

# **BOOK OF ABSTRACTS**

# **3<sup>RD</sup> DIGITAL FASHION INNOVATION E-SYMPOSIUM**

29 – 30 JUNE 2022 https://fashioninstitute.mmu.ac.uk/dfi2022/

CHAIR:

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# **KEYNOTE SPEAKER**

 Professor Nadia Magnenat Thalmann, Head of MIRALab, University of Geneva, Switzerland. **3RD DIGITAL FASHION INNOVATION** 

29 June 2022		Day 1		
*GMT	BST	Session 1A: Chair - Dr. Abu Sadat Muhammad Sayem, Manchester Fashion Institute		
12:00	13:00	Welcome by Professor Liz Barnes, Manchester Fashion Institute		
1205	13:05	Introduction by Professor Fiona Hackney, Manchester Fashion Institute		
12:10	13:10	Keynote - Professor Nadia Magnenat Thalmann,Head of MIRALab, University of Geneva, SwitzerlandPioneering 3D digital fashion: from the past experience to the future.		
12:40	13:40	Hilde Heim, Manchester Fashion Institute, UK Manchester Fashion Institute and the UNECE Sustainability Pledge		
13:00	14:00	Break (10 minutes)		
GMT	BST	Session 1B: Chair - Dr. Hilde Heim, Manchester Fashion Institute		
13:10	14:10	<b>Evridiki Papachristou, International Hellenic University, Greece</b> Developing a Digital Influencer in Daz3D		
13:30	14:30	<b>Charlene Gallery , The University of Manchester, UK</b> Developing Digital Skills: A Fashion Business Masterclass with Style3D		
13:50	14:50	<b>Tekila Harley Nobile, Università della Svizzera italiana, Switzerland</b> Digital Fashion: Teleworking and Video-meetings.		
14:10	15:10	Break (10 minutes)		
GMT	BST	Session 1C: Chair - Dr. Abu Sadat Muhammad Sayem, Manchester Fashion Institute		
14:20	15:20	Virginia Rolling, Georgia Southern University, USA Examining the perceptions of wearable accessory designers using 3D printing.		
14:40	15:40	Andrea Diodati, Fashion Institute of Technology, New York, USA Digital Fashion & Activism		
15:00	16:00	End of Day 1		

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29 - 30 June 2022

30 June 2022		Day 2
*GMT	BST	Session 2:
		Chair - Dr. Abu Sadat Muhammad Sayem, Manchester Fashion Institute
09:30	10:30	Invited - Professor Yoon Kyung Lee, Seoul National University, Korea
		Comparison of fashion CAD education achievement through online/offline learning
09:50	10:50	DIYAOLU Idowu J., Obafemi Awolowo University, Nigeria
		Perception of the Use of Computer Aided Designs among Fashion Designers in
		Southwestern Nigeria
10:10	11:10	Reem Almeshari, The University of Manchester, UK
		The Role of Snapchat Influencer E-WOM on Women Purchasing Behaviour Toward
		Beauty Products in Saudi Arabia
10:30	11:30	Cheng Fan, Northumbria University, UK
		User Experience Design and Online Fashion Sites: Values and Veganism
10:50	11:50	End of Day 2

\*N.B.: GMT = Greenwich Mean Time, BST = British Standard Time

You may use World Clock at <u>GreenwichMeanTime.com</u> to check your local time. Below figure shows the time differences from GMT in few cities in different continents and the local times in those cities at the starting time (i.e. 12:00 GMT) of Session 1A.

GMT +08:00	GMT +02:00	GMT +02:00	GMT +06:00
Beijing	Cairo	Cape Town	Dhaka
20:00:00	14:00:00	14:00:00	18:00:00
GMT +02:00 Frankfurt am Main 14:00:00	GMT +01:00 Manchester 13:00:00	GMT -04:00 New York City 08:00:00	GMT +10:00 Sydney 22:00:00

# **3RD DIGITAL FASHION INNOVATION**

# ABSTRACTS

### Manchester Fashion Institute and the UNECE Sustainability Pledge

FASHION INNOVAT

<u>H. Heim</u><sup>1\*</sup>, C. Chrimes<sup>2</sup>, C. Green<sup>3</sup>

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Key Words: UNECE Sustainability Pledge, Textile supply chain transparency

#### 1. Research Gap Identified

Verifiable tracking and tracing information is central to bringing the textiles sector in line with policyobjectives, forthcoming regulations and UNSDGs - not to mention growing consumer demand and the need for better practice. "Until the time transparency is treated as a mechanism to hold manufacturers and brands accountable, we will be unlikely to find ourselves in a situation conducive to achieving the Sustainable Development Goals"[1]. However, while large scale firms have the resources to research and develop independent initiatives, small-scale fashion brands (SMEs) are both fearful and unprepared for a transition to digitalised supply chain transparency [2]. The UNECE has developed a Toolbox designed specifically to helptransition SMEs - applying e-tools for supply chain sustainability and transparency using blockchain technologies. The UNECE has also developed a Sustainability Pledge to accelerate the transition to more sustainable practice. The Manchester Fashion Institute (MFI) has committed to the UNECE Sustainability Pledge and developed an initiative to support regional fashion SMEs in the Northwest to transition towards digitalised supply chain transparency. This study will present the MFI Sustainability Pledge initiative.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

How will the Manchester Fashion Institute's participation in the UNECE Sustainability Pledge benefit the transformation of regional firms in the Northwest of England towards digitalised supply chain transparency?

#### 3. Design/Methodology/Approach

The Textiles Transparency Team at MFI will design and undertake a consortium building initiative that connects selected fashion SMEs in the Northwest region. It will collect data on stakeholder needs through aseries of interviews followed by analysis and application into a set of guidelines for the firms.

#### 4. Results and Key Findings

The team will consult with other, similar initiatives and stakeholders such as the UKFT transparency project and hopes to exchange and combine all knowledge on supply chain transformation. The needs of stakeholders will be analysed and collated into an initial report. The initiative will also develop training modules and resources for local SMEs that will help connect and transition to digitalised transparency.

#### 5. Originality

Despite several pilot studies, no single platform has yet been universally adopted (or made accessible) for orby SMEs for digitalised supply chain transparency. This study hopes to contribute to knowledge for the digital transformation of the fashion supply chain.

#### 6. Research Implications and Limitations

This study is limited to the regional small-scale textiles sector in the Northwest of England. This is considered a pilot study to develop a proof of concept which may be rolled out to other regions nationally –and potentially internationally.

#### References

Uddin, M. A manufacturer's perspective on the need for more transparency in the global fashionindustry. 2021 [cited 2022 30/04/22]; Available from: <u>https://www.fashionrevolution.org/why-fashion-transparency-matters-according-to-the-experts/</u>.
Heim, H. and C. Hopper, *Dress Code: the digital transformation of the circular fashion supply chain*. International Journal of Fashion Design, Technology and Education, 2021. Special Issue.

## Developing a Digital Influencer in Daz3D

SHIAN INNAVAT

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#### 1. Research Gap Identified

The recent pandemic of Covid 19, which has led to the closure of studios, retail stores and the cancellation of fashion weeks all over the world has resulted in the creation of new ways of promotion, using technologies like digital twinning, virtual representations of the actual garments and catwalk scenes, AI generated personas/influencers etc. The pandemic has led many brands, to create and use digital (CGI) avatars and this demand is predicted to increase significantly in the future, given the expanding reach of the metaverse. However, despite the potential applications in the creative process as well as the role they are expected to play in underpinning a move to customised and on-demand product, students and young professionals are lacking the needed skills to develop a digital avatar.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

The objective of the authors' research was to create a digital influencer using Daz 3D, and to identify the problems and the difficulties that arise during this creation. Questions like "How easy is the creation of a digital influencer using Daz 3D", "How can a digital influencer created in Daz 3D replace the traditional influencers satisfactorily" and "How can a digital influencer created in Daz 3D be used and can help a clothing brand" are just an example.

#### 3. Design/Methodology/Approach

A research about the technology related to avatars and digital influencers in fashion has been conducted. Simultaneously a research how to develop an avatar using the Studio of Daz 3D has been deployed. In this paper the steps that a user must follow in order to create an avatar collection are described, using a great number of images.

#### 4. Results and Key Findings

The avatar creation software, DAZ 3D, which was used in this work, is considered quite easy to use. It is a digital tool that is open source and free to use in its basic version, so the user can create a basic figure of an avatar in a relatively short time and after that by purchasing some individual elements, the creator has the ability to enrich and dress the developed avatar. The user is supported in his effort by the company itself, since several tutorials are available on social media and forums, regarding the steps to be followed. The developing of a digital influencer using the Daz 3D is, and will become even easier in the future, for someone who has a fairly good personal computer with advanced graphics abilities.

#### 5. Originality

Up to the authors' knowledge, such a guide how to create a digital influencer using the DAZ 3D has never been conducted before.

#### 6. Research Implications and Limitations (optional)

During the process of developing the avatar, some difficulties were emerged. The difficulties were mainly related to the need to purchase several elements, such as leather, clothes, etc., which are not provided free of charge and are necessary for the completion of the avatar.

#### References

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[2]. Andersson V., Sobek T. (2020). Virtual Avatars, Virtual Influencers and Authenticity. *Master's Thesis, University of Gothenburg*.

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## **Teleworking and Video-meetings. Does Fashion fit?**

-ASHION INNOVAT

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Key Words: digital fashion, teleworking, digital self, personalisation, Covid19

#### 1. Research Gap

The Covid19 pandemic pushed most companies to enforce teleworking from home and hybrid work formats are expected to prevail in a post-pandemic world. Although fashion has not been at the centre of the conversation in telework literature and few studies have researched the role of fashion in video-meetings, fashion afforded by technological advances is becoming increasingly relevant as working from home entails consideration of personal appearance [1]. Arguably, videoconferencing practices are affecting the way in which individuals see themselves as the time spent in front of the camera is increasing, stressing the importance of the digital self. Hence, studying teleworking practices in the digital fashion field is expected to provide novel insights.

#### 2. Aim and Objectives

This research aims to explore workers' videoconferencing practices when it comes to fashion-related dimensions that can be seen through a camera: make-up, hairstyle, clothes, accessories, and home-décor. Furthermore, it studies the way in which fashion could be afforded by videoconferencing platforms through digital filters in order to provide novel insights into the level of interest in digital filters for professional settings.

#### 3. Design/Methodology/Approach

An online survey was designed with Qualtrics and distributed to individuals with telework experience through snowball sampling between February 23 and April 12, 2021. Of the 365 surveys collected, 308 were considered relevant for analysis.

#### 4. Results and Key Findings

This study finds that workers' appearance in terms of how they dress, do their make-up, and style their hair is different during telework from when they are in the office. A first insight into their decision to turn the camera on during online meetings is provided. Individuals value the costs of turning on the camera by considering various factors such as the way in which they look, their willingness to get ready for the meeting, their background, their internet connection status, the type of meeting and their role in it, company regulations, and the behaviour of other individuals. Arguably these factors, together with social norms, impact their decision to appear online resulting in a cost-benefit decision. A preliminary costbenefit model for further analysis is suggested: if individuals decide to turn the camera on, they might be willing to change how they appear to be more in line with what they believe is an adequate image. Social norms pushing individuals towards being seen on camera, would make them more likely to "pay" time and resources to improve their appearance. On the other side, technical affordances might make it "less expensive" to appear in the "right way" thanks to dedicated filters. Furthermore, the study shows that individuals' interest and prediction of use of digital elements for professional settings, such as clothes, home décor, accessories, make-up, and hair/beard is quite high as all listed elements score a prediction of use which is much higher than the 2.5% innovators and the 13.5% early adopters categoried by [2].

#### 5. Originality

This study provides novel insights on digital fashion in the context of teleworking. Furthermore, it introduces avenues for future research regarding individuals' intention to adopt digital fashion for video-meetings in a post-pandemic world.

#### References

[1] Zandan, N. & Lynch, H. (2020). Dress for the (Remote) Job you want, Harvard Business Review. <u>https://hbr.org/2020/06/dress-for-the-remote-job-you-want</u>

[2] Rogers, E. (1995). Diffusion of innovations, The Free Press, New York, 4th edition.

## Developing Digital Skills: A Fashion Business Masterclass with Style3D

FASHION INNOVAT

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Key Words: Digital skills, Metaverse, Virtual Fashion, Sustainability, Technology integration

#### 1. Fashion Graduate Skills Gap

The ever-changing fashion business and textile manufacturing landscape is continually augmented by technology. This was indicative pre-COVID 19, and, in a post covid fashion and textile ecosystem, the need for complete digital conversion is imperative for long term business viability [1] Technology is the key to a more sustainable, innovative, and efficient business operation; However, the distance between the commercial imperative and the academic environment is seismic. Fashion is transforming at such an accelerated pace that taught components in academia is unable to adapt quickly and adopt new technical competencies within set curriculums, in real time. [2] There is also a skills gap within industry as graduates lack the digital and technical skills to compete in today's hyper-digitalised fashion environment. [3] [4] With many of our social and consumerist interactions already happening digitally, the Metaverse has emerged as a holistic next step in the development of the internet, interweaving our digital environment, thereby altering the intrinsic and inherent value of physical fashion goods. [5] As 3D Technology is the foundation of the Metaverse, in order to enhance future employability skills, it is essential that fashion students develop skills in 3D modelling methods which can be applied to the production of hi-fidelity, realistic 3D digital assets.

#### 2. Project Aim

The aim of this research was to work with an industry partner (Style 3D) to provide a short practical masterclass to evaluate the usability of 3D CAD software for garment prototype development and the value of this type of practical experience for fashion business students. This study aimed to give students a learning opportunity to develop new 3D CAD technical skills while promoting an in-depth understanding of the effective management of digital technologies in contemporary fashion product development and their role in creating products of value.

#### 3. Design/Methodology/Approach

This evaluative case study presents how active learning during a four-day workshop equipped students with initial 3D design skills that consolidated an appreciation of how technology is driving change in the industry. Through a short interactive masterclass, the participants, with minimal technical expertise, used Style3D virtual modelling software for the process of 2D-to-3D design, product visualisation, simulation and marketing virtual fashion products. The method workflow consisted of three main steps where students worked in pairs to 1. modify a kimono block pattern, 2. fabric digitalisation and product rendering, 3. participate in a virtual catwalk of the masterclass garments and 4. (optional) investigate potential of NFT creation. Data was collected from student responses to a survey before and after the masterclass and observations during the workshop.

#### 4. Results and Key Findings

Participants developed essential digital skills and an understanding of how technology can optimise existing fashion design processes, and support the move towards a more inclusive, sustainable, and interactive fashion ecosystem. Cutting edge digital technologies can be rapidly evaluated through collaboration with industry to create innovative learning experiences. A short masterclass provides educators with important teaching and learning insights and resources before embarking on longer-term curriculum changes. The practical application of 3D modelling techniques was supportive of the learning and understanding of non-design, fashion business students of the potential of digital technologies.

#### 5. Originality

The participants had minimal technical expertise as they were fashion business not fashion design students. **References** 

#### References

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[2] Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes and context. Studies in Higher Education, 43(11), 1923–1937.

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[5] Jomaa, A (2022). Fashion and the Metaverse: Digital Futures Industry Summit: University of Manchester.

### Examining the perceptions of wearable accessory designers using 3D printing

FASHION INNOVAT

V. Rolling<sup>1\*</sup>

<sup>1</sup>School of Human Ecology, Georgia Southern University, Statesboro, USA (vrolling@georgiasouthern.edu) Key Words: 3D printing, wearable accessories, designers

#### 1. Research Gap Identified

Scholars have proposed that more research is needed from the design perspective of 3DP [6], especially scholarly research geared towards the fashion industry [7]. Since 3DP can improve societal needs such as to provide disabled individuals with limb accessories [8], it was suggested by Vanderploeg et al. that research be conducted to determine the advantages as well as disadvantages of certain 3DP materials and designer experiences with 3DP to make products [9]. Thus, this research sought to fill these gaps by examining disadvantages as well as advantages to 3DP (e.g., CAD programs, materials, etc.) along with 3DP's potential future.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

RQ1: How easy or difficult are 3DP fashion accessories to create?

RQ2: How easy or difficult is it to enter the field of 3DP as a fashion accessory designer?

RQ3: What is the future of 3DP?

#### 3. Design/Methodology/Approach

This Institutional Review Board approved research addressed the phenomenon of wearable accessory designers using 3DP through a phenomenological approach using qualitative research. A total of 16 accessory designers across various continents including North America, Asia, Europe, and Australia through a purposive sample were recruited through Shapeways.com. Ten semi-structured interview questions were asked to participants using Skype.com video chat software. Interviews were audio-recorded, transcribed, and significant interview statements were grouped into themes.

#### 4. Results and Key Findings

The results indicated that the majority of participants perceived 3DP as easier than traditional production methods. The easiest 3DP materials to work with were plastics and metals, whereas ceramic and steel had material weaknesses. The most efficient CAD program was Rhino 3D, whereas Blender was the most inefficient. The easiest 3DP learning curve was learning the software and production process, whereas the most difficult learning curve was understanding material dimensions. Most designers considered understanding the 3DP object in the computer as difficult. The easiest 3DP design was considered geometric shaped rings, whereas necklaces were the most difficult 3DP designs. The majority of participants explained that the field of 3DP was easy to enter. In addition, designers thought 3DP would become mainstream as more individuals are educated in this field, more industries are using 3DP (e.g., medical, fashion, automotive, etc.), and with the emergence of non-commercial 3D printers.

#### 5. Originality

This research is unique in providing a globally diverse perspective on the advantages and disadvantages of 3DP presently and in the future in the fashion industry through the use of in-depth interview quotes.

#### References

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[2] Pasricha, A., & Greeninger, R. (2018). Exploration of 3D printing to create zero-waste sustainable fashion notions and jewelry. Fashion and Textiles, 5(1), 1–18.

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### **Digital Fashion & Activism**

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Key Words: Digital Fashion, Activism, Fundraising, Social Media

#### 1. Research Gap Identified

Digital fashion research has been focused on three main categories: Design and Production, Culture and Society and the most prolific Communication and Marketing. [1] While digital fashion activism would fall under the category of Culture and Society, there has been no specific research about digital fashion's potential to be a powerful tool for grassroots fundraising. Non-profits can pair with digital designers to create digital collections that donors can "wear" on social media channels. Unlike a typical fundraising tote or tee, digital fashion has no waste, cost, questionable working conditions or toxic textiles. Digital fashion brings affordable couture to fundraising, creating exciting social media content for donors to share causes they care about on their platforms. With each purchase and post, the cause gains more exposure to potential donors.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

Are consumers interested in wearing digital fashion on social media platforms like Instagram and Facebook for fundraising? Dress X launched their Fashion for Ukraine campaign on February 24<sup>th</sup> 2022, raising awareness with influencers like Madonna donning digital fundraising garments. [2] Is the success of Dress X reproducible for independent designers and other causes? Is Generation Z the consumer of digital fashion? Does Generation Z want to engage with fundraising on their social media? The aim is to identify market demographics and create a model that any non-profit and digital designer can reproduce to fundraise.

#### 3. Design/Methodology/Approach

This research employed quantitative methods like orally surveying Generation Z design students and utilizing online questionnaires.

#### 4. Results and Key Findings

The findings suggest that the majority of individuals were not aware of what digital fashion fundraising was. Once the concept of digital fashion was explained, there was a divide amongst individuals who would excitedly purchase and post and those that would not. Critiques included wearing digital couture would trivialise the cause and that their social following was too small to affect change. Supporters wanted to use digital fashion to raise awareness about environmentalism, body positivity, domestic violence and mental health. Suggestions included using filters and stickers may be more accessible to the mass market then digital fashion.



Fig. 1 + 2 Graphics To Explain Digital Fashion Fundraising to Potential Donors

#### 5. Originality

By surveying the potential market for digital fashion and fundraising, non-profits and digital designers can employ strategic tactics to launch their grassroots campaign. If the majority of users do not know what digital fashion is, users will first have to be educated and see early adopters before they feel comfortable purchasing. Above are graphics designers can use to educate their potential donors about how digital fashion works.

#### References

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# Comparison of fashion CAD education achievement through online/offline learning

FASHION INNOVAT

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Key Words: fashion computer-aided design (CAD), e-learning, off-line class (OFCs), on-line classes(ONCs)

#### 1. Research Gap Identified

In design education, technology supports teaching the academic process and improves the way students learn. In addition, the skills training can replace content-based, teacher-centered learning with effective student-centered learning (Lee, 2018). Self-directed learning techniques related to student-centered learning using digital technology in the design curriculum can be effective in creating an effective e-learning environment. The success of e-learning learning is determined by creating an environment that respects students' opinions and encourages students' independent participation in their learning activities(Law et al., 2010). Thus, this study will prove how to improve using digital design skills usually requires extensive training that motivates students between e-learning and offline learning environment.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

This study aimed to identify the factors that determine the successful implementation of e-learning classes. There are 2 objectives; 1) this study identifies e-learning motivations that can increase CAD training practice effectiveness and analyze how these learning motivations affect students in off-line classes (OFCs) and online classes (ONCs), 2) it demonstrates the potential of e-learning in fashion CAD classes by comparing the design results of OFCs and ONCs.

#### 3. Design/Methodology

In this study, 99 freshman fashion majors who participated in CAD (Computer-Aided Design) classes conducted offline and online during the two semesters through Adobe Photoshop and Illustrator programs were analyzed.

#### 4. Results and Key Findings

In both the OFC class and ONC class, students who performed well in self-directed activities through assignments scored well in the midterm and final exams. Students who were not trained in self-directed learning through assignments during the semester did not perform well in the final exam regardless of their midterm exam scores. In particular, learning motivation such as self-directed learning, interaction, and self-efficacy acted as a more important factor for ONC students who lacked an interpersonal environment compared to OFC. However, when ONC students motivate themselves for self-directed learning and control the learning process by themselves, it was found that ONC students' ability was significantly improved in the final evaluation compared to OFC regardless of the academic achievement of the intermediate evaluation.

#### 5. Originality

This illustrates the positive potential of e-learning in fashion CAD education and the possibility of conducting effective teaching, using methods other than face- to-face strategies, in an efficient e-learning environment that enhances students' achievements and learning outcomes.

#### 6. Research Implications and Limitations

This study was conducted with only a limited number of students of the fashion CAD classes in 2 semesters, it does not reflect the characteristics of students at all levels. In this regard, the author suggests that future research should address these limitations.

#### References

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## Perception of the Use of Computer Aided Designs among Fashion Designers in Southwestern Nigeria

I, J. Diyaolu<sup>1\*</sup>, G. D. Ijiola<sup>2</sup>

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#### Key Words: Fashion designers, Computer Aided Designs, perception, adoption, awareness

#### 1. Research Gap Identified

Computer-Aided Designs (CAD) is an important technology used in fashion design that has significant impact on the quality, quantity and delivery of fashion products [1]. Despite the global development in the use of CAD among fashion designs, there's still a low level of adoption in Nigeria [2]. Manual clothing construction methods are still prevalent. The use of CAD can make designers competitive, meet customers' demand, boost the economy and increase employment generation in the country.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

Are fashion designers in Southwestern Nigeria aware of the recent development in fashion design technology? What is their perception about CAD? The study therefore assessed the level of knowledge of fashion designers in CAD, examined their attitudes and perception toward the use of CAD, as well as factors influencing the adoptions of CAD.

#### 3. Design/Methodology/Approach

The study employed the technology acceptance model to identify attitude toward the use of CAD. Quantitative and qualitative data was gathered for the study. Designers from three states in Southwest Nigeria (Ogun, Oyo and Osun) participated in the study. Simple random sampling technique was used to select 105 fashion designers in Osun State. Additional 20 designers were purposively selected from Oyo and Ogun States. Descriptive statistics was used to describe data. Correlation analysis was used to test hypotheses.

#### 4. Results and Key Findings

Majority of the fashion designers were aware of CAD but majority have never installed or used the software. About half (47.6%) had knowledge that CAD could do pattern drafting. Majority (65.7%) believed that level of computer literacy affects adoptions of CAD. There is significant relationship between level of education and awareness of CAD. Level of education does not affect adoption CAD but lack of training and cost of installation affect adoption of CAD. Also, there is no significant relationship between the perception of the fashion designers and factors affecting adoption of CAD (p= 0.034).

Knowledge/Awareness	Yes	No	I don't know	Mean	Remarks
	Freq(%)	Freq(%)	Freq(%)		
Have you heard about CAD before?	76(72.4)	29(27.6)	0(0)	0.72	Aware
Have you ever installed CAD software?	23(21.9)	78(74.3)	4(3.8)	0.23	Never installed CAD
Have you ever used CAD software?	23(21.9)	78(74.3)	4(3.8)	0.23	Never used CAD
Can CAD be used for pattern drafting?	50(47.6)	21(20.0)	34(32.4)	0.64	Aware
CAD can produce 3D modelling?	23 (21.9)	31(29.5)	51(48.6)	0.46	Not aware

Table 1: Awareness of Fashion Designers about CAD

**5. Originality** The study generated new data and provided additional information to existing studies on awareness and perception of CAD. It extended the area of study to Southwestern Nigeria.

**6. Research Implications and Limitations** Fashion designers in Nigeria may not be able to compete globally without adopting the use of CAD. There is a limit to manual operations.

#### References

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# The Role of Snapchat Influencer E-wom on Women Purchasing Behaviour Toward Beauty Products in Saudi Arabia

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Key Words: Influencer, Social media, Purchasing behaviour, Snapchat, Saudi Arabia

#### 1. Research Gap Identified

The growing popularity of social media marketing in Saudi Arabia and the subsequent acceleration in beauty industry and innovation has leading many local brands to capitalize on the influence of social media influencers. the top choice for consumers to research new products, leading to an almost complete shift away from traditional advertising and marketing tactics to ones dominated by social media marketing. While many have taken recent interest in studying social media marketing and its marketing effects and potential, there has so far been very little research done on the impact of Snapchat influencer. there has so far been very little research done on the efficacy of social media influencer types from different perspectives and dimensions Thus, much less is known about the extent to which snapchat influencer like Nano and Micro impact on women purchasing behaviour toward beauty product.

#### 2. Aim and Objectives:

The aim of this research is to deepen the understanding of the impact of Snapchat influencers on Saudi women's purchasing behaviour towards beauty products. The research objective is to evaluate the extent to which snapchat influencer e-wom can motivate Saudi women to purchase luxury beauty products and critically analyse a research sample's opinions to identify the factors behind women behaviour towards beauty products based on Snapchat influencer e-wom.

#### 3. Methodology:

A mix of methodological approaches is used to provide contextual understanding of the ways that Snapchat influencers' ewom impacts Saudi women's purchasing behaviour of luxury beauty products. This study aims to bridge the gap in the existing literature by first comparing the effectiveness of both e-wom Micro and Nano influencers Saudi women's purchasing intention, and how customer engagements impact to increase purchasing intention. Then, it will determine what and why women purchasing motivations and reasons and explore what ultimately guides their purchasing decisions when buying beauty products based on e-wom influencer.

#### 4. Results and Key Findings

The findings reinforce the importance of understating power of social media influencer before using it in the marketing strategies in Saudi Arabia. The finding provides important insights for marketers hoping to target women consumers through social media platforms. Thus, the finding of this study will contribute to a better theoretical understanding of the issues involved in social media marketing through a mix methodology approach which will provide a further detailed understanding of the extent to which e-wom in Snapchat becomes influential and more significant.

#### 5. Originality

The sudden emergence of social media as a dominating force in social behaviour has made it a hot topic for researchers and marketing experts. However, there has so far been very little research done on the efficacy of social media influencer types from different perspectives and dimensions While there is no studies have specifically explored the effect of Snapchat influencer e-wom on women's purchasing behaviour towards luxury beauty products in Saudi Arabia, this research will provide further insight into the relationship between e-wom influencer and consumer behaviour through examining how snapchat Nano and Micro influencers impact the purchasing behaviour of Saudi women consuming beauty products.

#### 6. Research Limitations:

While this study will maintain a narrower focus on Snapchat influencers in Saudi Arabia, it will pave the way for similar studies to be conducted in the future covering other platforms like TikTok or Twitter. This study will focus on the role of Nano and Micro influencers on women purchasing intention in Saudi Arabia, therefore the results might not be applicable to other countries as they have different religious and cultural contexts.

## User Experience Design and Online Fashion Sites: Values and Veganism

FASHION ININOVAT

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Key Words: User Experience, Digital Fashion, Veganism, Ethics

Veganism as an ethically sensitive movement has taken on a new social influence within digital fashion and subsequently become a marketing strategy within User Experience Design. This means the concept of veganism in design has a virtuous, growth-oriented interaction with fashion consumers and further changing consumer behaviour on a macro scale [1-3]. Clearly, this raises pertinent questions around both fashion and UX designers' practices and the more vicious, rather than virtuous, aspects of the circular digital economy. Such as, are the values of the sites true to those same values in terms of how things are presented (UX) and ii. what is presented (the fashion garments and their means of production)?

#### 1. Research Gap Identified

There is a noticeable lack of research studies at the intersection of User Experience Design, veganism and digital fashion beyond the limited literatures from Fashion that have discussed Vegan Fashion.

#### 2. Question (and Sub-question) answered / Aim (and Objectives)

This research asks: How are the most used/popular online fashion shopping apps in the UK influencing consumer behaviour through various digital platforms? In turn, how do users' consumption behaviours influence the business strategies of digital fashion?

#### 3. Design/Methodology/Approach

(1) Walkthrough; (2) Redesign and co-design.

#### 4. Results and Key Findings



#### 5. Originality

Perspective innovation.

#### 6. Research Implications and Limitations (optional)

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