtaha, et al. (2024), which investigates Islamic architecture's identity in the AI era. The first theoretical article focused on the theoretical concepts of Islamic architecture, utilizing observation methods, literature reviews, formal analysis, and critical historical analysis to explore AI applications in the Islamic context. The study demonstrates that AI can generate creative and engaging results. Still, it sometimes lacks the cultural and spiritual aspects of Islamic architecture, which necessitate professional expertise and a profound understanding of Islamic principles.

The second helpful article evaluated the AI-generated tool Midjourney analytically and highlighted its weaknesses in representing Islamic architectural heritage (Sukkar, Fareed, Yahia, Abdalla, et al., 2024). In this study, four actual buildings and sites of Islamic heritage were selected for replication in Midjourney using prompt engineering techniques based on historical references. These buildings include the Ka'ba in Makkah, the Dome of the Rock (Qubbat al-Sakhra) in Quds, the spiral minaret of the Ibn Tulun Mosque in Cairo, Egypt, and the Ibn Tulun Mosque in Cairo. The outputs were then evaluated using an observation method of human intelligence's critical analysis and an online survey to compare the AI-generated results with the original buildings. The study highlighted the limitations of AI-generated images in accurately representing the original appearance of the selected historical buildings. These limitations were categorized in four groups, which are: "(1) limits of the prompt, (2) limits of fame, (3) limits of regionality and historical styles, and (4) limits of architectural elements and details".

It is worth noting that AI can generate images that closely resemble historical buildings. At the same time, it sometimes lacks architectural elements and details, as it has some limited options that must be adhered to. It also found that other studies have shown that AI has the potential to reinterpret traditional elements in a contemporary context; however, cultural authenticity and spiritual aspects need to be considered, especially in sensitive designs like Islamic Architecture and, specifically, mosque design.

3. Materials and Methods

3.1 Research Design Overview

Following the roadmap of the research shown previously in Figure 2, this study employed a mixed-methods approach, combining qualitative and quantitative strategies, to investigate how AI tools can reinterpret Islamic architectural elements in contemporary mosque design and examine the capabilities and limitations of various AI tools. The methodology is divided into two parts: a qualitative method, which consists of an experimental approach and a comparison of three AI tools, and a quantitative method, which includes two surveys to measure public awareness of modern Islamic architecture and evaluate AI-generated mosque designs in terms of cultural authenticity and spirituality.

3.2 AI Experimentation and Tool Comparison

Three AI tools were explored in this study to generate visuals from specific prompts: Midjourney, Leonardo AI, and Prome AI. These tools were selected based on user feedback in the literature, AI workshops attended, and experimentation with them over time to explore their potential in various design areas. In addition, their ability to respond to architectural and interior design prompts, advanced image generation capabilities, and accessibility. Midjourney has been examined in numerous studies, yielding high-quality results and diverse design variations. Leonardo AI and Prome AI were suggested by designers and users from multiple workshops, websites, and social media platforms who utilized these tools to create visuals for architectural and interior design purposes. Midjourney was used with a monthly subscription, while other tools were free to use, albeit with a limited number of images that could be generated daily. Leonardo AI and Prome AI offer features such as video generation, sketch rendering, and editing input pictures, which are not available in Midjourney. These tools were used in this research to generate modern mosque designs by providing input prompts that resulted in output images. Four images are generated per prompt from each tool, except Prome AI, which generates three images at a time. ChatGPT was also used to enhance prompts according to the AI platform used.

Prompt engineering techniques were carefully structured to incorporate Islamic architectural elements, modern principles, and cultural and spiritual values, with a focus on specific design criteria, as shown in **Figure 3**. These criteria include exterior design, interior design, and specific traditional elements of Islamic Mosque architecture such as domes, minarets, mashrabiya, Islamic calligraphy, and geometric patterns. The prompt design was constructed to blend heritage components with contemporary design aesthetics. All prompts used in this exploratory research and the AI-generated images collected from each platform are provided in the **appendices (A, B, & C)** to allow replication by other researchers, taking into consideration that results never provide similar outputs as these tools are trained to generate new content each time, even if the same prompts are used. Additionally, results may vary depending on the tools' development, release dates, and version updates.

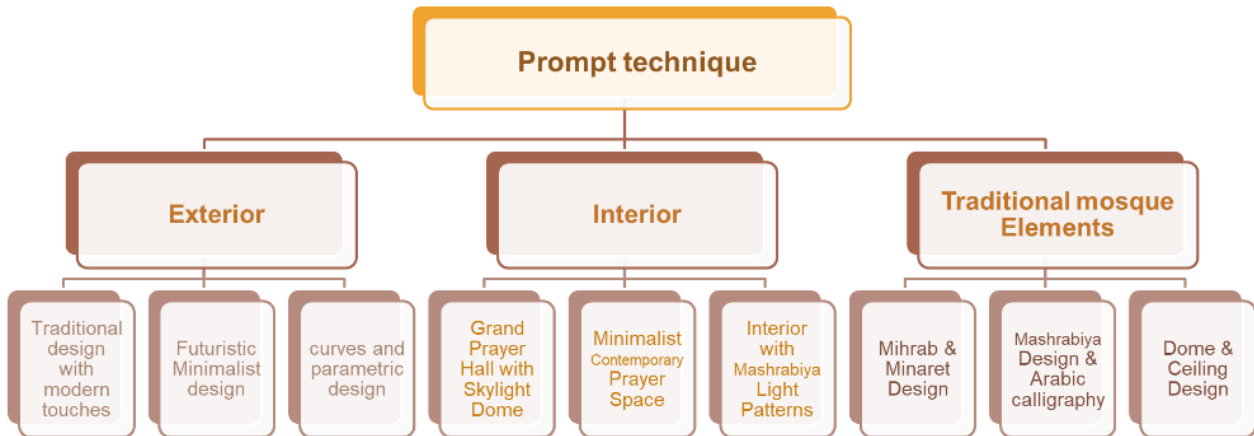


Figure 3: Prompt Techniques criteria (source: generated by author)

For the comparison approach, a similar prompt was used on all platforms to evaluate how each tool acts and responds to similar text. In addition, other variations of prompts enhanced by ChatGPT that suit each platform were used to test the ability of various AI tools to reimagine contemporary mosque designs. The results were analyzed, and a visual comparison was applied. Moreover, samples of these outputs from each tool were provided in the survey for participants to evaluate in terms of their cultural and spiritual identity. The outputs of how each AI tool interprets mosque elements were analyzed through observation and visual analysis, providing a comparison framework for the three AI tools, focusing on the following criteria:

- **Traditional elements' appearance** (domes, arches, mashrabiya, muqarnas, calligraphy, etc.).
- **Contemporary aesthetics** of given prompts (minimalism, abstraction, parametric influences, futuristic style).
- **Cultural accuracy** (faithfulness to Islamic design principles, preservation of symbolic and functional meanings).
- **Spirituality value** (appears in the general atmosphere of a sense of lightness and feelings)
- **Innovation Level:** AI's ability to reinterpret Islamic elements in a contemporary way.

Each AI-generated design was visually analyzed by these criteria and compared to existing examples of traditional mosques. The analysis employed a qualitative thematic approach, conducted through visual observation and systematic coding, to understand how well AI tools capture heritage aesthetics in contemporary contexts and to provide deeper insight into the strengths and weaknesses of AI-generated mosque concepts. The researcher conducted the analysis manually, following a coding system developed based on a preliminary review of Islamic architectural principles.

3.3 Public Perception Surveys

Two surveys were structured online using the Google Forms platform, which included multiple-choice questions, a Likert scale, and open-ended questions to gather more in-depth feedback about participants' perceptions, feelings, and opinions. Data was collected online and analyzed using Microsoft Excel. The sampling frame comprised students and faculty members from the Department of Architecture and Interior Design at the University of Bahrain, as well as design professionals and individuals with expertise in Islamic architecture. The first survey was conducted to measure public awareness of modern Islamic architecture, and the second was an evaluation of AI-generated designs for mosques. Invitations were distributed through the official Microsoft Teams channels of the University of Bahrain's Department of Architecture and Interior Design, targeting individuals with verified university email accounts. Additionally, the survey link was shared on social media platforms to broaden participation. Although most participants were from the University of Bahrain, the variety

of professional levels and academic backgrounds provides insightful information that may be representative of broader trends in architectural practice and education in comparable cultural contexts.

A total of approximately 150 invitations were distributed for both surveys. In the first survey, 57 valid responses were collected, yielding a response rate of 38%. In the second survey, 53 responses were received from an estimated 150 recipients, resulting in a response rate of 35.3%. It is recognized that the use of convenience sampling and voluntary participation may restrict the external validity and generalizability of the findings. However, given the exploratory nature of the study, the sample offers insight into the academic and design-related perspectives on AI-generated Islamic architecture. Even with the small sample size, the quality of the feedback was enhanced by the use of purposive sampling, which ensured that responses came from individuals with relevant professional or academic backgrounds.

3.3.1 Survey 1: Public Awareness of Modern Mosque Design

The purpose of the first survey was to measure the public's levels of familiarity with contemporary mosque design, as well as their perspectives on how a modern mosque should be designed and which aspects of a traditional and modern mosque they preferred. After a consent statement, the questions start with general information about gender, age, and job. Then, multiple-choice questions about modern mosque design, including essential features in mosques, architectural styles, cultural context, traditional elements, and materials that should be applied in contemporary mosque design. Concluding with an open-ended question asking about their thoughts on a contemporary mosque design produced by AI. Some questions were supported by images, as shown in the full survey available in **Appendix D**.

3.3.2 Survey 2: Evaluating AI-Generated Mosque Designs

The second survey assessed how well AI-generated mosque designs reflect cultural and spiritual identity based on participants' perception. This survey consisted of three parts, following a consent statement, which began with general information about gender, age, occupation, and familiarity with Islamic architecture. A Likert scale was used in this question, which is: "How familiar are you with Islamic architecture?" with a rating of 1 to 5, where one represented 'Not familiar' and 5 indicated 'Academic or professional expertise. In the next part, four images for exterior and interior views from each platform were provided, which were generated in the experimental approach with AI. Participants were asked to evaluate these images based on specific criteria of architectural authenticity, spiritual atmosphere, and cultural representation. For each aspect, participants could choose one of four answers: Yes, Somewhat, No, or Not Sure. These answer choices are considered nominal categorical data, as they represent separate, labelled categories without numerical values or a fixed order. Excel clustered bar charts were developed to display the distribution of responses for each criterion. This helped visually compare how people felt about the various designs produced by the three AI platforms (Midjourney, Leonardo AI, and Prome AI) concerning each of the three evaluation criteria. The final part included open-ended questions about the participant's final thoughts on the role of AI in generating modern mosque designs compared to traditional mosque designs. Manual coding was employed in this part to facilitate a thematic analysis, exploring recurring themes and concerns related to cultural and spiritual representations. The full survey questions and answers are provided in **Appendix E**.

3.4 Ethical Considerations

The entire investigation was conducted in accordance with ethical guidelines. An official approval was given by the head of the Architecture and Interior Design department at the University of Bahrain to conduct and distribute surveys among faculty and students of the department using the university platforms. A clear informed consent statement was obtained at the beginning of each survey, and participation was entirely optional. An example of the consent statement is provided in **Appendix F**. No information that could be used to identify the individual was collected, and the research purpose was disclosed at the beginning to inform participants about the study before they began the surveys. Additionally, AI-generated photos were produced following each platform's usage guidelines.

This section describes the methods used in the research, which show how the study examined the AI-generated mosque designs and analyzed participants' evaluations. The findings are presented in the next section, which compares the three AI platforms, highlights key themes, and offers insights into how contemporary mosque designs were generated through AI, while reflecting cultural authenticity, spirituality, and visual innovation.

4. Results

The results section is divided into two subsections, following the methods used in the study above. The first section presents the outcomes of the AI-generated contemporary mosque designs created by the three AI tools used in the experimental phase. The second section identifies the key findings of the two surveys conducted.

4.1 AI-Generated Image Result

In the experimental approach, it was found that the three AI tools show different responses to a similar given prompt. For example, Figure 4 displays three images generated by the Midjourney, Leonardo AI, and Prome AI platforms, respectively, using the simple prompt “A modern mosque in contemporary and futuristic style,” which showcases the various designs produced by each tool.



Figure 4: Examples of AI-generated mosque design in the three platforms: (Midjourney, Leonardo AI, Prome AI), respectively, using the prompt “A modern mosque in contemporary and futuristic style” (source: AI-generated, instructed by the author)

Table 2, below, illustrates the AI-generated images of the three platforms for the selected criteria and the prompt techniques used, focusing on three aspects: exterior, interior, and traditional elements of mosque design. Other images generated during the experiment phase using these tools and the corresponding prompts are provided in Appendices A, B, and C.

Table 2: Comparison between the three AI platforms (Table source: created by the author, image source: AI-generated images in Midjourney, Leonardo AI, and Prome AI, as instructed by the author (2025))

Design criteria	Prompt used for each platform	Midjourney outputs for each prompt (4 images per prompt)	Leonardo AI outputs for each prompt (4 images per prompt)	Prome AI outputs for each prompt (3 images per prompt)	Visual analysis
Exterior Design	A grand contemporary mosque blending modern and Islamic architecture, featuring a large, elegant dome, sleek minaret with geometric patterns, and intricate mashrabiya screens. The façade is crafted from white marble with golden calligraphy, set against a backdrop of reflective water pools and lush gardens. Ultra-HD, cinematic lighting, 8K render, hyper-detailed, architectural visualization				Exterior observation: All tools demonstrate an understanding of the mosque as an architectural building, as evidenced by the appearance of the Minaret and dome in some images. Representative of Specific details mentioned in the prompt, such as domes, minarets, and Mashrabiya. Looking at the Islamic elements design, Midjourney shows more innovative designs, Prome reflects more traditional styles, and Leonardo has a mix of both. Calligraphy and Islamic patterns are not shown appropriately among all tools.
	A modern Islamic Mosque with minimalist geometric forms, large glass windows, and a reinterpreted minaret. Blend traditional Islamic patterns with contemporary materials, such as concrete and steel. Incorporate sustainable design elements such as solar panels and green spaces. Feature an open, light-filled prayer hall with abstract calligraphy. Include community spaces and a water feature. Set in an urban environment, this building features a sleek, sculptural exterior that respects Islamic principles while embracing innovation. Hyper-realistic architectural rendering, dramatic lighting.				
	A futuristic mosque with a fluid organic design, inspired by natural curves and parametric architecture. The structure is composed of smooth white concrete and glass, featuring an open-air courtyard and a transparent dome that allows natural light to flood the prayer hall. The minaret is an abstract spiral tower with soft LED illumination. The environment is tranquil, with a vast desert landscape in the background. 8K render, ultra-realistic, hyper-detailed Islamic architecture				
Interior Design	Expansive, light-filled prayer hall of a modern mosque. Minimalist design with soaring ceilings and abstract geometric patterns. Large windows allow natural light to create dynamic shadows. Sleek mihrab with subtle LED lighting. Contemporary prayer rugs in muted tones. Elegant chandeliers with crystalline forms. Exposed concrete walls with calligraphy art. Glass dome above. Hyper-realistic architectural rendering with warm ambient lighting that emphasizes a spiritual atmosphere.				Interior observation: Innovative design of the prayer hall with a mix of contemporary and traditional styles. A spiritual ambiance is achieved by carefully utilizing natural light and open spaces to create a peaceful and meditative atmosphere. Appearance of arches without an explicit mention in the prompts. Calligraphy is missing, and geometric patterns are inappropriate.
	A modern minimalist mosque interior with a peaceful and meditative atmosphere. The walls are smooth white with subtle geometric relief patterns. The mihrab is a simple, curved niche bathed in soft natural light. The floor is covered with neutral-toned prayer carpets, and there is an emphasis on open space, creating a calming effect. Ultra-realistic, soft ambient lighting, clean architecture, 8K render				
	An enchanting mosque interior where intricate wooden mashrabiya screens filter natural light, casting stunning geometric shadow patterns across the walls and floors. The architecture combines warm wood tones with white marble columns, and the ceilings have muqarnas carvings. The mihrab is a delicate balance of traditional Islamic art and modern simplicity, featuring photorealistic, high-resolution imagery with a warm atmosphere and detailed lighting effects.				
Traditional Elements	A finely carved wooden mashrabiya panel filters sunlight, casting geometric shadow patterns across the interior of the mosque.				Traditional elements observation: Understanding of specific traditional elements, such as minaret, dome, and mashrabiya, but lacking Islamic motifs and patterns.

	<p>Render an architectural elevation of a contemporary mosque minaret with minimalist design. Use clean vertical lines, geometric Islamic motifs subtly engraved, and materials such as light-toned concrete and smooth stone. Focus on soft lighting, a modern landscape around it, and elegant proportions.</p>				<p>Prome AI still shows the traditional shape of a minaret, while the other two generate more abstract and creative forms.</p>
--	---	---	--	---	--

Comparing the outputs of the three AI tools through observation and thematic analysis reveals that AI can accurately comprehend the architectural significance of mosques, depicting them effectively and identifying prominent features such as the minaret and dome. The minaret can be identified among most of the generated images, while the dome appears when it is mentioned in the given prompts. In terms of representing the specific traditional elements and details mentioned in the prompt, AI tools can understand some of them and incorporate them into the design; however, they sometimes overlook others. For example, the second prompt, as represented in **Table 2**, asked to show abstract calligraphy. However, the output images of Midjourney and Prome AI did not show any clear calligraphy forms. At the same time, Leonardo AI presents some calligraphy on the wall, but not in an accurate form. Furthermore, Islamic patterns and calligraphy are not accurately and correctly represented in AI-generated designs compared to the actual designs of these elements. It was also noted that all tools have the potential to enhance the creativity and innovation of design, but they need specific details and accurate guidance to show better results. As a comparison between the three tools, Midjourney shows a highly artistic and innovative design. Leonardo AI can provide a mix of realistic and stylized designs, using traditional terms, and may generate Islamic motifs. Prome AI creates realistic architectural images and shows more historical architectural designs with moderately innovative features. Additionally, the strengths and weaknesses of these tools were identified based on the analysis used, which are elaborated upon in the discussion section.

To highlight the role of AI in representing Islamic heritage, a comparison was conducted between AI-generated designs and human-designed architecture, using specific criteria, as shown in **Table 3**. It can be figured that AI is better at generating various design iterations quickly, which enhances design efficiency and speeds up the work. It is also highly creative and can blend multiple styles by generating unexpected outputs, which enhances human creativity. On the other hand, the human-designed architecture shows better outcomes in representing culture, architectural accuracy, and spiritual atmosphere.

Table 3: Comparison between the AI-generated design and the Human-Designed Architecture (Generated by author).

Aspect	AI-Generated Design	Human-Designed Architecture
1. Design Speed & Efficiency	Fast (seconds to minutes). Create multiple versions quickly.	Time-intensive (days to months). Requires a deep design development process and skills.
2. Cultural Representation	Not accurate. It depends on the quality of the training data and the clarity of the prompt.	Rich, contextual understanding of culture and religious symbolism.
3. Architectural Accuracy	May miss proportions, structural realism, or functional logic.	High accuracy, based on technical knowledge, building codes, and drawings.
4. Creativity & Innovation	Often highly creative and unconventional. Can blend unexpected styles.	Grounded creativity with deep cultural understanding.
5. Spiritual Atmosphere	May evoke mood visually, but lacks emotional/spiritual intent.	Deeply embedded spiritual concepts are tied to form, symbolism, and space.

4.2 Survey results

4.2.1 Survey 1: Public Awareness Survey Results

This survey collected 57 responses, and more than 50% of the participants (29 out of 57) are architects, interior designers, or students from the same department. This suggests that most participants are familiar with or have a moderate understanding of Islamic architecture. The majority understand the Contemporary Mosque design as a blend of traditional and contemporary elements, with a percentage of 70% (40 out of 57). In comparison, 43 (75%) agree that traditional Islamic style should influence modern mosque design more than other styles, such as minimalism, futuristic, and modernism. In addition, almost all participants recognize the importance of incorporating traditional elements and cultural context into modern mosque design. Regarding the interior design of a modern mosque, results showed that more than half of the respondents (31 out of 57) prefer a mix of minimalist and traditional styles, with the same number of people preferring to use natural materials such as wood and stone; others prefer modern materials such as steel and glass. The last open-ended question asked about an overall vision for a modern mosque design generated by AI, where respondents shared their thoughts. In this part, the results show that most participants prefer a combination of traditional and modern design, focusing on the simplicity of contemporary aesthetics while respecting Islamic principles, reflecting spirituality, and preserving the essential elements of the mosque, such as the minaret, mihrab, prayer hall, and Islamic ornamentations. There was also a repetition of a preference for calm and straightforward design, with an emphasis on sustainability, modern technology, and green spaces.

4.2.2: Survey 2: AI Mosque Evaluation Survey Results

In this survey, 53 responses were collected from the same category of participants in the first survey. However, the number of participants from the public was equal to the number of architects and designers, at a rate of 45% for each category, and the rest were students from other disciplines. This indicates that 39 (75%) of the respondents are familiar with Islamic architecture, with an average rating of 3 on a 5-point Likert scale. The survey also included a public perception evaluation of architectural authenticity, spiritual atmosphere, and cultural representation of each AI tool. Clustered bar charts were created in Excel for each aspect to visually present these differences and understand how each tool resonated with viewers, as shown in **Figure 5**. It was found that all tools have the potential to generate designs that incorporate all the mentioned aspects. Notably, Prome AI receives a higher score for the answer “yes” than Midjourney and Leonardo AI in all criteria, with 44, 39, and 39 persons for each criterion, respectively. At the same time, the other two platforms have almost the same number of people who choose “yes” for all criteria, which are 27, 23, and 26 for Midjourney, and 28, 33, and 26 for Leonardo AI, in the same order. The rest of the participants thought it somewhat exhibited these characteristics, while only 3 to 5 people were unsure about it. It was also agreed by 39 respondents (75%) that all tools clearly show a combination of traditional and modern design inspired by innovation, and 27 (50%) feel the connection to Islamic heritage, while only 13 (24%) feel the spiritual engagement in the designs. On the other hand, some participants believe that the generated designs lack realism, practicality, a spiritual outlook, and a sense of place, with some missing elements, such as Islamic culture and identity, human touches, spirituality, a sense of place, Islamic patterns, and ornamentations. In comparison to the three AI tools, Midjourney and Prome AI achieve close scores in generating better results for representing modern mosque designs, with 49% (25) and 45% (23), respectively, compared to Leonardo AI, which achieves an almost 20% (10 out of 53) score.

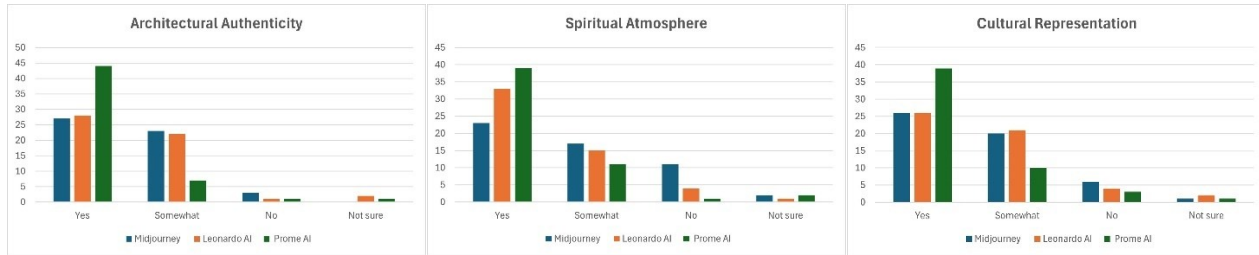


Figure 5: Clustered bar charts represent the participants' perceptions of the three AI tools (Midjourney, Leonardo AI, and Prome AI) in terms of architectural authenticity, spiritual atmosphere, and cultural representation. Each chart provides data for each criterion, respectively. (Created by the author).

5. Discussion

This study shows an experimental approach that explores AI's role in generating contemporary mosque designs that represent the principles of Islamic Architecture. The findings show that each tool yields different results, even when the same prompts are used, indicating the ability of each tool to create various designs based on the given prompt. This also demonstrates how each tool interacts with textual inputs to generate image outputs, providing a general idea of the opportunities each tool offers. This enables architects and designers to utilize these tools effectively, producing designs that align with the tool's characteristics. The AI-generated design was analyzed using thematic analysis, a method that involves observation and coding, aligning with the research of Sukkar, Fareed, Yahia, Abdalla, et al. (2024). This study employed a critical analysis method to evaluate Midjourney outputs in reimagining actual historical buildings. This study found that while AI tools can produce sophisticated AI-generated visuals influenced by Islamic architectural forms, their interpretations often lack a profound cultural and symbolic understanding and require further development to accurately represent the original designs (Sukkar, Fareed, Yahia, Abdalla, et al., 2024). This also shows similar results to the current study, where some traditional elements and details are missed in the AI-generated designs for a contemporary mosque. While many studies evaluating architectural designs employ quantitative methods or computational analysis, this study adopted a mixed-methods approach, combining qualitative thematic analysis of AI-generated designs with quantitative surveys to assess public perceptions. This approach enables in-depth, subjective interpretation, facilitating a deeper understanding of aesthetics and cultural meaning. The current study extends this approach by applying it to AI-generated visuals, a new area of study that combines technology with traditional design language.

The two surveys conducted in this study provide two insights. The first survey results offer a valuable insight into participants' expectations for contemporary mosque design, particularly among professionals and designers, underscoring the importance of preserving cultural authenticity and traditional Islamic architectural identity, even in contemporary interpretations. These insights can be applied in the AI experimentation phase by guiding the prompts to reflect the public's vision of a modern mosque design. The results of the second survey demonstrate the promising potential of AI tools in generating contemporary mosque designs that reflect Islamic values, such as architectural authenticity, spirituality, and cultural symbolism. These findings also highlight the capabilities of AI tools as assistants in the design process. They also open new opportunities for designers to engage with these technologies, develop relevant skills, and collaborate with technical experts to push the boundaries of what AI can achieve in design. In addition, the findings demonstrate the potential of utilizing these tools in Islamic architecture to generate ideas, enhance design solutions, and foster creativity. Moreover, these results align with various studies that indicate the advantages of AI in improving design efficiency (Yanhua, 2024), automating repetitive tasks and project management (Li et al., 2025), and enhancing creativity (Borglund, 2022). Therefore, this study supports the idea that

AI can be an effective partner in presenting tradition while embracing innovation in Islamic architecture if it is applied carefully.

Additionally, this study highlighted the strengths and weaknesses of AI-generated Islamic architectural designs. One of AI's notable strengths observed was the ability to interpret traditional elements such as domes, arches, and minarets, which are essential in traditional mosque architecture. Likewise, AI technologies demonstrated creative potential in creating visually appealing forms with modern aesthetics, and they represented a spiritual ambiance by carefully utilizing natural light and open spaces. These tools also significantly enhance the visualization and ideation stages of design by allowing designers to explore various forms, lights, and textures with more flexibility than traditional methods. On the other hand, limitations revealed a lack of cultural authenticity and depth in some AI-generated outputs, with the inappropriate application of Arabic calligraphy and Islamic patterns, indicating an insufficient understanding of the cultural and religious context. Additionally, there are limited representations of spiritual symbolism and the cultural nuances necessary for designing sacred spaces, such as mosques. This requires a deep understanding of culture and collaboration with human experts to produce spiritually authentic and context-sensitive architectural outputs.

6. Conclusion

In conclusion, this study aimed to examine the application of AI-generated methods in reinterpreting modern mosque design while preserving the principles of Islamic architecture. Through a mixed-methods approach that combined experimental methodology of three AI-driven tools and two perception-based surveys, the study demonstrated the potential and limitations of AI-generated architectural outputs. Findings reveal that AI tools like Midjourney, Leonardo AI, and Prome AI can effectively represent basic mosque elements, such as domes and minarets, when guided by well-crafted prompts. However, participants from both surveys noted that the tools' outputs sometimes struggle to express more detailed cultural elements, such as Islamic calligraphy and patterns. This research makes significant contributions to the growing discourse on AI applications in architecture, urban planning, and interior design, benefiting both academics and professionals, particularly in Islamic architecture, where limited studies have addressed the relationship between AI technology and Islamic heritage design. This also emphasizes the importance of collaboration between humans and artificial intelligence rather than rejecting new technologies, especially with culturally sensitive designs.

This study has several limitations. First, it focused on only three generative AI tools, which may not reflect the full range of capabilities across other platforms. These tools are also trained on data that lacks the specific knowledge and deep understanding of culture and authenticity of Islamic architecture, which affects the depth of cultural accuracy in their outputs. Second, the evaluation of AI-generated designs was based on public perceptions, which can be influenced by personal cultural familiarity or aesthetic preference that might limit the generalizability of the findings. Third, the lack of a randomized sampling method and reliance on voluntary online responses may limit the external validity of the survey results. Finally, the qualitative components of perception analysis depended on personal interpretation, which could add bias.

Furthermore, Future studies are recommended to develop specialized AI models trained specifically on Islamic architectural datasets, through collaboration between AI models and human experts specializing in Islamic architecture, to enhance cultural sensitivity and authenticity. Additionally, further research can focus on addressing the AI's potential role in sustainable and adaptive mosque architecture or exploring the combination of AI with parametric and computational design for mosque planning.

Since these tools began emerging between 2021 and 2022 and are still evolving, there are high expectations for their continued development, especially in the architecture and interior design industry. This paper supports this by providing insights into AI's capabilities within specific architectural areas, such as Islamic architecture, which can demonstrate the potential of AI applications across various styles and industries. As these tools continue to develop, newer and more advanced tools with improved results will likely emerge. So, future studies may also investigate alternative AI platforms that generate higher-quality outputs and have expanded features.

Funding

This study was not funded by any public, private, or nonprofit entity.

Conflicts of Interest

The authors have no conflicts of interest to declare.

Ethics Statements

This study was conducted in full accordance with ethical research guidelines. Approval to conduct and share the surveys was given by the Head of the Architecture and Interior Design Department at the University of Bahrain. Informed consent was clearly stated at the beginning of each survey, and participation was completely voluntary. No personal or identifying information was collected. Additionally, all AI-generated images were created following the rules and usage policies of each platform used.

Data availability statement

The data that support the findings of this study are available from the corresponding author, Maryam Obaid, upon reasonable request.

Institutional Review Board Statement

Not applicable.

CRedit author statement:

Conceptualization: M.O., O.O.; Data curation: M.O., O.O.; Formal analysis: M.O., O.O.; Investigation: M.O., O.O.; Methodology: M.O., O.O.; Supervision: O.O.; Validation: M.O., O.O.; Visualization: M.O., O.O.; Writing – original draft: M.O.; Writing – review & editing: M.O., O.O. All authors have read and approved the final version of the manuscript.

References

- Abdel Wahab, H. (2020). *حول العمارة الإسلامية.. طرز ونماذج* [Islamic architecture: Styles and models]. Arab Press Agency. [In Arabic].
- Abusaleh, S. W. (2024). Enhancing preservation outcomes for architectural heritage buildings through machine learning-driven future search optimization. *Asian Journal of Civil Engineering*, 25(7), 5277–5292. <https://doi.org/10.1007/S42107-024-01112-X>
- Adeleye, I. O. (2024). The Impact of Artificial Intelligence on Design: Enhancing Creativity and Efficiency. *Journal of Engineering and Applied Sciences*, 3(1), 1–13. <https://doi.org/10.70560/vvsfej12>
- Albarqawi, W. A., & Alburgawi, S. A. (2023). Mapping the approaches for investigating Makkah's architectural vocabularies and AI: A literature review. *Frontiers of Architectural Research*, 12(6), 1171–1179. <https://doi.org/10.1016/J.FOAR.2023.08.007>
- Al-Jasmi, A., & Mitias, M. H. (2004). Does an Islamic Architecture Exist? *Revista Portuguesa de Filosofia*, 60(1), 197–214. <http://www.jstor.org/stable/40338415>

- Almaz, A. F., El-Agouz, E. A. E. A., Abdelfatah, M. T., & Mohamed, I. R. (2024). The Future Role of Artificial Intelligence (AI) Design's Integration into Architectural and Interior Design Education is to Improve Efficiency, Sustainability, and Creativity. *Civil Engineering and Architecture*, 12(3), 1749–1772. <https://doi.org/10.13189/cea.2024.120336>
- Borglund, C. (2022). Artificial Intelligence in Architecture and its Impact on Design Creativity: A Study on how Artificial Intelligence Affect Creativity in the Design Process (Dissertation, KTH Royal Institute of Technology, Sweden). Retrieved from <https://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-315069>
- Das, B. R., Maringanti, H. B., & Dash, N. S. (2022). Role of Artificial Intelligence in the Preservation of Culture and Heritage. In Digitalization of Culture Through Technology. *Routledge*. <https://doi.org/10.4324/9781003332183>
- El Moussaoui, M. (2025). Architectural practice process and artificial intelligence – an evolving practice. *Open Engineering*, 15(1), 20240098. <https://doi.org/10.1515/eng-2024-0098>
- El-Daghar, K. (2022). Conserving Symbolism in Architectural Heritage—Case Study Eloquence in Depicting Philosophical Ideas Inspired by the Principles of Islam on Islamic Architecture Through Ages. In: Versaci, A., Bougdah, H., Akagawa, N., Cavalagli, N. (eds) Conservation of Architectural Heritage. Advances in Science, Technology & Innovation. *Springer*, Cham. https://doi.org/10.1007/978-3-030-74482-3_10
- El-Husseiny, M. (2022). Analyzing Contemporary Mosque Philosophy and Design, *New Design Ideas*, ICCAUA2022:27-42. Retrieved from: https://www.researchgate.net/publication/379190389_ANALYZING_CONTEMPORARY_MOSQUE_PHILOSOPHY_AND_DESIGN
- Enjellina, Beyan, E. V. P. ., & Anastasya Gisela Cinintya Rossy. (2023). A Review of AI Image Generator: Influences, Challenges, and Future Prospects for Architectural Field. *Journal of Artificial Intelligence in Architecture*, 2(1), 53–65. <https://doi.org/10.24002/jarina.v2i1.6662>
- Erarslan, A. (2019). A Contemporary Interpretation of Tradition in Mosque Design. Marmara İlahiyat Mosque, Turkey. *European Scientific Journal*, *ESJ*, 15(8), 87. <https://doi.org/10.19044/esj.2019.v15n8p97>
- Eyadah, H. T. A., Odaibat, A. A. (2024). A Forward-Looking Vision to Employ Artificial Intelligence to Preserve Cultural Heritage. *Humanities and Social Sciences*, 12(5), 109–114. <https://doi.org/10.11648/j.hss.20241205.12>
- Ferhati, K., M. Elgohary, A., N. Elghar, A., S. Abdelaal, A., M. Kamel, A., A. Elsayed, M., E. Sheimy, A., & E. Habib, M. (2024). Innovative Design Synthesis: AI-Driven Solutions for Sustainable Urban Planning: Development, Evaluation, and Insights. *Journal of Contemporary Urban Affairs*, 8(1), 177–195. <https://doi.org/10.25034/ijcua.2024.v8n1-10>
- Gaber, J. A., Youssef, S. M., & Fathalla, K. M. (2023). The Role of Artificial Intelligence and Machine Learning in Preserving Cultural Heritage and Art Works via Virtual Restoration. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, X-1/W1-2023, 185–190. <https://doi.org/10.5194/isprs-annals-X-1-W1-2023-185-2023>
- Gür, M., Çorakbaş, F. K., Atar, İ. S., Çelik, M. G., Maşat, İ., & Şahin, C. (2024). Communicating AI for Architectural and Interior Design: Reinterpreting Traditional Iznik Tile Compositions through AI Software for Contemporary Spaces. *Buildings*, 14(9), 2916. <https://doi.org/10.3390/buildings14092916>
- Husni, M. F. D. (2024). Authenticity in islamic sacred spaces: Case studies of distinctive regional mosques. *Journal of Socio-Cultural Sustainability and Resilience*, 1(2). <https://doi.org/10.61511/jscsr.v1i2.2024.770>
- Karadag, İ. (2023). Machine learning for conservation of architectural heritage. *Open House International*, 48(1), 23-37. <https://doi.org/10.1108/OHI-05-2022-0124>
- Li, H., Zhu, Y., Guo, Q., Wang, J., Shi, M., & Liu, W. (2024). Unveiling Consumer Satisfaction with AI-Generated Museum Cultural and Creative Products Design: Using Importance–Performance Analysis. *Sustainability*, 16(18), 8203. <https://doi.org/10.3390/su16188203>

- Li, Y., Chen, H., Yu, P., & Yang, L. (2025). A Review of Artificial Intelligence in Enhancing Architectural Design Efficiency. *Applied Sciences*, 15(3), 1476. <https://doi.org/10.3390/app15031476>
- Maksoud, A., Elshabshiri, A., Saeed Hilal Humaid Alzaabi, A., & Hussien, A. (2024). Integrating an Image-Generative Tool on Creative Design Brainstorming Process of a Safavid Mosque Architecture Conceptual Form. *Buildings*, 14(3), 843. <https://doi.org/10.3390/buildings14030843>
- Michailidis, D., Khutsishvili, K., Konstantis, K., Tympas, A., Ibrahim, I.A., Ghebreab, S. (2024). Enabling Inclusive Urban Transport Planning Through Civic Artificial Intelligence. In: Keseru, I., Basu, S., Ryghaug, M., Skjølvold, T.M. (eds) Strengthening European Mobility Policy. *Palgrave Macmillan*, Cham. https://doi.org/10.1007/978-3-031-67936-0_9
- M.Matter, N., & G.Gado, N. (2024). Artificial Intelligence in Architecture: Integration into Architectural Design Process. *Engineering Research Journal*, 181(0), 1–16. <https://doi.org/10.21608/erj.2024.344313>
- Obaid, M. J., & Elghonaimy, I. H. (2023). Exploring Mid-journey's Outputs and Analysing its Result for a New Design Approach in Architecture. In H. R. Husain, & H. A. Nia, Beyond Blueprints: Advancements in Architectural Education and Innovations (pp. 151-178). Istanbul: Cinius Yayınları. doi: <https://doi.org/10.38027/ICCAUA2023blue07>
- Omar, O., El Messeidy, R., & Youssef, M. (2020). IMPACT OF 3D SIMULATION MODELING ON ARCHITECTURAL DESIGN EDUCATION. *Architecture and Planning Journal (APJ)*, 23(2), 6. <https://doi.org/10.54729/2789-8547.1075>
- Ooi, K. B., Tan, G. W. H., Al-Emran, M., Al-Sharafi, M. A., Capatina, A., Chakraborty, A., ... Wong, L. W. (2023). The Potential of Generative Artificial Intelligence Across Disciplines: Perspectives and Future Directions. *Journal of Computer Information Systems*, 65(1), 76–107. <https://doi.org/10.1080/08874417.2023.2261010>
- Rabbat, N. (2012). What is Islamic architecture anyway? *Journal of Art Historiography*, No. 6. Retrieved from: <https://doaj.org/article/7e972bcabbbb4dc6a30e8440c268ffed>
- Rabbat, N. (2005). Toward a Critical Historiography of Islamic Architecture. In A. Thomine-Berrada & B. Bergdol (Eds.), *Repenser les limites : l'architecture à travers l'espace, le temps et les disciplines* (1–). Publications de l'Institut national d'histoire de l'art. <https://doi.org/10.4000/books.inha.642>
- Rane, N. L. (2024). Potential Role and Challenges of ChatGPT and Similar Generative Artificial Intelligence in Architectural Engineering. *International Journal of Artificial Intelligence and Machine Learning*, 4(1), 22–47. <https://doi.org/10.51483/ijaiml.4.1.2024.22-47>
- Rao, L., Yang, E., Dissanayake, S., Cuomo, R., Seth, I., & Rozen, W. M. (2024). The use of generative artificial intelligence in surgical education: A narrative review. *Plastic and Aesthetic Research*, 11, 57. <https://doi.org/10.20517/2347-9264.2024.102>
- Sanchez, T. W., Brenman, M., & Ye, X. (2024). The Ethical Concerns of Artificial Intelligence in Urban Planning. *Journal of the American Planning Association*, 91(2), 294–307. <https://doi.org/10.1080/01944363.2024.2355305>
- Sojak, S. D. M., Taufik, F. A., & Abdul Rani, M. F. (2023). Application and trends of motifs and styles on mosque ornamentation in Malaysia: From traditional to global. In IOP Conference Series: Earth and Environmental Science, 1274(1), 012039. IOP Publishing. <https://doi.org/10.1088/1755-1315/1274/1/012039>
- Sukkar, A. W., Fareed, M. W., Yahia, M. W., Abdalla, S. B., Ibrahim, I., & Senjab, K. A. K. (2024). Analytical Evaluation of Midjourney Architectural Virtual Lab: Defining Major Current Limits in AI-Generated Representations of Islamic Architectural Heritage. *Buildings*, 14(3), 786. <https://doi.org/10.3390/buildings14030786>
- Sukkar, A. W., Fareed, M. W., Yahia, M. W., Mushtaha, E., & De Giosa, S. L. (2024). Artificial Intelligence Islamic Architecture (AIIA): What Is Islamic Architecture in the Age of Artificial Intelligence? *Buildings*, 14(3), 781. <https://doi.org/10.3390/buildings14030781>

- Sulayman, M., Ivashko, Y., Afshariyad, S., Dmytrenko, A., Paprzyca, K., Safronova, A., Safronova, O., & Yevdokimova, T. (2024). Specific issues of conservation and restoration of Libya mosques (7th century - 1815). *International Journal of Conservation Science*, 15(2), 861–878. <https://doi.org/10.36868/IJCS.2024.02.08>
- Thampanichwat, C., Wongvorachan, T., Sirisakdi, L., Chunjajinda, P., Bunyarittikit, S., & Wongmahasiri, R. (2025). Mindful Architecture from Text-to-Image AI Perspectives: A Case Study of DALL-E, Midjourney, and Stable Diffusion. *Buildings*, 15(6), 972. <https://doi.org/10.3390/buildings15060972>
- Wazeri, Y. (2022). *Elements and ornaments of Islamic architecture: Mosques & facades elements, interior design elements, ornaments, Arabic calligraphy*. Scholars' Press. [Available at: <https://www.amazon.com/dp/6138967542>]
- Winarti, R., & Al-Obaidi, K. (2024). Development of Mosque Architecture in Islamic Civilization and Its Context in Indonesia. *Jurnal Iman Dan Spiritualitas*, 4(3), 217–228. <https://doi.org/10.15575/jis.v4i3.33669>
- Yanhua, L. (2024). Research on the Application of Artificial Intelligence in Interior Design. *International Journal of Science and Engineering Applications*, 13(7), 24–29. <https://doi.org/10.7753/IJSEA1307.1007>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – Where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 39. <https://doi.org/10.1186/s41239-019-0171-0>

Appendices:

Appendix A:

AI-generated mosque designs by Midjourney with its prompts instructed by the author.



Is a highly detailed, photorealistic 3D render of a modern mosque with sleek, futuristic architectural lines, set against a vibrant, electric blue sky with scattered, puffy white clouds, illuminated by a dramatic, warm ring light that accentuates the building's intricate, geometric patterns and ornate details, featuring a lush, verdant garden with exotic plants and trees in the foreground, all rendered in a stylized, exaggerated manner with bold, popping colors, evoking a sense of excitement and wonder, as if plucked straight from a futuristic, sci-fi movie, created using advanced 3D modeling software such as Unreal Engine, Octane Engine, or V-Ray, with a level of detail and realism reminiscent of Pixar animated films.



Islamic mosque, seashell and pearls inspiration, white modern architecture, spiritual atmosphere, geometric patterns and ornate details, plant and water features, modern minaret and dome.



A modern mosque in a contemporary and futuristic style



A sleek, modern glass dome with LED calligraphy, seamlessly blending with a contemporary mosque structure. --stylize 250 --v 6.1

Futuristic dome design for a mosque, influenced by Gulf architecture, sleek metallic surface, geometric lattice over the dome, high-tech and minimal aesthetic, desert background, ambient lighting, architectural render --stylize 250 --v 6.1

A modern mosque minaret with minimalist design. Use clean vertical lines, curve shape materials such as light-toned concrete and smooth stone. Focus on soft lighting, modern landscape around it -- stylize 250 --v 6.1

Appendix B: AI-generated mosque design by Leonardo AI, instructed by the author.

A majestic, modern mosque with intricately designed minarets, adorned with vibrant Islamic motifs and delicate arabesque patterns, set against a clear blue sky with a few puffy white clouds, its Cream-colored marble exterior glistening in the warm sunlight, with grand arches, domes, and columns adding to its structural elegance, surrounded by lush greenery and a tranquil atmosphere, with the calligraphy of Quranic verses or Arabic phrases subtly integrated into the architecture, and a sense of serenity and spirituality radiating from the overall structure.



"A modern mosque blending contemporary and traditional Islamic architectural elements, featuring geometric patterns, intricate arabesques, and elegant arches. The building has a minimalist facade with large glass panels and metallic accents, surrounded by green landscaping. A grand dome and slender minarets combine classic Islamic styles with a sleek, futuristic design. Soft ambient lighting highlights the intricate details, creating a serene, sacred atmosphere at twilight. Ultra-realistic, 4K resolution, with high architectural detail."



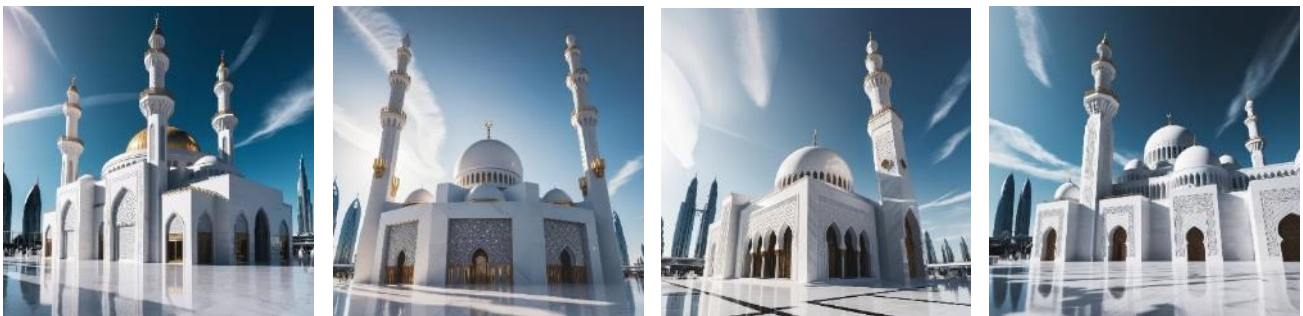
"A modern mosque blending contemporary and traditional Islamic architectural elements. The building has a minimalist facade with large glass panels and metallic accents, surrounded by green landscaping and water. A grand dome and squared minarets combine Islamic styles with a simple, futuristic design. Soft ambient lighting highlights the intricate details, creating a serene, sacred atmosphere at twilight. Ultra-realistic. 4K resolution. with high architectural detail."



"A modern mosque blending contemporary and traditional Islamic architectural elements, featuring geometric patterns, intricate arabesques, and elegant arches. The building has a minimalist facade with large glass panels and metallic accents, surrounded by green landscaping. A grand dome and slender minarets combine Islamic styles with a simple, futuristic design. Soft ambient lighting highlights the intricate details, creating a serene, sacred atmosphere at twilight. Ultra-realistic, 4K resolution, with high architectural detail."



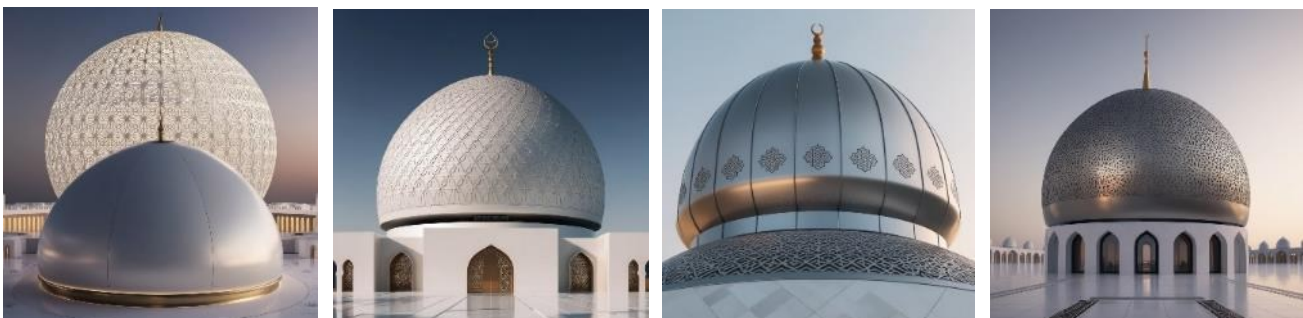
"A modern mosque blending contemporary and traditional Islamic architectural elements. The building has a minimalist facade with large glass panels and metallic accents, surrounded by green landscaping and water. A grand dome and slender minarets combine Islamic styles with a simple, futuristic design. Soft ambient lighting highlights the intricate details, creating a serene, sacred atmosphere at twilight. Ultra-realistic, 4K resolution, with high architectural detail."



a mesmerizing, high-contrast, cinematic photograph of a modern mosque blending futuristic architecture with traditional Islamic elements, featuring intricate geometric patterns, a towering minaret, and a grand dome, set against a clear blue sky with a few wispy clouds, with sunlight casting dramatic shadows on the gleaming white marble surfaces, highlighting the fusion of ancient and modern, amidst a bustling urban landscape with sleek skyscrapers in the background, captured with a wide-angle lens to emphasize the grandeur of the mosque's architecture.



A modern mosque in contemporary and futuristic style



Futuristic Gulf-style mosque dome, smooth metallic or white stone, minimalist Islamic geometric engraving or lattice shell, spiritual yet modern aesthetic, dome integrated with bright lighting or solar panels — high detail-aspect 3:2

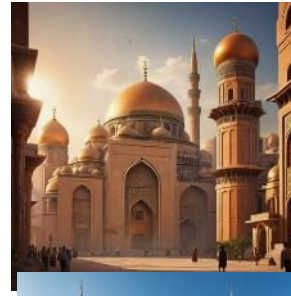
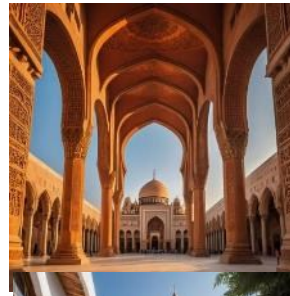
Appendix C: AI-generated mosque design by Prome AI, instructed by the author.

Prompt:

In the heart of a futuristic city, a modern islamic mosque stand. As the sun sets, a light blue sky with some clouds, casting a sun glow over the surrounding streets. This is a world of modernity, where the most recognizable things come alive in the most unique way, a testament to the beauty and coherence of modern technology.



In the heart of a futuristic city, a towering cathedral stands proudly, its stone walls weathered by the elements. As the sun sets, the sky turns a deep orange, casting a warm glow over the surrounding streets. A modern replica of a mosque stands tall against the backdrop of the city. The intricate hieroglyphics surrounding the structure evoke a sense of ancient and modernity, transporting the viewer to another time when architecture was once a barrier to life. The air is thick with the scent of burning oil, and the sound of chiming metals fills the air. This is a world of modernity, where the most recognizable things come alive in the most unique way, a testament to the beauty and coherence of modern technology.



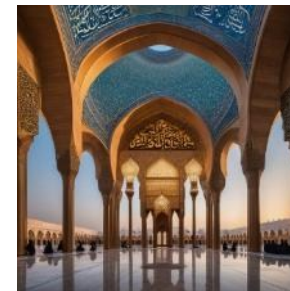
A modern mosque in a contemporary and futuristic style



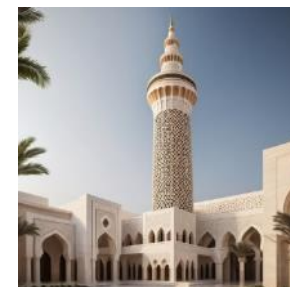
a highly detailed, photorealistic 3D render of a modern mosque with sleek, futuristic architectural lines, set against a vibrant, electric blue sky with scattered, puffy white clouds, illuminated by a dramatic, warm ring light that accentuates the building's intricate, geometric patterns and ornate details, featuring a lush, verdant garden with exotic plants and trees in the foreground, all rendered in a stylized, exaggerated manner with bold, popping colors, evoking a sense of excitement and wonder, as if plucked straight from a futuristic, sci-fi movie, created using advanced 3D modeling software such as Unreal Engine, Octane Engine, or V-Ray, with a level of detail and realism reminiscent of Pixar animated films.



A sleek, modern glass dome with LED calligraphy, seamlessly blending with a contemporary mosque structure

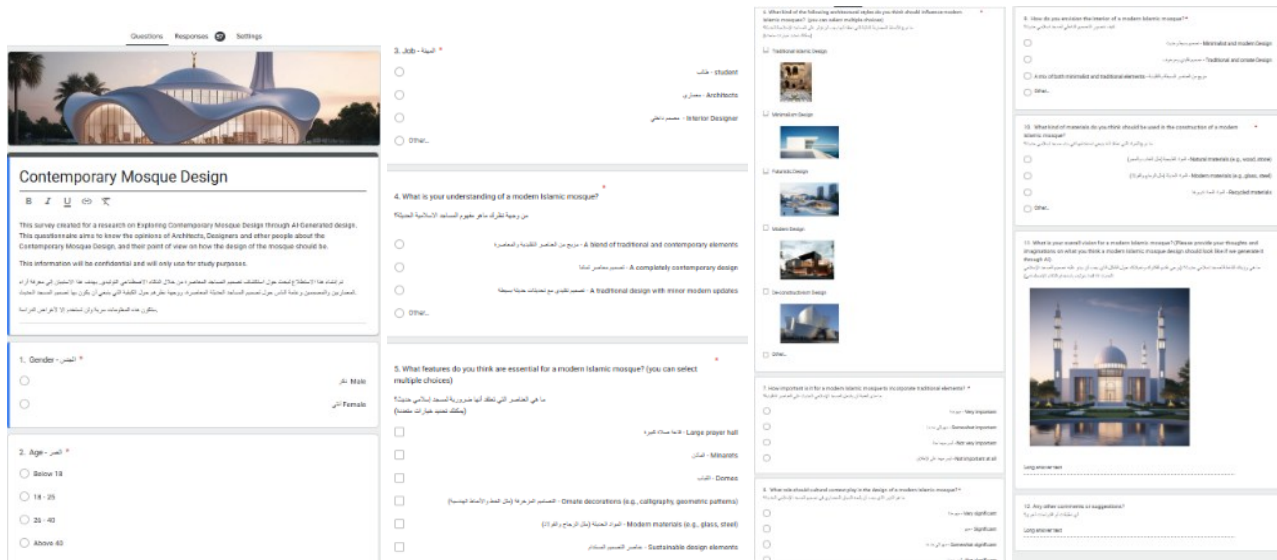


Generate a modern minaret design influenced by Gulf Islamic architecture. Use materials like white stone and brushed metal, integrate laser-cut geometric patterns, minimalist form, and a futuristic but



Appendix D: Survey (1) public awareness of contemporary Islamic Architecture.

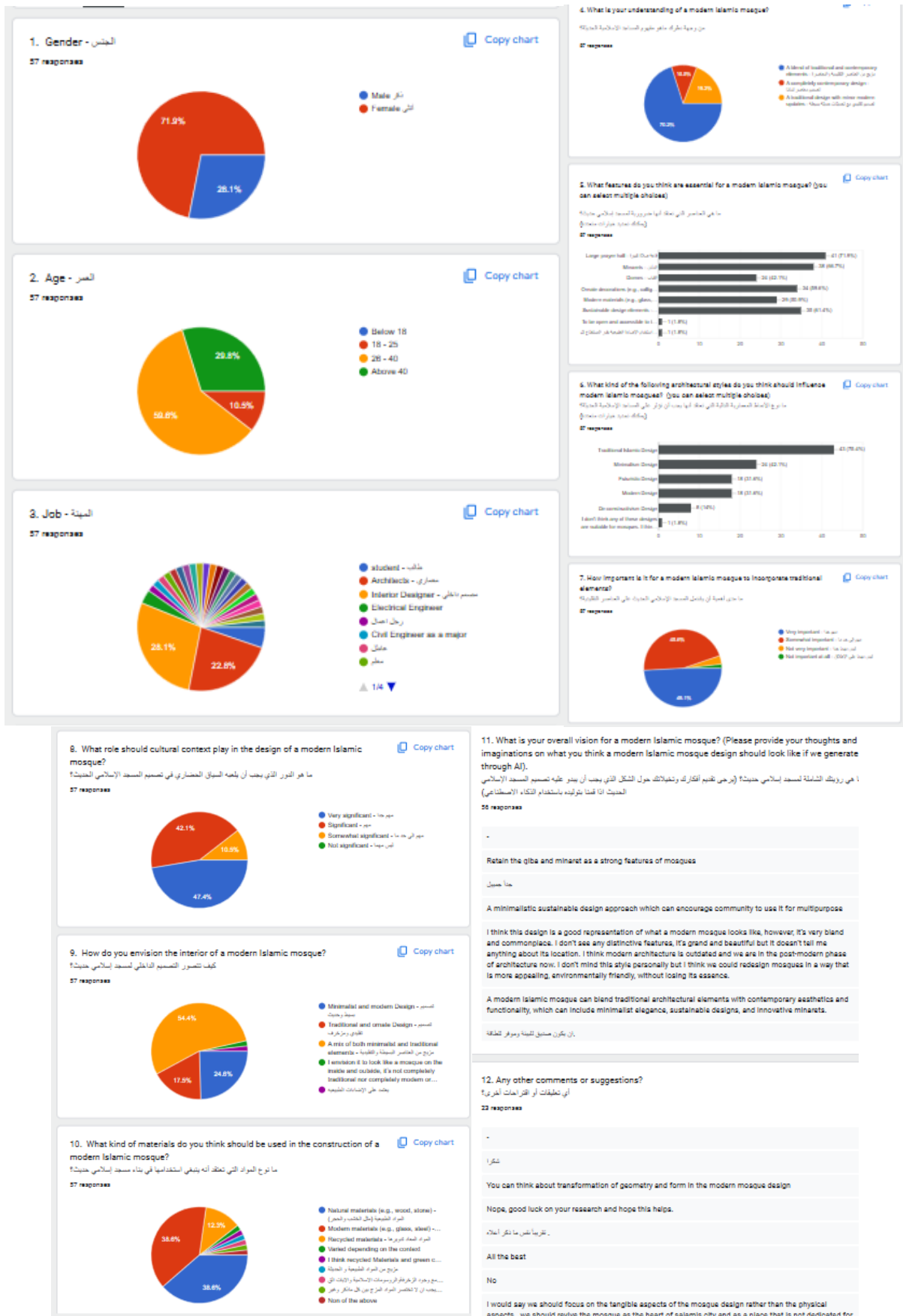
**A Survey aimed to evaluate Public Awareness of Contemporary Mosque Design
(What Do People Know About Modern Islamic Architecture?)**



This survey was created for research on Exploring Contemporary Mosque Design through AI-generated design. This questionnaire aims to know the opinions of Architects, Designers, and other people about the Contemporary Mosque Design, and their point of view on how the design of the mosque should be. This information will be kept confidential and used solely for research purposes. يهدف هذا الاستبيان إلى معرفة آراء. تم إنشاء هذا الاستطلاع لبحث حول استكشاف تصميم المساجد المعاصرة من خلال الذكاء الاصطناعي التوليدي المعماريين والمصممين وعامة الناس حول تصميم المساجد الحديثة المعاصرة، وجهة نظرهم حول الكيفية التي ينبغي أن يكون بها تصميم المسجد ستكون هذه المعلومات سرية ولن تستخدم إلا لأغراض الدراسة. الحديث

1. **Gender - الجنس**
2. **Age - العمر**
3. **Job - المهنة**
4. **What is your understanding of a modern Islamic mosque?**
من وجهة نظرك ما هو مفهوم المساجد الإسلامية الحديثة؟
5. **What features do you think are essential for a modern Islamic mosque? (you can select multiple choices)**
ما هي العناصر التي تعتقد أنها ضرورية لمسجد إسلامي حديث؟
(يمكنك تحديد خيارات متعددة)
6. **What kind of the following architectural styles do you think should influence modern Islamic mosques? (you can select multiple choices)**
ما نوع الأنماط المعمارية التالية التي تعتقد أنها يجب أن تؤثر على المساجد الإسلامية الحديثة؟
(يمكنك تحديد خيارات متعددة)
7. **How important is it for a modern Islamic mosque to incorporate traditional elements?**
ما مدى أهمية أن يشتمل المسجد الإسلامي الحديث على العناصر التقليدية؟
8. **What role should cultural context play in the design of a modern Islamic mosque?**
ما هو الدور الذي يجب أن يلعبه السياق الحضاري في تصميم المسجد الإسلامي الحديث؟
9. **How do you envision the interior of a modern Islamic mosque?**
كيف تتصور التصميم الداخلي لمسجد إسلامي حديث؟
10. **What kind of materials do you think should be used in the construction of a modern Islamic mosque?**
ما نوع المواد التي تعتقد أنه ينبغي استخدامها في بناء مسجد إسلامي حديث؟
11. **What is your overall vision for a modern Islamic mosque? (Please provide your thoughts and imaginations on what you think a modern Islamic mosque design should look like if we generate it through AI).**
ما هي رؤيتك الشاملة لمسجد إسلامي حديث؟ (يرجى تقديم أفكارك وتخييلاتك حول الشكل الذي يجب أن يبدو عليه تصميم المسجد الإسلامي الحديث إذا قمنا بتوليده باستخدام الذكاء الاصطناعي)
12. **Any other comments or suggestions?**
أي تعليقات أو اقتراحات أخرى؟

Survey (1) Results:



Appendix E: Survey (2) Evaluation of AI-generated contemporary mosque.

Section 1 of 3

Evaluating AI-Generated Contemporary Mosque Design

This survey created for a research on Exploring and Evaluating AI-Generated Contemporary Mosque Design. This questionnaire aims to assess how well AI-generated mosque designs reflect Islamic cultural identity, spiritual atmosphere, and architectural authenticity. Your response will help in understanding public perception and improving AI-generated architectural designs.

This information will be confidential and will only use for academic research in The 6th International Conference of Contemporary Affairs in Architecture and Urbanism. Thank you for your time in filling out this survey to help me complete my research successfully.

تم إعداد هذا الاستطلاع لهدف من أهدافه تقييم تصاميم المساجد المعاصرة التي يولدها الذكاء الاصطناعي. يهدف هذا الاستبيان إلى تقييم مدى انعكاس تصاميم المساجد المعاصرة التي يولدها الذكاء الاصطناعي على الهوية الثقافية الإسلامية، والبيئة الروحية، والاصالة المعمارية. هدفنا من هذا الاستطلاع هو فهم تصور الجمهور وتصميم المساجد المعاصرة التي يولدها الذكاء الاصطناعي، وتحسين تصاميم المساجد المعاصرة التي يولدها الذكاء الاصطناعي.

يمكنك إخفاء هويتك، وسيستخدمون فقط لأغراض البحث الأكاديمي في المؤتمر الدولي السادس في الشؤون المعاصرة في العمارة والبيئة الحضرانية.

1.1 Gender - الجنس

Male - ذكر

Female - أنثى

1.2 Age - العمر

Below 18

18-25

26-43

Above 43

1.3 Job - مهنة

student - طالب

Architects - معماري

Interior Designer - مصمم داخلي

General Public - عامة الناس

Other..

1.4 How familiar are you with Islamic architecture?

ما مدى معرفتك بالمعمارة الإسلامية؟

1 = Not familiar - غير مألوف

2 = I have a general understanding but haven't studied it in depth - لدي فهم عام ولكن لم أدرسه بعمق

3 = I have academic or professional expertise in Islamic architecture - لدي خبرة أكاديمية أو مهنية في العمارة الإسلامية

1 2 3 4 5

☆ ☆ ☆ ☆ ☆

Section 2 of 3

Section 2: Evaluating AI-Generated Mosque Designs

Evaluate the following AI-generated mosque design by different AI tools according to the given criteria.
قيم التصميم المعاصر للمسجد الذي يولده الذكاء الاصطناعي باستخدام أدوات الذكاء الاصطناعي المختلفة وفقًا للمعايير المحددة.

2.1 Contemporary mosque design generated by Midjourney

Yes - نعم somewhat - ربما No - لا Not sure - غير متأكد

Architectural Auth...

Spiritual Atmosph...

Cultural Represent...

2.2 Contemporary mosque design generated by Leonardo AI

Yes - نعم somewhat - ربما No - لا Not sure - غير متأكد

Architectural Auth...

Spiritual Atmosph...

Cultural Represent...

2.3 Contemporary mosque design generated by Prisma AI

Yes - نعم somewhat - ربما No - لا Not sure - غير متأكد

Architectural Auth...

Spiritual Atmosph...

Cultural Represent...

2.4 Modern vs. Traditional Design: Do you perceive these mosque designs as traditional, modern, or a mix of both?

التصميم المعاصر: هل تصنف التصميم المعاصر على أنه تقليدي، أم حديث، أم مزيج من الاثنين؟

Traditional - تقليدية

Modern - حديثة

A mix of both - مزيج من الاثنين

Other..

2.5 Emotional Connection: How does the previous design make you feel?

الارتباط العاطفي: ما هو الشعور الذي يولده التصميم المعاصر لك؟

Connected to Islamic heritage - مرتبطة بالتراث الإسلامي

Inspired by innovation - مستوحى من الابتكار

Spiritually engaged - مرتبطة روحيًا

Detached or unfamiliar - منفصلة أو غير مألوفة

Other..

2.6 Which of the previous AI tools generate better results for contemporary mosque design?

أي من أدوات الذكاء الاصطناعي السابقة تولد نتائج أفضل لتصميم المساجد المعاصرة؟

Midjourney

Leonardo AI

Prisma AI

2.7 Suggestions for AI Mosque Design Improvement: What improvements could make AI-generated mosque designs more aligned with Islamic cultural identity and spiritual atmosphere?

التوصيات: ما هي التحسينات التي يمكن أن تجعل تصاميم المساجد التي يولدها الذكاء الاصطناعي تتوافق مع الهوية الثقافية والأجواء الروحية للمساجد المعاصرة؟

Long answer text

3.1 What role do you think AI should play in mosque design?

ما هو الدور الذي تعتقد أن للذكاء الاصطناعي يجب أن يلعبه في تصميم المساجد؟

A tool to assist architects in generating ideas - أداة لمساعدة المهندسين المعماريين في توليد الأفكار

An analytical tool to enhance design solutions - أداة لتحسين الحلول التصميمية

Capable of designing mosques entirely without human intervention - قادرة على تصميم المساجد بشكل كامل دون تدخل بشري

AI has no suitable role in mosque design, it should be solely human driven - لا يوجد له دور مناسب في تصميم المساجد، يجب أن يكون تصميمها بشريًا بحتًا

Other..

3.2 How do AI-generated mosque designs compare to traditional mosque designs in terms of aesthetics, functionality, and spirituality?

كيف تقارن تصاميم المساجد التي تم إنشاؤها بواسطة الذكاء الاصطناعي بتصاميم المساجد التقليدية من حيث الجمالية والوظيفية والروحية؟

Better than traditional mosques - أفضل من المساجد التقليدية

About the same - تقريبًا نفس الشيء

Lower quality than traditional mosques - جودة أقل من المساجد التقليدية

Other..

3.3 What do you believe is missing in AI-generated mosque designs?

ما الذي تعتقد أنه مفقود في تصاميم المساجد التي تم إنشاؤها بواسطة الذكاء الاصطناعي؟

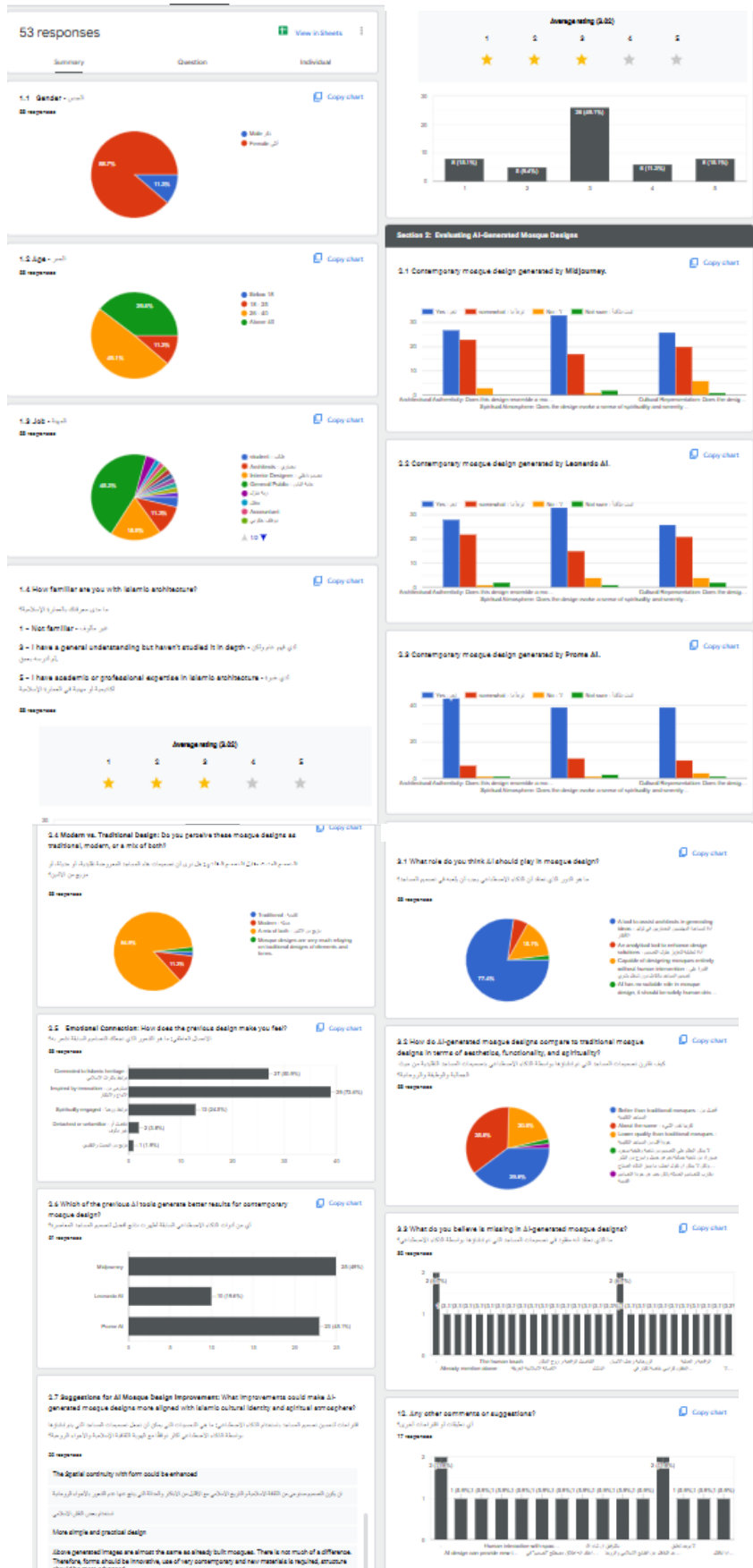
Short answer text

12. Any other comments or suggestions?

أي تعليقات أو اقتراحات أخرى؟

Short answer text

Survey (2) Results:



Appendix F:

Section 1: Consent Statement

I. Consent Statement:

"I voluntarily agree to participate in this study, which aims to assess the impact of artificial intelligence on Islamic architectural design. I understand that my participation includes filling out this survey. I also consent to the use of the data I provide for academic research purposes, with the assurance that all information will be treated confidentially and no personal details will be disclosed."

إقرار بالموافقة: أقر بأنني أشارك طوعًا في هذه الدراسة التي تهدف إلى تقييم تأثير الذكاء الاصطناعي في تصميم العمارة الإسلامية. أفهم أن مشاركتي تتضمن استكمال هذا الاستبيان. كما أوافق على استخدام البيانات التي أقدمها لأغراض البحث الأكاديمي، مع التأكيد على أن جميع البيانات سيتم التعامل معها بسرية تامة ولن يتم الكشف عن أي معلومات شخصية *"

I agree to participate in this study. أوافق على المشاركة في هذه الدراسة.

I do not agree to participate (In this case, you will not proceed with the survey). لا أوافق على المشاركة (في هذه الحالة، لن تكمل الاستبيان).