Investigation of Digital Transformation and Good Governance for Global Partnership among Fashion Designers in Lagos State, Nigeria

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Abstract
The study investigated digital transformation and good governance for global partnership among fashion designers in Lagos State. The study was conducted among 159 registered members of Fashion Designers Association of Nigeria (FADAN). Purposive sampling method was used. A twenty (20) item questionnaire was the main instrument used to collect data for the study. The statistical tools used were frequency count and percentages.150 (94.3%) answered yes that the digital technologies will place their business on the world stage. 135 (84.9%) answered yes that inventory can be tracked down using cloud computing. 148 (93.0%) answered yes that block chain allows transparency. 139 (87.4%) answered yes that social media platforms promote brands. 143(89.9%) answered yes that Computer Aided Design (CAD) creates designs done digitally. 159 (100%) answered yes that digital transformation allows efficiency, transparency, quality, accountability which are products of good governance. In conclusion, meeting the United Nations agenda needs digital transformation in the fashion industry. The following recommendation are made: Lagos state fashion designers to create designs with Computer Aided Design (CAD), employ 5G for faster sales, use social media platforms for brand advertising and cloud computing to collaborate.

Keywords: Digital, Fashion designers, Global partnership, Good governance, Transformation.

Introduction

The United Nations (UN) in 2015 unanimously adopted for the world to be better for all by 2030 and the (8^{th}) eighth agenda was to develop partnership for development using the application of new technologies in collaboration with the private sector, (Andrew 2022). Fashion designers are in business to make money, create wealth and get a wider patronage

locally and internationally. Shristi (2019), Parasanth and Jyothena (2018), noted that fashion is relevant to the business of couture, luxury label, designers label and mass market and the transformation in digitalization of the fashion industry cannot be under emphasized because fashion goods and services being a global business will be brought to everybody's doorstep. With good governance in the management of business, fashion designers in Lagos State will go global, Yu, (2018) opined that governance is the sum of the many ways individuals, institutions, public and private manage their common affairs, it is a continuous process based on control, coordination in the management of resources. (Andrew 2022, Anis & Nejab 2020). It includes selection, monitoring, replacement, formulation, and implementation of sound policies effectively in an organization. Yu (2018), Willem (2020), observed that good governance is a result-oriented principle of public accountability and legitimacy. De Cruyter (2021), opined that good governance deals with integrity, efficiency, accountability, responsibility and transparency.

Waleed, Chihiro, Yuji, Pekka, (2022), Erjavsek (2021), noted that, society is changing as are the social values. Therefore, since clothing and textile industry represents one of the biggest industrial sectors of the world the players in the industry must change Llewellyn (2022), Antonio, Holger, Carlos and Cyrielle (2020), noted that, digital transformation allows fashion companies to improve their operations and better serve their customers, by streamlining their supply chain, improve inventory management and enhance customer's experiences. This helps in increasing efficiency, reduce cost and stay competitive (Ruoan & Han 2023). Llewellyn, (2022) noted online shopping, cloud computing, data and analytics, internet of things (IOT), machine learning, robotics, block chain, virtual reality, 5G mobile technology, social media etcetera. Bertagnoli, (2022) observed Artificial Intelligence (AI) and smart clothing wearables. Vishakha (2022), Jahanana (2023) noted quality control. Waleed, Chihiro, Yuji and Pekka (2022), Mukesh (2023) observed that the fashion industry is at the forefront of digitalization and as a globalized industry, with advancement in technologies from on-demand manufacturing to virtual dressing room, e-commerce, and social media using smartphones, laptops and tablets which are the key growth drivers. Daria, Olga, Rudrajeet (2022), Ruoan, Leishen and Han (2023), opined that, with advancement in information and communication technology (ICT) fashion brands used these to improve customer's experience. Cloud computing as noted by Llewellyn (2022) is used to track, manage inventory, coordinate products, manage logistics, collaborate and communicate with suppliers, partners and customers as well as analyze data to make data driven decision in real time. (Mazharul, 2022, Beniwal, 2022).

Also, Solene (2023) opined that, the block chain technology increase transparency of trading on a large scale. Making the fashion industry more ethical and sustainable. It helps to protect intellectual property as well as improve brands storytelling. Cindy, Bonner, Michelle

(2021) noted that, genuine and counterfeit goods can be authenticated as well as facilitate secure and transparent payments and transactions in the fashion industry. (Llewellyn, 2022), Nwanonyirin, (2023) noted that internet of things (IoT) stream line tasks, cut down loss and enables more efficient management of inventory with the help of its tracking features in case of fraud using barcodes and (REID) frequency identification tags devices to develop customer's loyalty, items popularity with special chips. Shopping through (IoT) makes shopping more transparent and convenient. Michelle (2022) noted both company and sender received alert when the lock has been tampered with. (Mallika, 2020, Llewellyn, 2022). Robotic technology as noted by Gabriel (2023) Jess, (2023), Shehmir, (2023), and Newton, (2020) helps to provide logistics by driving businesses effectively in warehouses, stores, factories and the distribution centers of e-commerce. Robots can perform tasks in fashion designing and fashion shows, also in inventory management and in sales, customers can use their phones to access information and receive advice while in the very physical store.

Accordingly, Ilewellyn (2022) opined that Robots are used to inspect fashion products for defects and quality control and other applications. Shehmir (2023) noted that (AI) Artificial Intelligence offers solutions to various challenges in the fashion industry like in other sectors AI is used to create clothing designs using data such as images from brand's previous offerings or other designers using AI enables tools, data, style choice and current fashion trends. Used also for the standardization of fabric from the customer's perspective. (Mazharul, 2023, Bertagnoli 2022). Holger, Koullias, Roger, Kimberly (2023) observed that AI is not just automation but augmentation giving professionals and creative tools to serve customers in real time. 5G, the fifth-generation wireless technology is faster, more reliable and more secure connections for online shopping, supply chain management connection in the fashion supply chain in real-time by fashion companies for data driven decision and suggestion. (Ilewellyn, 2022 Sanyam, 2023). Ganeshkumer and Akhil (2023) observed that, 5G drive new innovations with speed and reliability. (Izzy, 2019, Tingting, 2021). There are Virtual Reality (VR) and Augmented Reality (AR). As observed by Ilewellyn (2022). Virtual reality creates immersive experience for customers such as virtual fashion shows or virtual fitting rooms, while augmented reality (AR) create interactive experiences for customers such as virtual try-on experience or 3D product visualization. Jenna (2022) noted that, virtual reality via social media have increased awareness, engagement, accessibility from anywhere in the world. (Maddison, 2020). Vrinda (2022) noted that virtual software is a game changer using smartphone. This reduces time and logistics. (Daria, Olga and Rudrajeet, 2022.) Llewellyn (2022) noted Data analytics as another digital transformer used in analyzing customer's data to better understand customer preferences, track stock, forecasts, optimize production and distribution and manage inventory efficiently. Fashion companies use it to analyze sales, identify trends and customer's behavior patterns for data driven decisions about product and pricing. Shehmir (2023) noted in collaboration with AI, create fashion design, gathers data regarding customers favorite texture,

color and style by asking series of question to create clothing designs to decrease workload and improve worker safety. The AI enabled computer vision systems enable inventory management, retail, theft prevention, cashier less automation, stores and improve fashion retail. Personalization of wearable technology has been designed as an iphone USB (Universal Serial Bus) making it ideal item for tech-savvy women. (Mazhurah, 2023, Ganesh, and Akhil 2023, Kanu, 2023). Social media is another digital transformer for the fashion industry business bringing the world to everybody's door step through such technologies as e-mail, website, social networks, Instagram, YouTube, online forum, influencers as well as news groups, television and mobile communications. (Keun, Donghyun, Triphu, 2021) social companies engage with customers and promote their products on different platforms. Mazharul, (2022) noted that, social media has become a power tool for advertising, obtaining and attracting customers. Machine learning as noted by Shemir (2023) and Ganesh, Akhil (2023) is used to create fashion design, it gathers data on customers favourite, improve production, forecast trends, improve fashion retail used in inventory management with the combination of AI. Mukesh (2023) observed the CAD (Computer aided design) that allows designs to create detailed technical drawings, specification and patterns for garment, accessories and footwear. However, transformation in the fashion industry alone cannot fulfill the agenda of 2030 if there is no quality control, Jahanana (2030) observed that it can be done virtually, manually or automated inspection before and during production Vishakha (2022) opined that, fashion goods are made with high quality standards and goods are not damaged before they reach buyers, quality assurance in fashion manufacturing allows the designer to minimize defects, improve productivity, efficiency in cost.

Statement of the Problem

The importance of digital transformation in the fashion industry as a global partner through good governance cannot be overlooked. Despite the functions of digital application in efficiency, integrity, accountability, transparency, coordinating, managing inventory, collaborating with partners, communicating with suppliers and customers, adverting as well as analyzing data to make real-time, also protecting intellectual property and quality control. Lagos state fashion designers have not adopted digitalization in their day to day activities in the industry. The world has changed the way business is done but Lagos state fashion designers are yet to recognize these technologies and apply to their daily activities in order to meet the 2030 vision agenda. It is in this regard that this research was carried out.

Objective of the Study

The main objective was to investigate digital transformation and good governance for global partnership among fashion designers in Lagos State to meet vision 2030 agenda

Research Question

1. What is the digital transformation for good governance and global partnership among fashion designers in Lagos State?

Methodology

The study was conducted among 159 respondents who are registered members of Fashion Designers Association of Nigeria (FADAN). The objective of the study was to investigate the digital transformation for good governance in the fashion industry in Lagos State to meeting Vision 2030 United Nations (UN) agenda. Descriptive survey design was used. A structured questionnaire was the main instrument used to collect data for the research. Section A was for bio data of the respondents while section B contained 20 questions in which respondents were to answer yes or no. The questionnaire was given face validity by two experts. One form Home Economics Department of Lagos State University of Education Oto/Ijanikin and the other from the department of fashion design, Yaba College of Technology, Yaba, Lagos. The instrument was administered by the researchers with the help of one of their members. Respondents were educated on the objective of the study. All questionnaires were collected same day. Data collected were analyzed using frequency counts and percentage as represented below.

Research Question 1: What are the digital transformations for good governance and global partnership among fashion designers in Lagos State**?**

Table 1: Digital transformations for good governance and global partnership in Lagos State

S/N	Items (n=159)	Yes (%)	No (%)	Decision
1.	Do you have a smartphone as a fashion designer?	159 (100%)	--	Agreed
2.	You also have a laptop?	140 (88%)	19 (12%)	Agreed
3.	Do you know these technologies will place your business on the world stage in real-time?	150 (94.3%)	9 (5.6%)	Agreed
4.	Do you know one of their functions is cloud Computing	145 (91.1%)	14 (8.8%)	Agreed
5.	Cloud computing tracks down inventory?	135 (84.9%)	24 (15.0%)	Agreed
6.	It can also be used to collaborate with other fashion designers?	145 (91.1%)	14 (8.8%)	Agreed
7.	There is block chain that can be used by fashion designers in their business?	135 (84.9%)	24 (15.0%)	Agreed

8.	Blockchain prevents counterfeiting of fashion goods? Agreed	135 (84.9%)	24	(15.0%)
9.	Also allows transparency in fashion business? Agreed	148 (93.0%)	11	(6.9%)
10.	Internet of things (IOT) prevent product theft Agreed	135 (84.9%)	2415.0%)	
11.	Artificial Intelligence (AI) creates designs and predicts fashion trends) Agreed	140 (88%)	19	(12%)
12.	Robots are used in fashion shows and sales? Agreed	135 (84.9%)	24	(15.0%)
13.	5G is faster on online sales and drives innovations for fashion designers? Agreed	147 (92.4%)	12	(7.5%)
14.	Virtual reality (VR and AR) creates interactive experiences for customers Agreed	138 (86.7%)	21	(13.2%)
15.	Data analytics monitors production for fashion designers? Agreed	150 (94.3%)	9	(5.6%)
16.	Social media promotes fashion brands? Agreed	139 (87.4%)	20	(12.5%)
17.	Machine learning for fashion inventory management? Agreed	140 (88%)	19	(12%)
18.	Computer aided design (CAD) creates fashion design Agreed	143 (89.9%)	16	(10.0%)
19.	Standards in the fashion industry are now done digitally? Agreed	140 (88%)	19	(12%)
20.	All these technologies when well coordinated will bring about global partnership since they function as transparency, integrity and accountability technologies? Agreed	159 (100%)	--	

The report from the Table1. shows that all the fashion designers have smart phones, majority have laptops and these technologies will help to place their businesses in the world stage in carrying out different functions such as, taking inventory, collaborating with other fashion designers, and preventing counterfeiting of their products as well as creating designs and maintaining standards digitally, which will allow for global partnership as a result of good governance in their fashion industry.

Discussions of Findings

The findings on Table 1 was on digital transformation and good governance for global partnership among fashion design in Lagos State. The result reveals that all 159 (100%) respondents answered yes that they have smart phones to conduct their business. 140 (88%) answered yes that, they also have laptops, 19 (12%) answered no (Jess 2023, Shehmir, 2023, Newton ,2020). 150 (94.3%) answered yes that they know these technologies will place their businesses on the world state in real time. 9 (5.6%) answered no (Ruoan, Leishen & Han, 2023, Keun, Donghyun & Triphu, 2023). 145 (91.1%) answered yes that one of the functions of these technologies is cloud computing, 14 (8.8%) answered no (Ilewellyn, 2022). 135 (84.9%) answered yes that cloud computing tracks down fashion inventory, 24 (15.0%) answered no. (Ilewellyns, 2022). 145 (91.1%) answered yes that it can be used to collaborate with other fashion designers 14 (8.8%) answered no (Ilewellyn, 2022, Mazharul 2022, Beniwal 2022). 135 (84.9%) answered yes, there is blockchain, 24 (15.4%) answered no (Solene, 2023). 135 (84.9%) answered yes that block chain prevents fashion counterfeiting (24%) (15.0%) answered no (Cindy, Kelly, Fiona, Michelle 2021, Ilewellyn, 2020, Nwanonyirin, 2023). 148 (93.0%) answered yes that block chain allows transparency 11 (6.9%) answered no. (Nwanonyirin 2023). Internet of Things (IoT) prevents fashion product theft. 135 (84.9) answered yes, 24(15.4%) answered no. (Michelle, 2022, Ilewellyn, 2023, Mallika, 2020). 140(88%) answered yes that, Artificial Intelligence (AI), creates design and predicts fashion trends, 19 (12%) answered no (Shehmir, 2023, Mazharul, 2023, Bertagnoli 2022). 135(84.9%) answered yes that robots are used in fashion shows and sales, 24(15.0%) answered no. (Gabriel, 2023, Newton, 2020, Jess, 2023, Shehmir, 2023). 5G is faster on online sales and drives fashion innovation. 147 (92.4%) answered yes, 12(7.5%) answered no. (Ilewellyn, 2023, Sanyam, 2023, Garnesh and Akhil, 2023).

Virtual reality (VR and AR), creates interactive experience for customers. 138(86.7%) answered yes, 21 (13.2%) answered no (Jenna 2022, Maddison 2020, Vrinda, 2022, Daria, Olga and Rudrajeet, 2022). Data analytics monitors fashion production. 150 (94.3%) answered yes, 9(5.6%) answered no. (Ilewellyn, 2022, Shehmir, 2023). 139(87.4%) answered yes that social media promotes fashion brands, 20 (12.5%) answered no (Keun, Donghyun, Triphu 2021, Cyrille 2020, Saiful 2022, Noran and Maha Abdullar, 2020). Machine learning for fashion inventory management. 140 (88.0%) answered yes, 19(12%) answered no. (Shemir, 2023, Ganesh and Akil 2023). 143 (89.9%) answered yes that Computer Aided Design (CAD) creates fashion design 16 (10.0%) answered no (Mukesh, 2023). 140 (88%) answered yes that fashion standards are now done digitally, 19 (12%) answered no (Vishakha, 2022). 159 (100%) answered yes that, these digital technologies when well-coordinated will bring about global partnership, since there is transparency, quality control, accountability, efficiency which are products of good governance. (De Cruyter, 2021, Yu 2018, Andrew, 2022, Willem, 2020).

Conclusion

In conclusion, to meet the 2030 United Nations (UN) agenda fashion designers in Lagos state need to apply digital technology in order to collaborate with the private sector locally and internationally to have global partnership. Because digitalization helps in integrity, transparency, efficiency, quality control and accountability. Therefore, the old ways of doing business cannot continue. Lagos state fashion designers must go digital to transform the industry.

Recommendations

In view of the forgoing, the following recommendations were made:

1. Lagos state fashion designers should choose the most appropriate digitalization peculiar to their business
2. In creating design, the Computer Aided Design (CAD) should be adopted by the fashion designers
3. Lagos state fashion designers to employ social media platforms to put their business on the global stage.
4. Fashion designers need to update their digital knowledge by training and retraining themselves

References

Andrew, M. (2022), sustainable development goals and their fit with good governance global policy vol 13 (1), 79 – 85. Retrieved from i.onlinelibarary.wiley.com August 5th 2023

Anis, O & Nejab, B. M. (2020), Good governance sustainable development goals: Getting ahead of the pack or falling behind? Environmental impact assessment review. Vol. 38.PDF. Retrieved from August 7th 2023

Antonio, G, Holger, H., Carlos, S.A & Cyrielle, V, (2020), Fashion digital transformation: now or never. Retrieved from: www.mckinsey.com 8th August 2023

Bertagnoli, L. (2022), AI and fashion: 7 cool applications: Artificial Intelligence's versatility makes it the technological little black dress of the apparel industry. Retrieved from: built.in.com. August 10th 2023

Cindy, Y., Kelly, B., Fiona, R. & Michelle, R. J. (2021), Blockchain and NETS are smart but can they revolutionize the fashion industry sustainability and luxury pirates in the digital age. Retrieved from: www.mutilaw.com August 12th 2023

Daria, C., Olga, C & Rudrajeet, P. (2022) Exploring the nature of digital transformation in the fashion industry opportunities for supply chains, business models and sustainability – oriented innovations. Sustainability: Science practice and policy Vol 18 (1), 773 – 775:

Retrieved from: Journal homepage: https//www.tangfonline.com.pdf August 14th 2023

De Gruyter. M (2021), Translating the principles of good governance in search of accountability in Spanish and German: International of Legal Discourse. Retrieved from: https://do.org.www.degnniyter.com August 16th 2023

Erjavsek (2021), Modern aspects of Home Economics Education and Slovenia. *C.L.P.S. Journal* Vol 11 (4). PDF. Retrieved from www.pedocs.de August 21st 2023

Gabriel, F. I. (2023), Fashion and robotics a successful relationship. Retrieved from: Gabriel fabrics/ribarren.com August 21st 2023

Ganesh, K.L & Akhil, P. (2023), 5G redefining retail industry. Retrieved from: www.wipro.com August 22nd 2023

Holger, H., Theodora, K., Roger & Kimberly,T. (2023), Generative AI: Unlocking the future of fashion. McKinsey and Company. Retrieved from: www.mckinsey.com August 25th 2023

Ilewellyn, R. (2022), 10 ways digital transformation in fashion is inspiring shoppers. Retrieved from: rob.ilewellyn@cxotransform.com.attransformationskills.com August 26th 2023

Izzy, C. (2019), What 5G means for fashion. Retrieved from: www.ordre.com August 28th 2023

Jahanara, R. (2023), Stages of quality control in garment manufacturing technology. Retrieved from: fashion2apparel.com August 29th 2023

Jenna, B. (2022), Virtual Runway: is digital future of fashion shows? Talks the future of catwalk. Retrieved from: fashioninnovation.nyc August 30th 2023

Jess, C. M. (2023), Fashion: models and robots share the runway at copern: Fashion show. Retrieved from: amphitheguardian.com September 1st 2023

Kanu, P. (2023), Artificial Intelligence in Fashion: The future of innovation. FF. Fibre 2 fashion. Retrieved from: www.fibre2fashion.com September

Keun, L., Donghyan, P. &Triphu, V. (2021), digitalization of value chain in apparel industry: implications for small and medium – sized enterprises and start-ups. Retrieved from: www.adb.org.default>files September 3rd 2023

Maddison, G. (2020), How nine designers used virtual runway shows to make a statement this season. Style fashion magazine. Retrieved from: com.imaxtree.com September 4th 2023

Mallika, R (2020), What is the role of IOT in the fashion industry. Retrieved from: www.analyticssteps September 5th 2023

Mazharul, L.K & Manisha, B. (2022), Impact of digital marketing in fashion industry. Retrieved from: textilelearner.net September 6th 2023

Mazharul, I. K (2023), applications of AI in quality control in textile and apparel industry. Retrieved from: textilelearner.net September 7th 2023

Michelle, R. (2022), Is the internet of things (IOT), the new fashion and retail disruption just style. Retrieved from: www.juststyle.com September 8th 2023

Newton, E (2022), How are robots improving garment manufacturing. Home>garment manufacturing. Retrieved from: w.onlineclothingstudy.com September 10th 2023

Noran, T. & Maha Abdullah, A.D (2020), use of social media as an effective marketing tool for fashions start up in Saudi Arabia. Open journal of special sciences. Vol 8(II). Retrieved from: www.scrip.org September 11th 2023

Nwanonyirin C. (2023), How blockchain creates a sustainable and traceable fashion industry. Retrieved from: block build.africa September 12th 2023

Parasanth, V. S. & Jyothena, M. (2018), Impact of digital marketing in retail fashion industry. International Journal of management technology and engineering. Vol 8 (XII). Retrieved from September 19th 2023

Ruoan, R. L. & Han X. (2023), Research on digital transformation and upgrading of fashion industry under the background of big data. School of design Jiangnan University. Wuxi.china@stu-jiangnan Retrieved from: edu.cn.com September 20th 2023

Saiful, (2022), Digital marketing influences on consumer fashion product purchases decision through facebook. Retrieved from: www.diva-portal.org.net September 21st 2023

Sanyam K (2023), Top 9 technology trends reshaping the fashion industry in 2023 (Techpacker). Retrieved from: techpacker.com September 21st 2023

Shemir, J. (2023), Top 4 use of cases of AI in fashion in 2023. AI multiple research. Retrieved from: aimultiple.com September 21st 2023

Shrist, P. (2019), Digital marketing: an effective tool of fashion marketing proceedings of the 10th international conference on digital strategies for organizations success. University of Allahabad-center of fashion design and technology-papers.ssrm.com. Retrieved from SSRF (PDF)

Solene, R. (2023), can blockchain technology make fashion more transparent? Retrieved from goodonyou.eco September 22nd 2023

Tingting, M. (2021), Research on clothing design based on 5G network and FPGA. Microprocessors and Microsystems. Vol 81(c): Retrieved from: digital library dt.acm.ord.https://doi.org/10.1016/j.micro September 14th 2023

Vishakha, S. (2022), The importance of quality control in garment manufacturing. Retrieved from: wfx.worldfashionexchange.com September 15th 2023

Vrinda, M. (2022), Virtual reality in fashion. Examples, benefits and uses. Retrieved from: analytics steps.com September 16th 2023

Waheed, H. A, Chihiro, W, Yuji, T. and Pekka, N. (2022), A new perspective on the textile and apparel industry in the digital transformation. Era journals/textile/vol 2(4), 623-656. Retrieved from: https://doi.org.MDPI.www.mpdi.com September 17th 2023

Willem, T. (2020), Good governance of reflexive governance: in praise of Good colleagueship public integrity: A legacy of integrity. A tribute to Leottubets. Vol 20(3). Retrieved from: www.tanfonline.com of 10th international conference on digital strategies for organization success. University of Arababad, centre of fashion design and technology papers. Retrieved from: SSRM.com.SSRN (PDF) September 18th 2023

Yu. K, (2018), Goverance and good governance. A new framework for political analysis Fudan journal of the humanities and social sicences. Vol 11(1-8). Retrieved from ilinkspringer.com.pdf. September 19th 2023