# Moroccan Design Students Acceptance of AI Tools

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**Abstract**

The article discusses the acceptance of Artificial Intelligence (AI) tools among Moroccan design students in the context of the Technology Acceptance Model (TAM). The mixed-methods research collected data from 37 interior design students from Art'Com Sup, Rabat, using Likert-scale questionnaires and open-ended responses. The qualitative data were processed using sentiment and stance analysis with the help of tools such as Daniel Soper's statistical platform and ChatGPT. The findings reveal a generally positive attitude towards AI, with students embracing it as a "co-creative" partner in ideation, prototyping, and visualization. Despite this enthusiasm, participants were emphatic about the necessity of the "human touch" in interior design and were skeptical regarding the potential for AI to replace human creativity entirely. The study further highlighted several ethical concerns, including those related to copyright, privacy, over-reliance, and transparency. Overall, the research concludes that Moroccan interior design students are open to adopting AI in their designing practices whilst being critically aware of its impact—indicating towards a hybrid model of creativity that requires responsible AI adoption as well as a critically aware pedagogy of design.

**Keywords:** Interior Design, Artificial Intelligence Tools

قابلية طلبة التصميم الداخلي المغاربة لأدوات الذكاء الاصطناعي
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ملخص

يهدف هذا البحث إلى دراسة مدى تقبّل طلاب التصميم الداخلي في المغرب لاستخدام أدوات الذكاء الاصطناعي في ممارساتهم الأكاديمية والمهنية المستقبلية، وذلك من خلال نموذج تقبّل التكنولوجي. اعتمدت الدراسة على منهجية مختلطة، جمعت بين البيانات الكمية باستخدام مقياس" ليكرت "والبيانات النوعية من خلال أسئلة مفتوحة، شملت عينة من 37 طالبًا بمدرسة  في الرباط. تم تحليل الإجابات باستخدام أدوات تحليل المشاعر وتحديد المواقف لضمان دقة النتائج. أظهرت النتائج مواقف إيجابية تجاه الذكاء الاصطناعي، حيث اعتبره المشاركون أداة محفِّزة للإبداع تدعم توليد الأفكار والتصوّر البصري. ومع ذلك، عبّر الطلاب عن تحفظات تتعلق بالجوانب الأخلاقية مثل حقوق التأليف، والاعتماد المفرط، والخصوصية. كما شددوا على أهمية العنصر الإنساني في العملية الإبداعية، ما يشير إلى توجه نحو تبنٍ نقدي ومسؤول للذكاء الاصطناعي في التعليم التصميمي. توصي الدراسة بدمج محو الأمية الرقمية والأخلاقية ضمن مناهج التصميم، وتعزيز ثقافة التفاعل المتوازن بين الإنسان والآلة.

**الكلمات الدالة**: التصميم الداخلي، أدوات الذكاء الصناعي .

## I. Introduction

In recent decades, technology has reshaped the landscape of interior design. As the digital revolution progressed, a new wave of innovation has emerged—Artificial Intelligence (AI). AI, now ever-increasingly present across various industries, promises to redefine the interior design landscape from different angles, including designers' and clients'. This study aims to explore the attitudes and acceptance levels of Moroccan interior design students regarding AI tools, building upon previous research (e.g., Skipworth et al., 2025) based on Technology Acceptance Model (TAM) to assess perceived usefulness and ease of use of AI in interior design study and practice. Through both qualitative and quantitative analysis, this paper investigates how future designers in Morocco perceive integrating AI into their educational and professional practices.

## II. Review of Literature

Technology has shaped interior design in the past decades. Early building technology innovations, such as electric lighting and climate control, offered interior designers a myriad of possibilities. For instance, the prominence of electric lighting in the 19th and 20th centuries transformed aesthetics and space usage by freeing designers from being limited to daylight and gas lamps (Isenstadt, 2018). In the late 20th century, digital revolution led to a paradigm shift. Personal computing and specialized software became part and parcel to interior design. Interior designers made the switch from hand-drafted blueprints to computer-aided design (CAD) software (Aouad et al., 2013). CAD and 3D modelling had become a norm by the 2000s, which allowed designers to create detailed plans and realistic renderings easier and faster in comparison with traditional methods (Demirbaş, 2021).

Further technology development has continued to introduce new interior design tools. 3D rendering and visualization allowed clients to explore proposed designs, and by 2010s, tools such as virtual reality (VR) and augmented reality (AR) made designers-clients communication better than ever. VR enabled clients to get a feel for spaces before the actual building process even started (Top Gun Program, n.d.) Interior design has evolved in parallel with technological advancements—from industrial-era materials to the nowadays cutting-edge technological tools.

### 1. History of Artificial Intelligence

As a discipline, Artificial Intelligence has its roots in the mid-20th century. In 1956, pioneers John McCarthy, Marvin Minsky and others, coined the term "artificial intelligence" during a summer project—they also launched Ai as a formally established field of study (Elliott, 2024). Optimism marked the early phases of AI research in the 1950s and 1960s; programs developed could prove mathematical theorems or play games like checkers, which led researchers to speculate that human level machine intelligence could possibly be achieved in a few decades. However, AI development was not as fast as researchers had hoped, especially due to limited computing power leading to what was known as "AI winter" (Rizvi, 2024), which was marked by reduced funding that halted AI development. In the 1980s, AI resurged again through expert system-rule-based programs for specialized domains- which found commercial use in fields such as medicine and finance. However, with AI winter memory looming around, another slowdown occurred in the late 1980s and early 90s, as those systems proved costly and brittle in practice (Ida, 2024).

Late 1990s and early 2000s witnessed what has been termed AI modern renaissance, driven by improved algorithms, larger datasets, and revolutionary computing powers (Luger, 2021). Several advancements marked this era: IBM's Deep

Blue defeated world class champion in 1997, thus demonstrating AI complex problem-solving capacities and its prospects (Hsu, 2022). In the 2010s, machine learning, deep learning in particular, revolutionized AI. A turning point came in 2012 when a deep neural network achieved superhuman scores in an image recognition competition (Wiggins & Jones, 2023). Fast forward to early 2020s, breakthroughs in natural language processing and generative models have been momentous (Elliot, 2024). For instance, OpenAI's GPT-3 , launched in 2020, contained 175 billion parameters and was capable to generate human-like text (Mucci, 2024). By 2022-2023, generative AI became even more powerful and popular, extending to image creation (e.g. DALL- E, Midjourney). In January 2025, DeepSeek was announced, which is a powerful AI platform that cost a fraction of Open AI's Chat GPT. In a way, DeepSeek has even made AI race even fiercer with a new player in the market (Metz, 2025). Recent years have thus seen an unprecedented development in the field of AI.

## 2. History of AI and Interior Design

From the previous historical account of interior design and technology, it is evident that interior designers have always embraced digital tools. Thus, it is only expected that the field has already begun exploring AI and even adopting it. In the earlier years, AI seemed to have little influence on interior design because the technology was still not mature enough to deal with the complexities of interior design in terms of aesthetics and functionality (Coyne et al., 1990). Early research in AI-aided design dates to expert systems and academic experiments in the late 20th century with practical application remaining highly minimal (Haigh, 2025). Only post-2010 that AI started introducing tools specifically catered for interior design purposes.

A significant area of AI adaptation is generative design and automated space planning. Algorithms that can generate multiple layout options for a given space have been developed. For instance, experimental system can enhance furniture layouts, lighting arrangements, and other aspects by "learning" from datasets. A recent study by Chandrasekera et al. (2024) notes that text-to-image generative AI can serve as a creative co-designer in the early design stages through producing concepts from simple prompts. In practice, mainstream interior design platforms have started incorporating AI feature. For instance, Kujiale is a Chinese interior design platform that offers AI-driven recommendations (Asmedi, 2023). Other popular commercial design tools, such as Homestyler and Planner 5D, have started integrating AI-assisted floor planning, where software can automatically generate room layouts and suggest furniture based on user preferences. These tools embody archetypes of how machine learning can help complete tasks that once took designers hours upon hours of iterative sketching.

Another area of that dominates AI applications in interior design is visualization and customization. Research has shown that over 85% of interior designers who adopt AI use it to for 3D visualization and rendering (Smith, 2024). AI-based renderings can now exploit lighting aspects, realistic materials, contrast, and shadows to a 3D model, or even create entire spaces images from prompts. This accelerates creating client presentations and facilitates rapidly iterating design ideas. Additionally, AI recommendation systems help designers personalize design choices through suggesting colour schemes and furniture selections. Early examples include AI chatbots on design websites that can propose décor items based on user's input, and algorithms that learn from client's Pinterest boards to curate personalized mood boards. While these innovations promise a future where AI is ever improving, AI in interior design practice is still in its infancy. A recent study of interior design practitioners and educators in Austria captured an interesting snapchat of attitudes: it found generally positive towards AI, but a considerably low level of actual uptake of AI tools, with many participants expressing

uncertainty on how to best integrate these tools into their workflow (Skipworth, et al., 2025). This paints a picture of designers cautiously navigating AI applications rather than embracing them fully.

3. **Technology Acceptance Model**

The Technology Acceptance Model (TAM), originally developed by Davis (1989) posits two primary beliefs—perceived usefulness (PU) and perceived ease of use (PEU)— guide a user's behavioural intention to adopt new technology, which in turn serves as predictor of actual system use (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989). This paper defines Perceived Usefulness (PU) as the degree to which an individual believes that using a certain system enhances their job performance. Additionally, perceived ease of use (PEU) refers to the extent to which a system requires less effort (Davis, 1989). Over the years, researchers have extended TAM to TAM2, which factors social influence, job relevance, self-image to better explain technology acceptance across different contexts (Venkatesh & Davis, 2000; Venkatesh, Morris, Davis, & Davis, 2003). Critics have pointed out that TAM has a limited scope and that it largely neglects organizational and external constraints (Benbasat & Barki, 2007; Lunceford, 2009). Despite of the criticism, TAM remains one of the most widely used models in information system research across varied settings (Venkatesh & Davis, 2000; Venkatesh et al., 2003).

**III. Methodology**
1. **Research question :**

The research aims to investigate the acceptance levels of AI tools for interior among Moroccan design students and professionals. This study replicates a study conducted by Skipworth et.al (2025). One question was asked:

*RQ1: What is the acceptance of AI tools for generating interior designs by Moroccan interior design students?*

2. **Survey Questions (Adopted from Skipworth et.al (2025)**

This research study employed a mixed method approach based on Skipworth et.al 2025 to extract qualitative and quantitative data with Likert scale questions and open questions to employ sentiment and stance analysis based on Technology Acceptance Model (TAM). The latter is an approach that aims to investigate people's perceptions and attitudes of future acceptance or refusal to use new technologies (Davis & Granić, 2024). Unlike Skipworth research, the researcher did not include a video of AI tools in interior design to watch prior to answering the survey for two reasons: a) to avoid any biases that might stem from creating a certain mental image; b) the research participants have already been exposed in their respective courses to several examples of AI in interior designs with some students already taken part in AI workshops.

3. **Research Participants:**

This target population of this study was interior design students at Art'Com Sup, Rabat. 37 participants participated in this study, from second year interior design students to fifth year students. Given the limited number of participants, the results of the current study should be read within this specific interior design community rather than being generalizable to the larger local context in Morocco. Using Microsoft Form, data was collected from March 2025 to June. 2025, providing the research participants with a sufficient timespan to answer the survey questions. 89% of the participants were between 18-24 while the rest 10% were between 25-34. 56% of the respondents were third year students, followed by second year students (32%). The remaining 11% were master students between fourth and fifth year.

*Table 1 : Frequencies for What is your age?*

| What is your age? | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 18-24 | 33 | 89.189 | 89.189 | 89.189 |
| 25-34 | 4 | 10.811 | 10.811 | 100.000 |
| Total | 37 | 100.000 | | |

| Table 2: Frequencies for What is your gender. | | | | |
|---|---|---|---|---|
| What is your gender. | Frequency | Percent | Valid Percent | Cumulative Percent |
| Female. | 32 | 86.486 | 86.486 | 86.486 |
| Male. | 5 | 13.514 | 13.514 | 100.000 |
| Total | 37 | 100.000 | | |

| Table 3: Frequencies for What year of study are you in? | | | | |
|---|---|---|---|---|
| What year of study are you in? | Frequency | Percent | Valid Percent | Cumulative Percent |
| Fifth year. | 2 | 5.406 | 5.406 | 5.406 |
| Fourth year. | 2 | 5.405 | 5.405 | 8.108 |
| Second year. | 12 | 32.432 | 32.432 | 43.243 |
| Third year. | 21 | 56.757 | 56.757 | 100.000 |
| Total | 37 | 100.000 | | |

## 4. Engines used in Sentiment and Stance Analysis

To ensure analytical rigor and cross validation of results, the researcher employed two distinct AI tools available: Daniel Soper and Chat GPT. First, sentiment analysis was conducted using the Daniel Soper tool, which provides polarity scores on a scale from –100 (very negative) to +100 (very positive). Another round of sentiment analysis was generated with ChatGpt, which operates on a 0 to 100 positivity scale, where 50 is considered neutral. To draw reliable conclusions, all results were normalized using 0-100 scale. This process enabled the computing combined sentiment scores, thus allowing a balanced interpretation. Finally, the researcher used ChatGpt to conduct stance analysis to categorize participants' positions (e.g., favourable, neutral, or unfavourable) towards integrating AI in design and education. This multi-method approach enhanced the reliability and depth of the data interpretation. Table 3 presents the sentiment and stance analysis.

**Table 4**
*Qualitative questions sentiment analysis and stance analysis of results/comments using AI engines.*

| | Stance analysis of comments | | | Stance Analysis comments |
|---|---|---|---|---|
| | AI engine DanielSoper. com | Chat GPT Analysis | Normalised result outcome of 2 AI engines | |
| What do you think about using AI tools? | Quite positive 54.6 | Very positive 82 | Positive 79.7 | Neutral |
| For what do you think you could use AI tools in interior design practice? | Very positive 85.5 | Moderately positive 67.5 | Positive 82.2 | Neutral |
| Describe why/why not you think designers will be replaced by AI tools in the future | Quite negative - 66.3 | 57.4 neutral to slightly positive | Negative 37.1% | Opposed |

| | | | | |
|---|---|---|---|---|
| How do you think AI tools will help in creative practice? | Slightly positive 16.3 | Strongly positive 77.03 | Positive 67.6% | Favourable |
| How do you feel about that? | Somewhat positive 16.1 | Strongly positive 81.08 | Positive 69.6 | Neutral |
| If you could train AI tools using your designs, resulting in designs that resemble your style, types of materials, furnishings and forms, how might that change your practice | Positive 57.1 | Positive 65.7 | Positive 72.1% | Neutral |
| What ethical considerations do you think need to be addressed when using AI tools? | Somewhat negative -32.2 | Positive 64 | 49% | Favourable |
| Under what conditions do you think using AI tools is acceptable? | Negative -82 | Positive 80 | 44.5% | Favourable |
| Do you think AI can help in learning? | Slightly positive 16.3 | Generally positive 78 | 68.1 | Favourable |

*Note.* This is a note about the table

## 5. Likert Scale rating

The research adopted Skipworth et. al (2023) Likert scale rating interpretation as shown in the table below
**Table 5**

*Likert scale – mean intervals for TAM rating: Technology Acceptance Model (TAM) Likert scale - Mean intervals of acceptance rating*

| Mean Interval | Interpretation |
|---|---|
| 4.5 – 5.0 | Very high |
| 3.5 – 4.49 | High |
| 2.5 – 3.49 | Moderate |
| 1.5 – 2.49 | Low |
| 1.0 – 1.49 | Very low |

*Note.* This is a note about the table

## IV.    Results

## 1.  Perception of AI tools

Unlike Skipworth et al. (2023) original research where 67% of the respondents reported they have used AI tools (81%). This is particularly an important finding to justify the difference in the methodology used in this study (Table 6)

| Do you currently use AI tools? | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| No | 7 | 18.919 | 18.919 | 18.919 |
| Yes | 30 | 81.081 | 81.081 | 100.000 |
| Missing | 0 | 0.000 | | |
| Total | 37 | 100.000 | | |

*Table 6: Frequencies for Do you currently use AI tools?*

2. **Likert Scale Questions:**

Likert scale questions show that students exhibit high acceptance of AI tools in almost all the questions with an acceptable standard deviation. As shown in in table 7, students demonstrated consistently high scores in both perceived usefulness (PU) and perceived ease of use (PEU). The research participants have answered almost unequivocally that they are willing to adopt AI tools in the future with a mean high score on the question *How likely do you think you will use AI tools in the future as part of your interior design practice?"* (M = 4.189, SD = 0.845), with 83.7% of participants selecting "somewhat likely" or "very likely". Following the same trend, the results indicate strongly positive view towards the potential of AI in improving work performance, (M = 3.99, SD = 1.11) and generating meaningful results (M = 3.5, SD = 0.93). Interestingly, the only question where students reported moderate acceptance was "*Do you think AI tools are easy to use*?" (M = 3.083, SD = 1.06). Notably, students expressed optimism towards complex applications of AI tools—such as 3D mesh generation from text prompts—with a mean of 3.541 (SD = 1.1). These findings reflect the initial question of students currently using AI tools and allude to a future with interior designers will incorporate this technology.

**Table 7**
*Likert scale questions – Technology Acceptance Model (TAM) analysis of results*

| Survey Questions | PU/PEU | Technology Acceptance Model (TAM) rating Mean | Acceptance Rating | Standard Deviation (SD) | percentage of Likert answers to Question |
|---|---|---|---|---|---|
| How useful do you think AI tools such as image generation, layout tools and text generation tools would be in your interior design activities? | PU | 4.081 | High | 0.89 | Somewhat useful : 45.9% Extremely useful : 35.1% |
| How likely do you think you will use AI tools in the future as part of your interior design practice? | PU | 4.189 | High | 0.845 | Somewhat likely : 43.2 Very likely : 40.5 |
| How likely do you think using AI tools will improve your work performance? | PEU | 3.99 | High | 1.11 | Very likely: 40.5% Somewhat likely : 29.7% |

| | | | | | |
|---|---|---|---|---|---|
| Do you think AI tools are easy to use? | PEU | 3.083 | Moderate | 1.06 | Very easy : 32.4% Somewhat easy : 32.4% |
| How likely is it that AI tools can give you meaningful results? | PU | 3.5 | High | 0.93 | Somewhat likely : 45.9%    Neither likely nor unlikley : 29.7% |
| How likely is it that AI tools will improve your designs? | PU | 3.541 | High | 0.932 | Somewhat likely : 40.5%    Neither likely nor likely : 27.07% |
| It's expected that future AI language-driven tools will be able to generate 3D meshes for interior design from word prompts, generating designs that haven't existed before. How likely do you think that you would use a tool like this in the future? | PU | 3.541 | High | 1.169 | Somewhat likely : 29.7%;    Neither likley nor unlikley : 27.02% |

*Note.* **This is a note about the table**

## 3. Sentiment and Stance Analysis

### 3.1. AI Acceptance in the Creative Process

Respondents generally demonstrated strongly positive stance toward adopting AI tools in enhancing creative practice. Sentiment analysis revealed high normalized scores (e.g., 82% for AI use in design practice (67.6% for creativity, and 68.1% for learning), with the stance being favourable. Responses showed that students were excited, curious, and open to integrate AI in tasks, such as generating ideas, prototyping, and visualisation. Students responded that AI can be a huge boost to creative process taking the role of a 'co-creator', describing it as 'time-saving' and effective for brainstorming. For instance, one the respondents put eloquently that AI helps them "get out of a creative slump". These findings support previous research that highlights AI's potential to foster creativity by accelerating design iteration and expanding conceptual boundaries (Jiao & Cao, 2024; Kelly et al., 2023).

**Table 8**
*Sample Anonymous Comments: For what do you think you could use AI tools in interior design practice?*

| Student | Sample Comments |
|---|---|
| Student 1 | To generate design concepts, visualize spaces, optimize layouts, and explore materials or color palettes. |
| Student 2 | To get out of an inspiration slump |
| Student 3 | To be open to lots of ideas and get more creative. Personally, I don't think AI stops my thinking or puts me in a box. On the contrary, it opens my eyes |

| | to ideas I never thought were possible. |
|---|---|
| Student 4 | We can use AI tools in interior architecture to get inspiration, to generate an image that can materialize our concept, or to further develop our concept. |
| Student 5 | Managing project timelines, allowing me to focus more on the creative and conceptual aspects of design. |

*Note.* **This is a note about the table**

## 3.2. Human Replacement

In contrast, to the previous findings where respondents showed enthusiasm about the potential implications of AI in interior design, the data presents a situation where Moroccan future interior designers exhibit scepticism and emotional resistance towards the possibility of AI taking over interior design jobs. The normalized sentiment score dropped to 37.1%, and stance analysis revealed strong opposition (table 4). Many participants stated, "AI will never replace human creativity" and emphasized the importance of "the human touch," "empathy," and "cultural understanding" (table 9). Students also acknowledged that AI is bound to change the interior design landscape, emphasizing that designers need to adopt AI before they themselves become replaceable. One student commented, "*AI tools are unlikely to fully replace designers, but they will absolutely change how designers work".* Responses also allude to the idea that as much as AI might pose a threat to designers jobs, it may also be a driver of excellence—one student noted, *"doubt you can be replaced if you're creative enough cause AI will not replace human mind in terms of creativity, i doubt!".*

**Table 9**
*Sample Comments: Describe why/why not you think designers will be replaced by AI tools in the future*

| Student | Comment |
|---|---|
| Student 1 | I don't think AI tools will replace designers because AI tools don't have the logique or the human view to designs projects |
| Student 2 | I don't think designers will be replaced by AI. Design involves emotion, context, culture, and human judgment things AI can't fully understand. AI can assist, but it will never replace the intuition and vision of a real designer. |
| Student 3 | I think it's absolutely not going to replace us, depending on how we use it. We have to be smart, and work WITH IT. Not against it, not 100% ai work, but 80% human work 20% ai work |
| Student 4 | Because designers bring a unique creativity, cultural sensitivity, and emotional insight that AI currently cannot replicate. Also Designers often consider complex social, historical, and personal contexts that go beyond data and logic. Designers have the interaction with clients, understand nuanced needs, and translate abstract ideas into personalized solutions—something AI struggles to do intuitively. |
| Student 5 | AI tools are unlikely to fully replace designers, but they will absolutely change how designers work |

| | |
|---|---|
| Student 6 | Because at the end of the day, it's just Ai and a robot, I dont really know much about that, but I'm just sure that it will not replace designers, and nobody can change my mind 😊 |
| Student 7 | i doubt you can be replaced if you're creative enough cause AI will not replace human mind in terms of creativity, i doubt! |
| Student 8 | i think that AI could not give you an idea without a privious designs so for designers could be more creative than AI |

*Note.* **This is a note about the table**

## 3.3. Ethical Considerations

Concerning ethical considerations, students exhibited a moderately positive sentiment (49%) and the stance was generally favourable (table 4), which suggests caution on rather than complete opposition. Respondents raised alarms regarding AI, mainly copyright issues, privacy, overreliance, and transparency. Students highlighted the risks of using AI-generated content without proper attribution or consent, pointing out that "most of the data AI is powered may be taken from other creators' works. One student commented, *"AI can replicate a style, and that style was initially the result of hard work and dedication from a human being, so it's extremely unfair to use AI to replicate the work of someone who has invested so much effort and time to produce that style"* (table 10).

Others stressed that AI should be cited like any other research tool and warned against its use in ways that undermine human agency. These perspectives echo ethical debates cited by Rezwana and Maher (2023), who identified emerging tensions around authorship, bias, and misuse of training data in creative industries. There was consensus among participants that while AI offers great promise, its application must be transparent, limited, and aligned with principles of fairness and respect for originality.

**Table 10**
*A sampling of anonymous comments: What ethical considerations do you think need to be addressed when using AI tools?*

| Student | Sample Comments |
|---|---|
| Student | We must credit sources, avoid copying other people's work, and be honest about AI use |
| Student 2 | Bias in data, privacy concerns, and the potential for job displacement are to me some key ethical considerations. |
| Student 3 | AI tools must be used responsibly by ensuring fairness, transparency, privacy, and accountability to prevent harm and uphold human values |
| Student 4 | Remember, AI is just a tool. People should still make the final choices. |
| Student 5 | Making sure to not let it minimize the value of efforts made by human. Because AI can replicate a style, and that style was initially the result of hard work and dedication from a human being, so it's extremely unfair to use AI to replicate the work of someone who has invested so much effort and time to produce that style. |

| Student 6 | I think it's important to address things like plagiarism, over reliance, and losing originality. We need to make sure ai helps us, not replaces our thinking or creativity. |
|---|---|

## V.  Conclusion

This study has examined Moroccan interior design students' attitudes toward integrating Artificial Intelligence (AI) tools within their field, using the Technology Acceptance Model (TAM). The findings reveal a predominantly positive stance among students toward AI adoption, with high levels of perceived usefulness (PU) as well as moderate to high levels of perceived ease of use (PEU). Students especially acknowledged AI's value in epitomising the different design processes, which aligns global trends observed in similar studies (e.g., Skipworth et al., 2025; Smith, 2024).

However, this enthusiasm for AI does not translate into unquestioned acceptance. A key contribution of this paper is capturing the intricately nuanced balance between excitement for AI's potential and concerns regarding its intermediate as well as long term drawbacks. While students perceive AI as a powerful 'co-creative' tool that may expand their conceptual boundaries and aid in the technical part, they remain reservedly cautious about its ability to replicate the human dimensions of design. Emotional intelligence, cultural sensitivity—qualities central to interior design—were repeatedly cited as difficult or even impossible to replace by AI powered tools. This echoes broader scholarly debates around human-AI collaboration rather than substitution in creative industries (Rezwana & Maher, 2023).

The paper also discussed ethical concerns, particularly regarding authorship, data ownership, and originality. Respondents largely stressed that AI adoption needs to be transparent and responsible. Many expressed rather uneasy views about the potential for plagiarism and algorithmic bias in diluting interior design practice, hence pulling the rug from under human interior designers.  These concerns suggest a need for critical design pedagogy where interior designers not only are technologically proficient but also ethically motivated.

In sum, this research illustrates that Moroccan interior design students are not only ready to embrace AI, but are also critically engaging with its implications and are actively developing a certain sensitivity towards its 'ramifications'. Their views underscore a remarkably generational shift toward a hybrid model of creativity—one that combines human intuition and machine intelligence. While the small sample size limits the generalizability of these findings, the study nevertheless offers valuable insights for educators, policymakers, and industry stakeholders aiming to foster responsible AI adoption in interior design education and practice, paving the way for a safe and inclusive integration. Future research could extend this work by including professional designers and educators in broader contexts.

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# Appendix

*Appendix A: Survey*

| Question Number | Question |
| --- | --- |
| Q1 | Do you agree to participate in this study? |
| Q2 | What is your email address? |
| Q3 | What is your age? |
| Q4 | Select the category that describes how you spend most of your time. |
| Q5 | What year of study are you in? |
| Q6 | How many years have you been an educator in interior design? |
| Q7 | How many years have you been practicing Iinterior design? |
| Q8 | What is your gender? |
| Q9 | How useful do you think AI tools such as image generation, layout tools and text generation tools would be in your interior design activities? |
| Q10 | How likely do you think you will use AI tools in the future as part of your interior design practice? |
| Q11 | How likely do you think using AI tools will improve your work performance? |
| Q12 | Do you think AI tools are easy to use? |
| Q13 | . How likely is it that AI tools can give you meaningful results? |
| Q14 | How likely will designers be replaced by AI tools in the future? |
| Q15 | It's expected that future AI language-driven tools will be able to generate 3D meshes for interior design from word prompts, generating designs that haven't existed before. How likely do you think that you would use a tool like this in the future? |
| Q16 | What do you think about using AI tools? |
| Q17 | Have you used AI-tools to date in your studies/teaching or practice? |
| Q18 | . For what do you think you could use AI tools in interior design practice? |

| Question Number | Question |
|---|---|
| Q19 | Do you think that AI tools are creative? |
| Q20 | Do you currently use AI tools? |
| Q21 | Which tools do you use? |
| Q22 | Are they easy to use? |
| Q23 | How likely is it that AI tools can give you meaningful results? |
| Q24 | How likely is it that AI tools will improve your designs? |
| Q25 | Describe why/why not you think designers will be replaced by AI tools in the future |
| Q26 | Do you think AI assisted designs look professional? |
| Q27 | Do you think you can learn or teach concepts using AI tools? (0 point) |
| Q28 | How do you think AI tools will help in learning? |
| Q29 | How do you think AI tools will help in creative practice? |
| Q30 | How do you feel about that? |
| Q31 | Do you think that using AI tools in your design process is cheating? |
| Q32 | Is it stealing? |
| Q33 | What ethical considerations do you think need to be addressed when using AI tools? |
| Q34 | If you could train AI tools using your designs, resulting in designs that resemble your style, types of materials, furnishings and forms, how might that change your practice? |
| Q35 | Under what conditions do you think using AI tools is acceptable? |

*Note.* **This is a note about the table**