

Rethinking the role: The evolving role of the fashion designer in response to the increasing use of AI and generative design tools.

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Abstract

According to McKinsey's The State of Fashion: Technology (2022), up to 25 percent of the potential of AI in fashion lies within the creative domain. Technological advancements have continuously reshaped the creative and operational landscape of fashion, but the rise of AI represents a distinct turning point. Since the introduction of widely accessible generative AI tools like ChatGPT in 2023, fashion businesses have rapidly adopted algorithmic systems for design, curation, and consumer engagement.

AI is being deployed to address the choice overload in online fashion shopping, using tools like smart curation, content generation, and improved search functions. With the integration of artificial intelligence into the fashion industry, the role of the fashion designer necessitates redefinition and raises a critical question: Does the incorporation of AI into the design process enhance creative potential, or does it risk constraining design outcomes to more standardized, centralized, and derivative forms?

This paper examines how technology and AI are simultaneously diversifying and centralising fashion processes, and investigates the evolving role of the designer within this shift. The scope of this paper is to critically explore these dynamics and their implications for the future of fashion.

This paper adopts a mixed-methods approach. The secondary research component involves the analysis of global adoption statistics, economic forecasts, and innovation trends within the fashion industry, while the primary research draws on interviews and experimental studies conducted with 4th and 3rd-year Fashion Design Bachelor's students, from ATLAS Skilltech University, Mumbai, selected for their digital nativity and high engagement with emerging technologies.

This paper studies the role of technology in design and thereby offers critical insights and a foundation for future studies on balancing human creativity with algorithmic intelligence in fashion, and hopes to answer the question: Is AI augmenting human creativity and strategic thought, or is it centralising decision-making and eroding the designer's agency? By doing so, it aims to investigate whether AI fosters creative diversity and how both consumers and designers perceive its integration.

Keywords: Technology in fashion, AI, Trends, Innovation, Algorithmic Curation, Generative AI, Creative Augmentation, Fashion Technology Ethics

INTRODUCTION

“AI is like a highly intelligent assistant that allows us to focus on the artistic aspects while it handles data analysis, trend predictions, and other time-intensive tasks,” notes Indian fashion designer Amit Agarwal.

As industries continue to adopt automation at scale, this shift raises an important question echoed by David Lauren, Innovation Lead at Ralph Lauren: “The jobs that really need creativity, empathy, judgment ... those are still human-led.”

The authors of this paper question- how true does this remain in an era where AI increasingly directs designers through data, offers unlimited iterations, and contributes to a growing sense of choice overload? Under constant pressure to deliver what is trending, how much creative freedom do designers still retain?

Fashion companies are implementing digital tools across supply chains to enhance planning, reduce waste, and improve responsiveness to demand. McKinsey forecasts a 118 percent increase in cash flow for companies embedding AI into their business models by 2030, while those that delay risk a 23 percent decline. The rapid integration of Artificial Intelligence (AI) into the fashion industry is reshaping creative, operational, and consumer-facing processes at an unprecedented pace. As AI becomes more accessible, its applications now span nearly every aspect of the industry—streamlining operations, predicting trends, enhancing customer experiences, and even assisting with design (LIM College, 2024).

On the consumer end, the industry is rapidly moving toward hyper-personalization, with AI shopping agents learning individual tastes, styling full outfits, and completing purchases autonomously (Butler-Young & Baskin, 2025). More broadly, the fusion of fashion and technology is widely recognized as unlocking a new era of innovation, efficiency, and sustainability (Priya, 2025). This technological momentum accelerated further during the COVID-19 pandemic, when investment in fashion-related technology surged by 66 percent, reaching US\$16.2 billion among the top 50 investments (The Business of Fashion & McKinsey, 2022; Computer Weekly).

Yet despite this rapid growth, current AI-driven design tools remain limited in scope. Only nine AI-based design-generation solutions have been developed so far, with most focused narrowly on trend analysis and automatic image generation (Choi et al., 2023). Still, predictions indicate a far more transformative shift ahead: AI will soon be able to generate diverse and expansive design concepts from specific inputs or constraints, dramatically expanding the creative possibilities available to designers (Metaverse Fashion Council, 2024).

Against this backdrop, the present study investigates how emerging designers, specifically fashion students, are engaging with AI within their design processes. By examining these early interactions, this research aims to understand how AI is beginning to redefine creative workflows, influence aesthetic decision-making, and shape the future role and agency of the designer in an increasingly digitized fashion ecosystem.

LITERATURE REVIEW

Technology as a transformative force in fashion

The fusion of fashion and technology is unlocking a new era of innovation, efficiency, and sustainability. (Priya, 2025) The AI in the fashion market has witnessed exponential growth, valued at USD 1.75 billion in 2024, and forecasted to surge to USD 26.22 billion by 2032, representing a CAGR (Compound Annual Growth Rate) of nearly 40.3% (SNS Insider, 2025). Conversely, those that delay in digitising could see a 23 % relative decline. (McKinsey & Company, 2022). This growth is largely because of AI being used for data analysis and design automation, speeding up the creative process.

This offers potential to fashion companies to serve customers better while also creating a more efficient, responsive, and responsible business. (McKinsey & Company, 2022)

It also raises questions of ethics. When designers start second-guessing bold ideas because the data says no, that's a level of brand-identity abdication that should strike fear into a generation of creatives. (The Interline, 2025)

The Rise of Artificial Intelligence in Fashion

Artificial Intelligence is the ability of computer systems to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and decision-making. And today, it is rapidly taking over the fashion industry. In a 2024 survey of BoF-McKinsey State of Fashion 2024 Executive Survey, 73 % indicated generative AI will be a key priority in the coming year, and 62 % said their companies already use generative AI, for example, in product descriptions, online shopping assistance, or design/product development. (McKinsey & Company, 2024) Embracing AI as a part of your business is no longer an option; if you want to survive in the cutthroat market, embedding it is mandatory. “Retail and fashion companies that fail to embrace AI likely risk losing their current market share or, worse, going out of business altogether.” (ArentFox Schiff LLP, 2023)

AI in Fashion Design and Forecasting

Artificial intelligence (AI) has significantly transformed fashion design and forecasting by introducing data-driven precision and efficiency. AI models trained to recognize fashion images can now categorise attributes such as fabric textures, silhouettes, and design details—helping brands identify emerging trends faster than ever (Xu et al., 2021). This is aiding in refining previous unfiltered data of customer preferences and buying habits.

Through such technologies, fashion forecasting has evolved from manual observation to real-time data analysis, providing insights into consumer preferences, purchasing behaviour, and cultural shifts (Heuritech, 2023).

Beyond forecasting, AI is also being applied to garment development itself, simulating human design logic to create prototypes and generate new collections (Choi et al., 2023).

Applications like CLO3D, a professional-grade 3D fashion design software used to create realistic, virtual garment prototypes, enable fashion designers and students to creatively and quickly visualise their designs on digital avatars, reducing the need for physical prototyping. Such software helps to accelerate the design process and helps reduce the carbon footprint for designers. In academic scenarios, it allows students to better visualise their designs, figure pattern making, and how their 2D illustration will actually form in 3D.

Moreover, the integration of AI into the design process allows users to visualise, modify, and predict outcomes with unprecedented speed, making the creative workflow more streamlined and market-responsive. This is today possible with the help of startups such as Alle, Acloset, GlanceAI, RalphAI, and more such upcoming tech platforms. This convergence of human creativity and machine intelligence blurs traditional roles; designers can collaborate with algorithms to explore styles or even use AI to recommend fabrics and colour palettes. This can be seen in luxury conglomerates such as Gucci and Prada, which are deploying customised trend analysis to curate data-designed collections. As Koh (2025) envisions, consumers may soon be able to photograph a look they admire, have AI identify the style, locate similar items across retailers, and facilitate the purchase all within moments.

Together, these innovations illustrate how AI is reshaping fashion's creative and commercial ecosystem, balancing intuition with intelligent computation.

The Designer's Role in the Age of Generative Systems

The designer's role is evolving and being challenged daily. From being pioneers in the chain, they are now dictated by trend. A report by McKinsey & Company found that 75 % of fashion executives said they planned to prioritise data-driven planning and forecasting tools in 2025. Brands like H&M and Zara have built their USP around using AI to deliver a trend at the fastest speed. Even fashion houses from the capitals, like Gucci and Prada, use AI as creative agents in their design process.

Table 1. Brands using AI tools

Sr.no	Brand & Country	AI Application	Key Insight / Source
1	Zara (Spain)	Uses AI-driven demand forecasting & inventory analytics across thousands of stores to restock quickly and sell more at full price. (SmartDev)	Example: AI helps up to ~85% of items sell at full price. (SmartDev)
2	H&M (Sweden)	AI analysing sales, social media, weather, events + optimizing fabric cutting to reduce waste and improve stock alignment. (Ayna)	Supports sustainability and better demand matching.
3	Moncler (Italy)	Collaborated with AI studio to co-create a collection (AI-generated patterns + artistic elements) blending with craftsmanship. (DigitalDefynd Education)	Shows how luxury brands are experimenting with design-AI combinations.
4	Gucci (Italy)	Uses AI and creative agency for interior store design, trend predictions, and generative design tools. (Blog MBADMB)	Demonstrates AI beyond apparel design – in brand environment & experience.
5	Prada (Italy)	Uses AI for targeted marketing & trend prediction, merging heritage aesthetic with data-driven insights. (Blog MBADMB)	Shows how high-luxury brands adopt AI for personalization.
6	Balmain (France)	Employed virtual supermodels and 3D digital renderings in campaigns (AI/CGI models) to present collections. (Dream Farm Agency)	Illustrates the use of AI/CG for visual representation and brand storytelling.
7	Levi's (USA)	Using generative AI for denim prototyping and product development to respond faster to customer preferences. (Glance)	Example of a mid-market brand using AI for design agility.
8	American Eagle Outfitters (USA)	Deployed AI for inventory optimisation and distribution centre fulfilment with robots & analytics. (Glance)	Highlights supply-chain efficiency through AI.
9	U.S. Polo Assn. (USA)	Integrated AI-driven search and discovery on e-commerce, improving online user experience. (Glance)	Shows AI in enhancing the digital shopping interface.
10	Mi Arcus (India)	Partnered with “Fynd Create” AI platform for trend research and design acceleration – reported ~35% cost savings. (fynd.com)	Example from India: smaller brand leveraging AI for design & cost efficiency.

11	Ajio (India)	Uses AI-powered visual search (via ViSenze) to enhance online shopping on its platform. (ViSenze (a Rezolve Ai Company))	Shows AI in Indian fashion retail for visual commerce.
12	Bata (India)	Deployed AI video analytics in-store for staff and merchandise operations (emotions chart, audience segmentation). (indiaai.gov.in)	Shows AI for offline retail operations in the fashion/apparel sector in India.

AI and Students

Generative AI was popularised in late 2022, and since then, it's been a rising trend in each field. ChatGPT was launched in 2022 and gained 1 million users in the first 5 days, making it the fastest-growing consumer application in history at the time. In a controlled ideation study, 73.3% of fashion students said ChatGPT contributed to “information variety,” while 63.3% attributed it to “design-idea generation” (Cai, Msafiri, & Kangwa, 2024). Similarly, Polimoda students reported that AI helps them “create imagery for sketches and moodboards ... to visualize laser-cut leather” (Polimoda, 2025).

Global Adoption, Innovation, and Industry Trends

Investment in technology across fashion companies has been steadily increasing. In 2021, fashion brands invested between *1.6 and 1.8 percent of their revenues in technology*, and by 2030, this is expected to rise to *3.0–3.5 percent* (McKinsey & Company, 2022). These investments show how digital tools and AI are becoming core to design, production, and consumer engagement. The *State of Fashion 2024* report also notes that brands adopting advanced data analytics and AI-driven strategies are likely to gain higher profitability and stronger adaptability in uncertain markets (McKinsey & Company, 2024).

Innovation in fashion is not limited to design or commerce; it also supports cultural and archival development. The University of Alabama is converting its static repositories of archival fashion data into digital searchable libraries, Fashion Archive, by scanning 3D modelled garments, capturing data on colour, textile, and analysing this data using Meta AI to improve discoverability. Augello and Terragni (2025) discuss the *Digital Caveau* at the

Fondazione Antonio Ratti, which digitized historical textile archives to make them accessible to researchers and designers. They explain that “users can view spreads with pieces side by side... and flick through the pages,” showing how digital tools preserve creativity while improving accessibility (Augello & Terragni, 2025).

Ethical Considerations and Creative Agency

In essence, fashion technology is not merely shaping the future of fashion but also making it more accessible and exciting for everyone, enhancing the availability of goods and services from manufacturers and retailers (Soliwal, 2024). For instance, Zara’s AI-integrated inventory management system ensures that garments are restocked based on real-time consumer demand, improving accessibility and reducing waste. Similarly, Levi’s AI-based fit recommendation tool helps customers find accurate sizes online, enhancing user experience while minimizing returns. This decreases the possibility of a wrong purchase and hence helps reduce waste production.

However, the exponential rate at which AI is advancing raises pressing questions about ethicality, legality, and originality. “Fairness and bias mitigation in AI are not just technical challenges but ethical imperatives. Ensuring that AI systems operate equitably is essential for building trust in AI technologies and harnessing their potential for positive societal impact” (The Interline, 2024).

As AI becomes increasingly embedded in fashion processes, it brings forth a unique set of ethical challenges, including concerns about privacy, job displacement, bias perpetuation, and the sustainability of AI-driven systems (Riviste di Firenze University Press, 2024). For example, AI-based hiring tools in fashion retail have been criticized for reflecting algorithmic bias, and automated design systems risk undervaluing creative human labor.

“These AI platforms use the brand's own data to train models instead of public datasets that are less bespoke and can lead to copyright issues” (Vogue Business, 2023). This shift toward proprietary datasets, such as those used by Gucci’s AI-driven personalization platform, helps maintain creative integrity while avoiding copyright violations and plagiarism concerns.

RESEARCH OBJECTIVES

Through this study, the authors attempt to:

1. Examine how generative AI is reshaping the creative role and agency of emerging fashion designers.
2. Identify which stages of the design workflow (research, ideation, visualisation, prototyping) are most impacted by AI.
3. Explore whether AI functions more as a collaborator/assistant or as a centralizing force that standardizes design outcomes.
4. Evaluate how AI influences aesthetic decision-making and the preservation of personal design identity.
5. Document the key benefits and challenges students face when integrating AI into their design process (creative, technical, ethical).
6. Understand whether AI accelerates or impedes skill development, creativity, and learning in fashion education.
7. Assess designers' perceptions of AI's future impact on design jobs, creative autonomy, and industry workflows over the next 5–10 years.

METHODOLOGY

For this research paper, a mixed-method approach has been adopted. Secondary research provides a comprehensive understanding of the evolution of the utilisation of I in fashion and its impact on the fashion industry's creative landscape globally. This is followed by a two-stage primary research that incorporates both interviews and surveys. By integrating these research methods, this study ensures a well-rounded analysis of the role of AI in fashion, balancing industry exposure with consumer perspectives.

Primary Research:

Data Collection & Analysis - To gain firsthand perspectives, both qualitative and quantitative research methods were employed.

Qualitative Research: Interview

- (i.) Sample size: 5 interviewees - focus group
- (iv.) Method: online video conference

(v.) Analysis: To understand how the use of AI has shaped the collection of a group of final year fashion design students.

Quantitative Research: Survey

(i.) Sample size - 50

(ii.) Place: Mumbai

(iii.) Method: Multiple choice survey circulated using Google Forms

(iv.) Analysis: Through pie charts and graphs

(v.) Sampling technique: convenience sampling

(vi.) Sample definition: A structured questionnaire was distributed to third and final-year fashion design students at ATLAS SkillTech University to understand how they used digital and AI tools during the development of their design collections.

The survey aimed to assess the influence of AI on their ideation, visualization, workflow efficiency, creativity, and design decision-making. The responses provide key insights into how emerging technologies are shaping the academic design process and the evolving role of AI in fashion education.

FINDINGS

Table 2. Focus group of final year fashion students

Question	Respondent 1 — Diya Thakkar	Respondent 2 — Megha Soni	Respondent 3 — Gargi Kulkarni	Respondent 4 — Yashvi Agarwal	Respondent 5 — Meher Aibara
Q1. Briefly describe your thesis project & core concept	Kinetic origami: silhouettes derived from body hinge/bending points; structural + Tokyo streetwear aesthetic; fabrics: denim, felt, experimental variants.	Rewearable Indian bridal trousseau: blend linen & silk properties to create modular, repurposeable bridal pieces.	“God?” — 7-look menswear investigating theism vs atheism across 3 sections (creation, evolution/intelligent design, belief); suiting fabrics, spray paint, embroidery/print.	Bhutan-inspired reversible suiting collection: one side shows Bhutan, the reverse shows travel narrative; Bhutan color palette and embroidery.	Fashion as rebellion: punk + Victorian influences; graffiti/Basquiat-inspired palette and silhouettes.

Q2. Used digital/AI tools? Which?	Yes — Gemini (image gen for visuals), ChatGPT (brainstorming fabric variants).	Yes — Gemini for visualization and quick idea generation.	Yes — ChatGPT (research prompts), Gemini (swatches, visualizations) ; plans to use CLO3D for patterns.	Yes — ChatGPT for concept writing & references; Gemini for croquis/visuals.	Yes — AI for swatch ideas and artist/color analysis; ChatGPT & Grammarly for writing/grammar.
Q3. How did tools influence ideation/research? Visualization or prototyping?	Visualization: used AI to place garments on croquis to see iterations; helped with illustration.	Visualization: helped imagine results before physically making; quick visual feedback.	Research: ChatGPT for references (esp. Indian theology); Gemini for swatches and visualization on figures; plans CLO3D for patterning.	Research & visualization: quick Bhutan refs; used AI for croquis and concept drafting.	Visualization & analysis: swatch ideas, color/artist analysis; writing help.
Q4. Has AI changed your design thinking vs traditional methods?	Yes — clarifies scattered ideas and gives direction; speeds ideation but can box you in if overused.	Yes — lets me see results quickly and shape decisions earlier; helps focus.	Partly — helped structure research, but prompting issues limited depth; useful as a starting point, but human judgment required.	Yes — speeds research and ideation; clarifies direction for scattered thinkers.	Mixed — helpful for ideation and analysis, but over-reliance can limit original thinking.
Q5. Does AI enhance or limit creative expression? Why?	Enhances (clarifies & visualizes) but can limit if over-relied upon (boxes thinking).	Enhances — quick visualization and interpretation of concepts.	Both gave useful direction and swatches, but also produced generic outputs and sometimes boxed creative exploration.	Enhances — helps filter/structure ideas; can limit if prompts are poor or if one becomes dependent.	Both — helps generate options/analysis but can constrain original, tactile experimentation.
Q6. Has AI influenced aesthetic/design direction unexpectedly? How to balance personal identity?	Yes — AI visuals influenced some iterations; balanced by	Yes — helped clarify styling/rewear ideas; would adapt AI ideas to personal	Yes — executed 3 AI-generated swatches; balances by using AI as a	Yes — AI shaped some croquis/visual directions; balances by iterating and	Yes — AI gave swatch ideas and color analyses; balances by integrating and

	using AI as a tool, then reasserting personal control.	aesthetic.	starting reference and modifying outputs.	applying own judgment.	reworking outputs physically.
Q7. Has AI made the process faster/efficient?	Mostly yes — faster visualization and ideation; can also create decision overload if too many options.	Yes — speeds imagining and drafting; helps when you need quick results.	Partly — faster for some tasks (swatches, research), but prompting/time to refine can slow things.	Yes — research and drafting much faster; occasional slowdown from refining prompts.	Yes — speeds parts of the workflow (swatches, writing), though physical experimentation is still needed.
Q8. Challenges/frustrations with AI tools	Prompting accuracy; AI inserting unintended creativity; compositing artefacts in images.	The risk of too many ideas is confusing; it depends on prompt precision.	Difficulty prompting; generic answers for niche (Indian theology); imperfect image compositing; paid tools are expensive.	Prompt skill barrier; AI can box thinking; need two-step verification for facts/outputs.	Over-reliance can limit original thought; some AI outputs feel generic; access/cost concerns.
Q9. Has AI helped you learn new skills or think differently?	Yes — learned origami/technical terms from AI summaries; clarified methods and folding terminology.	Yes — saw simpler design solutions that work; learned rewear/styling ideas from AI examples.	Yes — discovered swatch and visual ideas; used AI to test philosophical visualizations.	Yes — faster access to references and writing formats; improved ideation habits.	Yes — analysis of artist color choices and improved writing with AI tools.
Q10. Do you see AI as a collaborator, assistant, or threat? Impact in 5–10 years?	Collaborator/assistant — will automate backend tasks (patterning, 3D); humans remain essential for empathy/ideation.	Assistant/collaborator — will save time on technical steps; may replace some routine roles, but not human creativity.	Assistant/collaborator with threat potential — could replace repetitive jobs; trend cycles expected. AI is also like a trend, and at the end of the century, in 20 years, people	Assistant/collaborator — will help non-designers create designs; backend automation likely; human input still vital.	Collaborator/assistant — depends on human prompting; AI augments workflow but needs human curation.

			will again want human designers.		
Q11. Would you continue using AI in future projects? If so, how?	Yes — for visualization, brainstorming, and research; combine AI with physical iteration.	Yes — for drafting, visualization, and concept-testing; integrate with physical design.	Yes — for swatches, references, initial visualizations; plan to adopt CLO3D + generative tools.	Yes — for quick references, croquis, and concept text; use selectively.	Yes — for swatch ideation, analysis, and writing help; use as an AI, not a replacement.
Q12. Advice to peers exploring A: anything surprising discovered?	Advice: use AI to clarify ideas but avoid over-reliance; learn prompting and verify outputs. Surprise: realistic video and convincing mockups are possible.	Advice: use AI early for research/visualization, but combine with your own ideas; simple designs can be powerful (surprising).	Advice: learn prompting, verify sources, use AI as a starting point; surprise: useful swatches & novel combos from Gemini (plus limits on Indian-theology depth).	Advice: use AI as a tool + limit usage; two-step verification; surprise: how fast AI drafts concept text & realistic visuals.	Advice: combine human ideation with AI iteration; don't outsource original thinking; surprise: AI can generate convincing visuals and novel combinations.

Final lineup of the respondents in the focus group.

Final lineup of Respondent 1- Diya Thakkar



Fig. 1 Kinetic Origami: Urbanised

Final lineup of Respondent 2- Megha Soni



Fig. 2 Beyond the Rasams

Final lineup of Respondent 3- Gargi Kulkarni

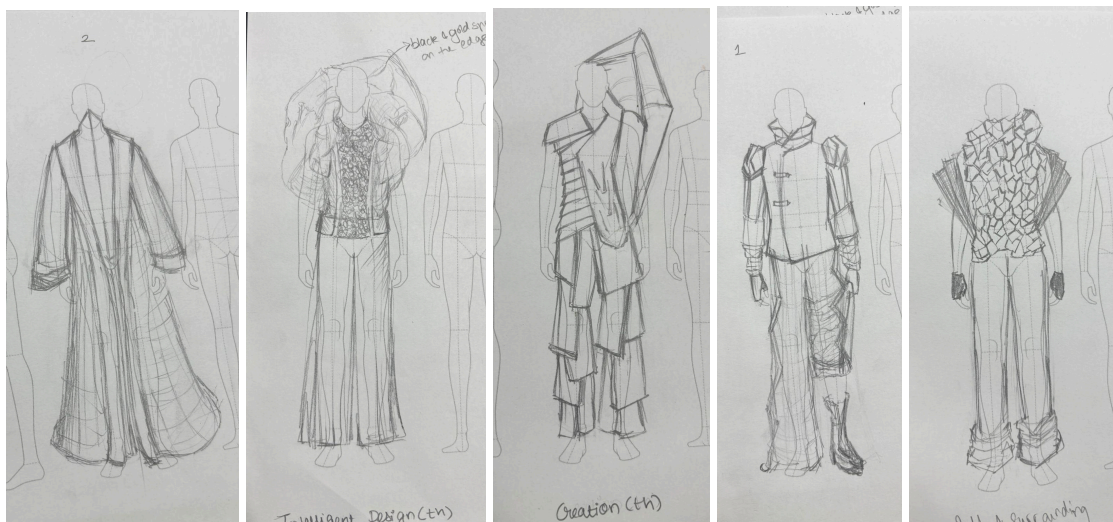


Fig. 3 GOD?

Final line up of Respondent4- Yashvi Agarwal



Fig. 4a Inside Out



Fig. 4b Inside Out (reverse side)

Final lineup of Respondent 5- Meher Aibara



Fig. 5 Quebarda

Quantitative Analysis:

A questionnaire was circulated to 50 students of ATLAS SKilltech University, BA Fashion Design, after the focus group, to understand how they are applying AI in their process.

Q1. What areas of fashion are you working in?

Categories
50 responses

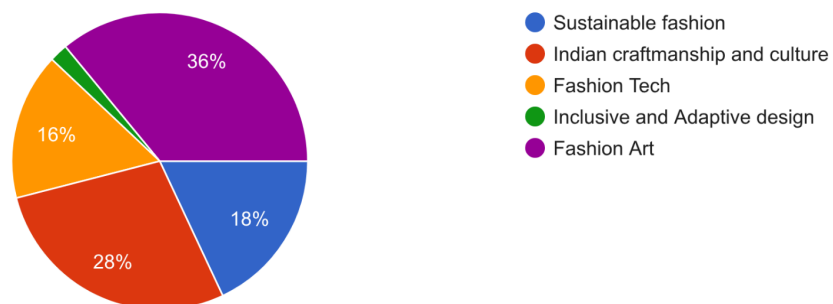


Fig. 1 Fashion Areas

The respondents are working in various aspects, with 36% working in the direction of Fashion Art.

Q2. What category of fashion are you designing for?

Category
50 responses

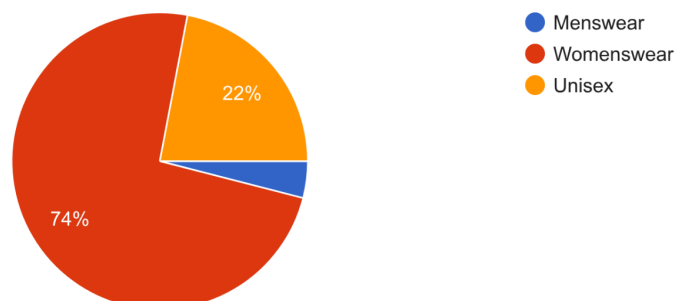


Fig. 2 Fashion Categories

A majority of 74% respondents are making womenswear.

Q3. Did you use any digital or AI tools in the making of your final collection?

Did you use any digital or AI tools during the making of your final collection?
50 responses

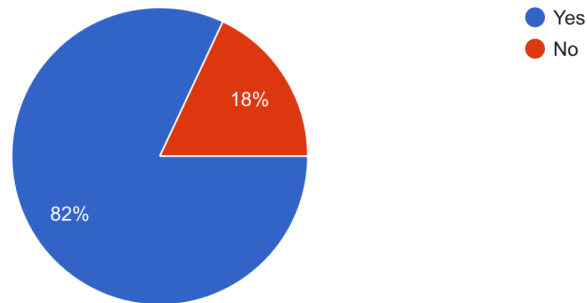


Fig. 3 Usage of AI tools

82% respondents used AAI-based tools in the making of their final collection, showcasing a lot of acceptance towards technology.

Q4. Which AI tools did you use in the making of your collection?

If yes, which tools did you use?
50 responses

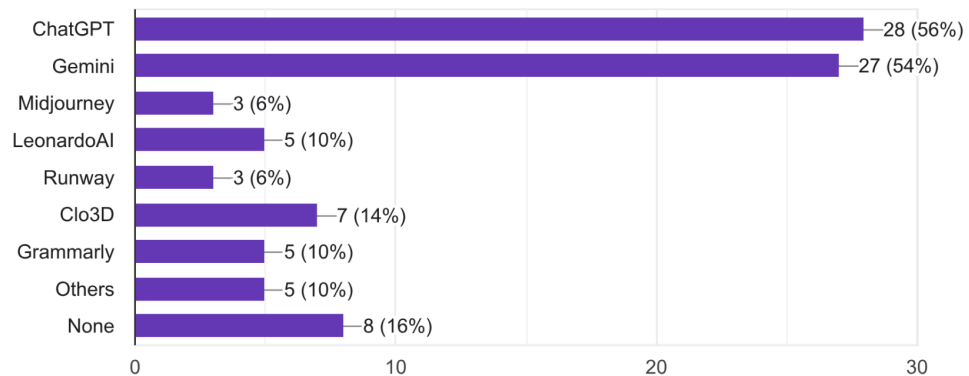


Fig. 4 Categories of AI tools

The respondents used a variety of AI tools, with the majority being ChatGPT at 56% and Gemini at 54% displaying a wide range of software usage adaptation.

Q5. For how many different tasks did you use AI tools?

For how many tasks did you use AI (task such as creating croqui, brainstorming ideas, conceptualisation, etc)

50 responses

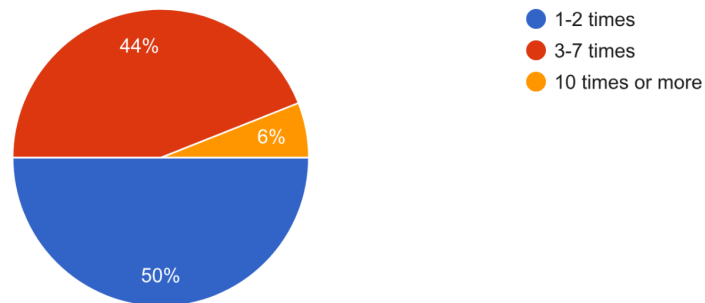


Fig. 5 Usage of AI

50% of respondents only used AI for 1-2 tasks.

Q6. Did AI influence your ideation process?

Did AI influence your ideation process?

50 responses

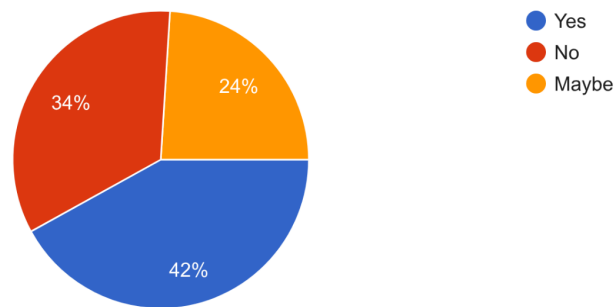


Fig. 6 Influence of AI

42% of respondents found AI influencing their ideations.

Q7. Did AI help with the visualization of ideas?

Did AI help with visualization (croquis, mockups, swatches):
50 responses

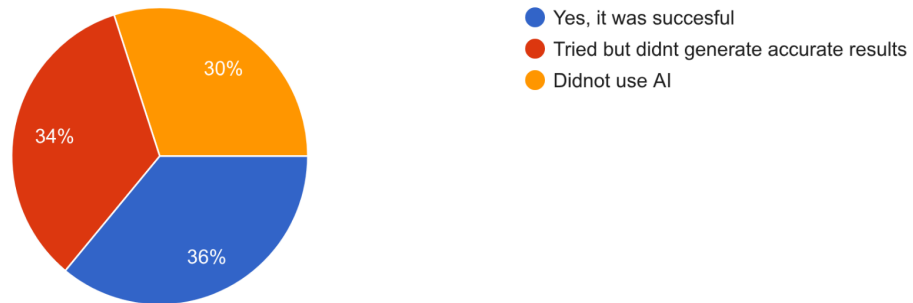


Fig. 7 Visualization using AI

34% of the respondents weren't satisfied with the visualisation results generated by AI.

Q8. Has AI affected your aesthetic direction unexpectedly?

Has AI affected your aesthetic direction unexpectedly
50 responses

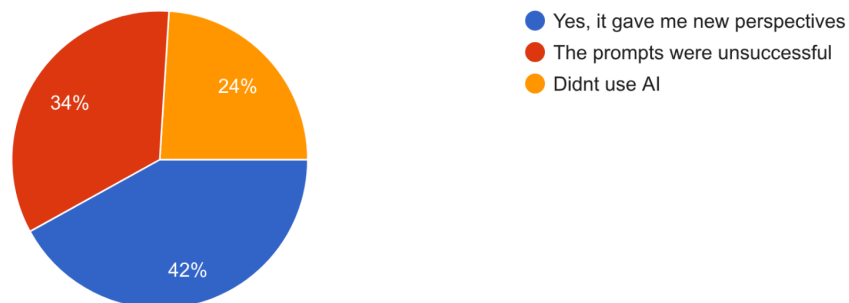


Fig. 8 Impact of AI on aesthetic direction

42% respondents believe AI has helped them think of new and unexpected ideas.

Q9. Which stage of designing has AI made easier?

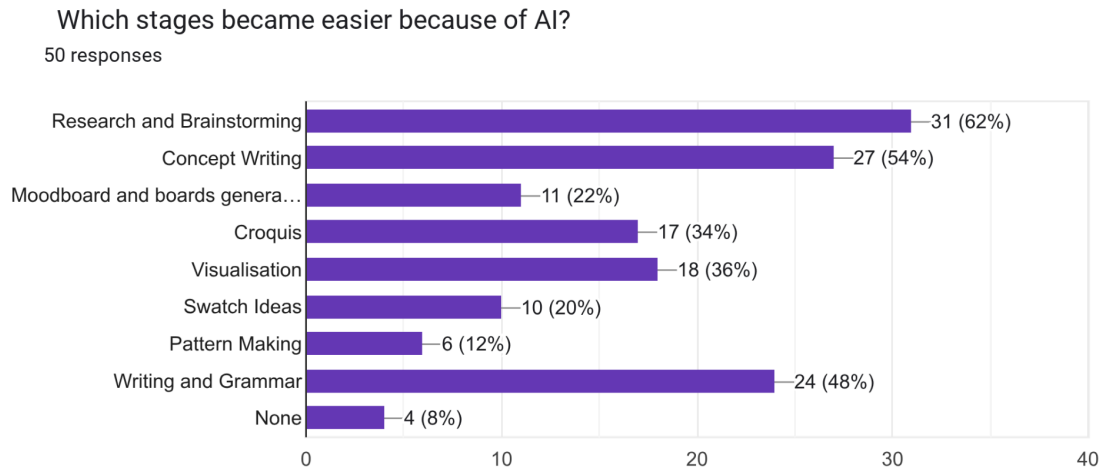


Fig. 9 Usage of AI in different stages of the process

The respondents used AI at a variety of stages, with the order of most being Research and Brainstorming (62%), Visualisation (36%), Croquis (34%).

Q10. What challenges did you face when using AI tools?

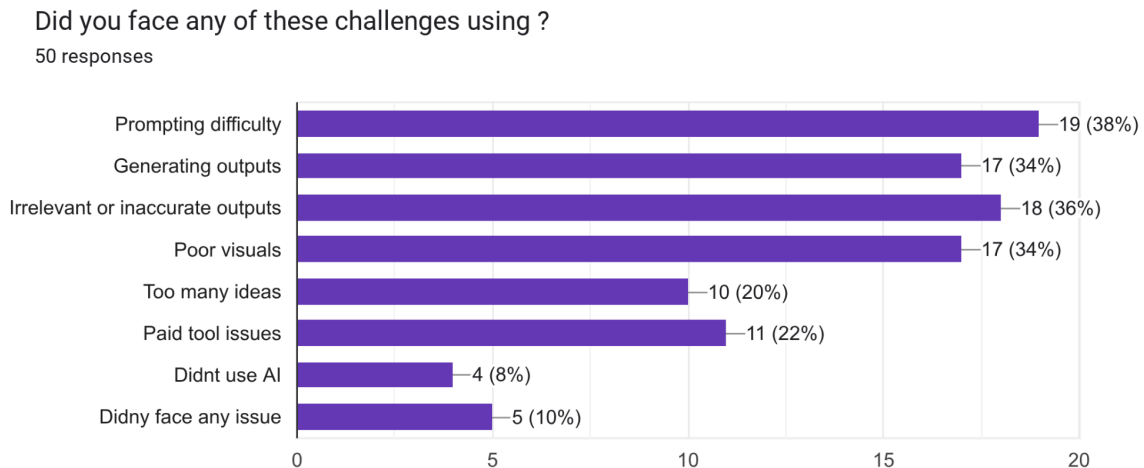


Fig. 10 Challenges faced while using AI

Respondents faced challenges while using AI, where a majority of 38% faced difficulty prompting.

Q 11. Do you see AI as a collaborator, assistant, or threat?

Do you see AI as
50 responses

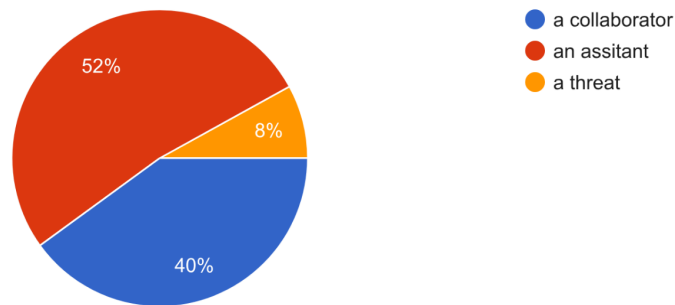


Fig. 11 Assessment of AI
Only 8% respondents view AI as a threat, and 52% view it as an assistant.

Q12. Would you use AI tools again in future projects?

Would you use AI again in future projects?
50 responses

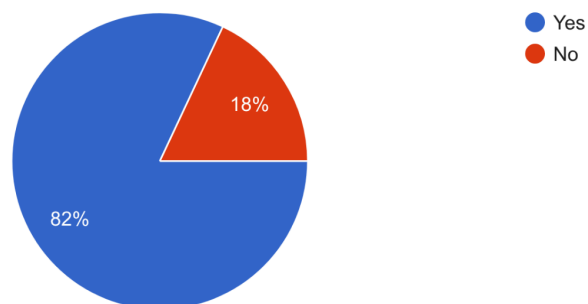


Fig. 12 Usage of AI in the future
82% respondents intend to use AI in future projects, showcasing acceptance towards AI.

Q13.What will AI's impact be on fashion in the next 5-10 years?

What will AI's impact on fashion in the next 5-10 years will be?

50 responses

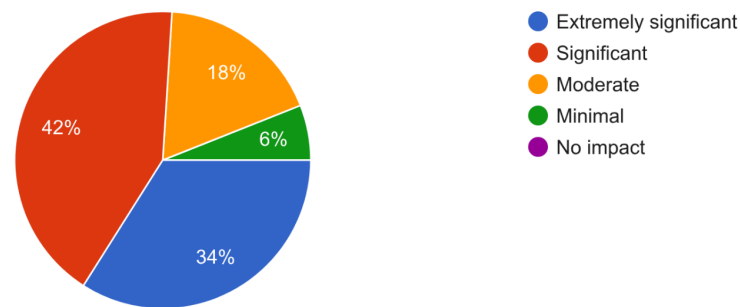


Fig. 13 Impact of AI in the next 5-10 years

The respondents have varied opinions, where 42% believe there to be a significant impact and 6% think there will be minimal impact.

RESULTS

1. How generative AI is reshaping roles & agency

Across both datasets, AI emerged as a tool that strengthens early-stage creativity by helping designers organise thoughts, expand idea directions, and make sense of scattered concepts. It acts as a clarifying force that supports—not replaces—the designer's creative agency.

- Survey Data Reflects This:
 - 42% reported that AI directly influenced their ideation.
 - 42% stated that AI provided “unexpected ideas,” indicating measurable shifts in creative direction-setting.
- Focus Group Reflects This:
 - Participants described AI as helping them “clarify scattered ideas” and “structure research.”
 - Designers consistently used AI to stabilise early thinking, expand possibilities, and speed up conceptual exploration.

2. Stages of the workflow most impacted by AI

Research and ideation emerged as the most heavily AI-supported phases, with moderate influence on visualisation and minimal presence in hands-on prototyping.

- Survey Data Reflects This:
 - 62% — Research and brainstorming
 - 36% — Visualisation
 - 34% — Croquis
 - Limited use in pattern-making, swatches, and moodboards
- Focus Group Reflects This:
 - All participants used AI for research expansion, cultural reference exploration, and terminology clarification.
 - Four out of five used AI for visualisation tasks such as croquis, swatches, and silhouette testing.
 - Prototyping remained largely physical, though CLO3D adoption is increasing.

3. AI as collaborator/assistant vs. centralised creator

AI is predominantly understood as an assistant or collaborator that supports the creative process. Concerns about centralisation arise only when outputs become too generic or repetitive.

- Survey Data Reflects This:
 - 52% view AI as an assistant
 - 40% view AI as a collaborator
 - Only 8% perceive AI as a threat
- Focus Group Reflects This:
 - All designers described AI as helping with background tasks or co-generating ideas.
 - Participants emphasised that emotional and intuitive decision-making remains human-led.
 - Some noted risks of generic or culturally inaccurate outputs, particularly in traditional or craft-heavy themes.

4. Influence on aesthetic decision-making & personal identity

AI shapes design direction through strong visual outputs, but designers maintain identity by filtering suggestions, modifying iterations, and re-engaging with physical experimentation.

- Survey Data Reflects This:
 - 34% were dissatisfied with AI visualisations, indicating misalignment with personal aesthetics.
 - 42% reported that AI sparked new ideas for silhouettes, colour palettes, or swatches.
- Focus Group Reflects This:
 - Participants reported that AI-influenced palettes, silhouettes, and swatches sometimes informed their decisions.
 - Designers actively rejected outputs that felt generic or misaligned with their aesthetic voice.
 - Many relied on physical methods to restore personal identity within the process.

5. Key benefits and challenges of AI in design practice

AI enhances creativity through speed, clarity, and expanded possibilities, but can constrain creativity when over-relied upon, especially when outputs become repetitive or overwhelming.

- Survey Data Reflects This:
 - Respondents highlighted benefits such as faster visualisation, idea expansion, and smoother workflows.
 - Many noted that AI helped them overcome creative stagnation.
- Focus Group Reflects This:
 - Benefits included idea clarification, swatch generation, styling variations, and alternative directions.
 - Challenges involved generic output, option overload, and reduced tactile engagement.
 - Participants emphasised the risk of designing “toward what AI can produce,” narrowing originality.

6. AI's effect on skill development, creativity & learning

AI acts as an educational tool that expands technical and conceptual knowledge, but it may weaken skill depth if relied on excessively for core creative tasks.

- Survey Data Reflects This:
 - 42% said AI provided new perspectives.
 - Many used AI for grammar, concept drafting, and research synthesis.
- Focus Group Reflects This:
 - Participants used AI to learn terminology, explore silhouettes, analyse artists, and understand cultural references.
 - Overuse was linked to reduced experimentation, weaker tactile engagement, and shallower learning depth.

7. Perceptions of AI's future impact on jobs, autonomy & workflows

Students anticipate that AI will significantly reshape routine workflows and job structures over the next decade, while creative autonomy will depend on how critically designers adopt the technology.

- Survey Data Reflects This:
 - 42% predicted a significant impact in the next 5–10 years.
 - Several selected “extremely significant.”
 - Fewer than 10% anticipated minimal impact.
- Focus Group Reflects This:
 - Participants expect AI to streamline tasks, transform workflows, and alter professional expectations.
 - Most believe creative jobs will evolve rather than disappear, provided designers retain intentional and critical control over AI tools.

CONCLUSION

The authors conclude that generative AI is not replacing fashion designers but reshaping how the creative process commences and is subsequently. Across both the focus group and questionnaire respondent groups, AI functioned primarily as an assistant—mostly in research and ideation—helping designers organise information, broaden conceptual directions, and accelerate early decision-making. While students valued AI for rapid

visualisation, swatch generation, and conceptual clarity, they also recognised its limits: generic outputs, stylistic homogenisation, and option overload that can restrict originality or reduce engagement with tactile, material processes. At the same time, AI-supported learning clarifies technical terminology, strengthens writing, and exposes designers to new visual and conceptual possibilities.

Looking ahead, participants expect AI to significantly shape future design processes, especially routine technical tasks, but maintain that human judgement, cultural sensitivity, and authorship remain central. The emerging role of the fashion designer at present is best understood as a hybrid one—where creative authorship remains firmly in the hands of the designer, and AI serves as a powerful and indispensable supporting force.

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