Trend Research of Fashion Trade Show Virtual Reality Technology: A Bibliometric Mapping From 2013 to 2022

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ABSTRACT

Keywords:
Trend research; Fashion trade shows; Virtual reality technology; Bibliometrics analysis

This research paper used a bibliometric computational mapping analysis technique with a VOSviewer to investigate trends concerning virtual reality technology research in fashion trade shows. The authors conducted a search of relevant publications on Google Scholar using the Publish or Perish application, employing the keywords "virtual reality," "fashion," and "trade show" to identify relevant journal articles. Over the last decade, from 2013 to 2022, 960 publications were identified as relevant to the keywords in question. The findings indicate a steady increase in virtual reality-related publications in fashion trade shows over the past ten years, with few fluctuations. Specifically, there was a fluctuation in publication numbers between 2013 and 2016, with the highest number of publications recorded in 2016. However, from 2017 to 2021, there was a consistent increase in publications, with 2021 recording the highest number in the ten years. The researchers identified six clusters related to fashion trade shows based on virtual reality research, which included industry, virtual reality, fashion, augmented reality, technology, and reality, with a total link strength of 5472. The results of this study have significant implications for future research on fashion trade shows based on virtual reality technology. Specifically, the findings serve as valuable input for researchers seeking to identify trends and research gaps in this area.

1. Introduction

In the fashion industry, trade shows are generally used as a medium to publish works. Specifically, Smeeds explained that an exhibition can be defined as an organized and spatially visualized expression of thoughts, objects, and knowledge systems. In addition, exhibits also date back to the Enlightenment period and are primarily based on the appearance of material objects [1]. In the creative industry, creative economy actors must be able to design exhibitions to attract potential buyers. Trade shows to market and carry out promotional activities for their products. A trade show

is also known as an exhibition or bazaar, where a group of sellers gathers in one location to display and sell their products [2]. Another benefit of participating in trade shows is that it can improve the company's image and obtain information regarding competitors [3].

Currently, new technologies have transformed and revolutionized [4] the way people engage with the world around them [5] because they contribute to many benefits [6]. The position of creative industry must be able to adapt to entering the era of Industry 4.0 and Society 5.0. The concept emerged in this condition, where Industry 4.0 focuses on facilitating human life with AI as the main component. On the other hand, Society 5.0 uses modern technology but still relies on humans as its main component. In the fashion industry, the industry must be ready to adopt, use, and utilize information technology [7], preparing to face digital content-based sectors [8] such as digital marketing [9] or payment tools such as e-wallet [10] while creating new ideas in the use of technology, one of which is exhibitions of fashion using virtual reality technology.

The use of technology for specific purposes must be analysed and explored more deeply, including its form, function, benefits, advantages, and disadvantages. In other words, industry players also have to do research. Of course, this can be realized through studies and references from those that have existed before. One of the techniques that can be used to analyse studies related to the use of science and technology in organizing fashion exhibitions is the bibliometric analysis technique. This analysis is a bibliographic study whose scientific activities are based on the assumption that the research being researched must also be related to another research [11].

Currently, many studies have been found using bibliometric analysis related to fashion and other fields such as bibliometric analysis of fashion industry 4.0 research [12], fashion Muslim, Branded Content in fashion research [13], Survey of Fashion Analysis Using Artificial Intelligence [14], Fashion Consciousness [15], Marketing and e-commerce landscape [16-18], Augmented and virtual reality in the apparel industry [19], and structure of clothing and textiles [20]. However, based on the search results, there is still no bibliometric analysis research related to fashion exhibitions or trade shows based on the adaptation of augmented reality technology. Therefore, soft computing research was conducted to discover the mapping of bibliometric and network analysis on published articles related to extended reality-based fashion shows indexed by Google Scholar using VOSviewer software. Google Scholar was chosen because it can reach articles not indexed by SINTA, Scopus, or Web of Science (WOS), so it will be more comprehensive. The existence of this research is expected to be an illustration for researchers in the field of fashion in particular, particularly those related to fashion trade shows based on virtual reality as a direction and topic for further research.

2. Theoretical Framework

A fashion trade show is an activity that brings together one action, one location, and a group of suppliers who organize physical exhibits for their products and services from a given industry or discipline [21]. Trade shows, also known as trade fairs and exhibitions, provide the opportunity to promote themselves, which is usually done every year as in Figure 1 [22]. As previously mentioned, Fashion trade shows are generally held as physical exhibits. They are open to potential buyers and other related elements, so the implementation must be carefully planned. The trade show is one of the three most important factors in influencing purchasing decisions by customers [23]. In trade show activities, sellers get the opportunity to meet face-to-face with customers, get cheap access to new markets, allow sellers to communicate with visitors to introduce their products, and encourage visitors to make purchases [24]. The number of activities carried out while competing with other industries, therefore, the trade shows carried out must be creative and attract potential buyers.

Fig. 1. The 34th International exhibition of men, women, children's clothing, underwear, wedding fashion and accessories, February 24-27:Fashion Trade Show 2020 Moscow, Russia. Documentation by Dreamstime.com

On the one hand, creative fashion industry players must be able to harmonize with current technological developments. With the development of Industry 4.0 and Society 5.0 concepts, industry players strive to use technology and create new ideas in their applications, including virtual reality technology. Virtual reality is a three-dimensional immersive illusion that is entirely computer-generated and can be explored and interacted with by an individual through specialist headsets [25-27]. Utilization of virtual reality technology has found several aspects in the fashion field, such as fashion retail, surveys, and places [28] as opportunities for its use in the fashion trade concept. Previously, virtual reality technology was used to implement art exhibitions by Untitled ART. Untitled ART usually hosts offline art exhibitions in Miami Beach and San Francisco. By holding a virtual art exhibition, the art exhibition organized by Untitled ART in 2020 became the first virtual art exhibition [29]. Thus, the use of virtual reality technology in the implementation of physical activities is very possible.

To make innovation at a trade show system, it is necessary to analyse the components at the trade show. Liu's research states that exhibition attributes include six factors: exhibition environment, brand, service personnel, booth management, exhibition design, and service information. The exhibition environment represents the industrial environment and facilities at the venue. Exhibition brand refers to the marketing promotion and brand image of the exhibition. Service personnel refer to the professionalism of the field staff and the speed of service response, etc. The booth management represents the on-site management order and exhibition of logistics transportation services. The exhibition design shows the visual system in the collection, including brochures, booth designs, etc. Information indicates whether the information related to the service exhibition is made accurately and promptly [30]. See Figure 2 for a graphical representation of the research framework.
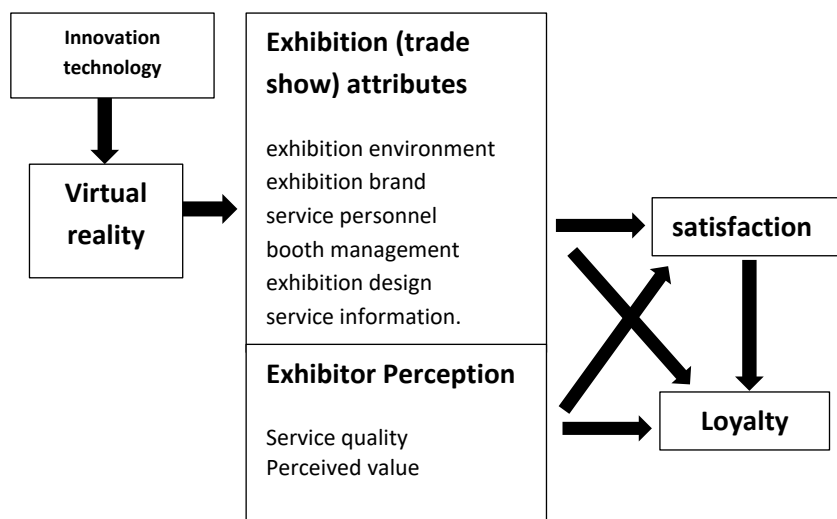
Fig. 2. Adaptation framework from Liu *et al.,*

3. Methodology

The objective of the research is to know the trend of fashion trade show virtual reality research with a bibliometric computational mapping analysis technique by using a VOSviewer as a tool. The bibliometric analysis approach was chosen because it accurately measures and analyses articles in the specified database to identify the most influential publication through citation analysis, explore the network structure and the relationship among the highly cited publications, and predict future trends and work in fashion exhibitions through co-word analysis [31]. Article data, the primary data in this study, results from searches through various journals that Google Scholar has indexed. Searching through Google Scholar was chosen because it is a database platform that anyone can access because it is open source. In exploring the data, Publish or Perish (PoP) software is used to help find and analyse the sources of information needed [32]. The search is directed to titles and abstracts of papers by using "fashion trade show, virtual reality" as a keyword with the field of searching in the Google Scholar database. The research period considered around ten years (2013 – 2022) of Google Scholar-indexed papers with the maximum number of results set up to 1000. This research was conducted in several stages.

i. Search and collect article publication data using Publish or Perish (Pop) software. At this stage, the keywords, source, type of publication, and year are determined through Google Scholar. The article data obtained from the search results of the Publish or Perish (PoP) software uses the keywords 'fashion trade show, ' and 'virtual reality' related to the research topic. The articles obtained are the results of scientific publications in 10 years from 2013 to 2022, which are search results for October 2022. The data that has been received is then stored in .csv and. ris formats.

ii. The article data obtained is then reprocessed using Microsoft Excel by dividing it into different years and listing the number of articles per year. Data screening is carried out in 2 stages, namely based on the suitability of the topic and the second based on the completeness of the data obtained. At the data collection stage, 999 articles were found. Then, in the first screening stage, 995 articles were produced. At the last screening, 987 articles were produced. After that, it was continued by making graphs to make the changes more visible every year.

iii. The stage of making soft computational mapping from bibliometric data with the type of research information system (.ris) from the Publish or Perish (PoP) software using the VOSviewer application. Network visualization, overlay visualization, and Density visualization are generated at this stage. The VOSviewer application is used to analyse the relationship between the terms used and visualize and evaluate trends using bibliometric maps. When creating a bibliometric map, the keyword frequency is set to be found at least ten times, and less relevant keywords are then omitted.

iv. Generate a conclusion. VOSviewer software was employed to display and assess the trend using bibliometric mapping. The VOSviewer software may show bibliometric mapping in three visualizations: network visualization, density visualization, and overlay visualization based on the network (co-citation) connecting existing items.

4. Results
4.1 Publications Data Search Result

Based on the search results using Harzing's Publish or Perish application based on the Google Scholar database with the terms 'fashion trade show' and 'virtual reality technology', 997 articles that met the search criteria were obtained. The data is in the form of writing metadata consisting of the author's name, title, year, journal name, publisher, number of citations, article links, and related URLs. Table 1 below shows some examples of article publications using VOSviewer analysis. The sample articles used are articles that are most related to the keywords of this research. The number of citations per year in the 2013-2022 range is 49313, with 4931.30 citations per year and 49.46 citations per paper on average, with an h-index of 101 and a g-index of 199.

Table 1
Article finding from searches via Publish or Perish

No.	Authors	Title	Year	Cites	GSRank
1	A Watson, B Alexander, L Salavati	The impact of experiential augmented reality applications on fashion purchase intention	2018	122	3
2	M McMaster, C Nettleton, C Tom, B Xu, C Cao…	Risk management: Rethinking fashion supply chain management for multinational corporations in light of the COVID-19 outbreak	2020	111	116
3	EL Ritch	Consumers interpreting sustainability: moving beyond food to fashion	2015	98	264
4	M Kim, K Cheeyong	Augmented reality fashion apparel simulation using a magic mirror	2015	53	1
5	Y Liang, SH Lee, JE Workman	Implementation of artificial intelligence in fashion: Are consumers ready?	2020	37	215
6	E Cho, AM Fiore, UJ Yu	Impact of fashion innovativeness on consumer-based brand equity	2018	30	156
7	JS Park, S Ha, SW Jeong	Consumer acceptance of self-service technologies in fashion retail stores	2020	25	213
8	K Goldsworthy, R Earley…	Circular speeds: a review of fast & slow sustainable design approaches for fashion & textile applications	2018	23	133
9	K Yang, HJM Kim, J Zimmerman	Emotional branding on fashion brand websites: harnessing the Pleasure-Arousal-Dominance (PAD) model	2020	23	122
10	CJ Parker, L Wenyu	What influences Chinese fashion retail? Shopping motivations, demographics, and spending	2019	22	146
11	RR Ruckdashel, D Venkataraman…	Intelligent textiles: A toolkit to fashion the future	2021	22	307

12	K Nobbs, KM Foong, J Baker	An exploration of fashion visual merchandising and its role as a brand positioning device	2015	20	275
13	W Wang, Y Nagai, Y Fang, M Maekawa	Interactive technology embedded in fashion emotional design: A case study on interactive clothing for couples	2018	20	248
14	F Joseph, M Smitheram, D Cleveland…	Digital materiality, embodied practices, and fashionable interactions in the design of soft wearable technologies	2017	18	220
15	N Rees-Roberts	After fashion film: social video and brand content in the influencer economy	2020	18	97
16	JI So, SH Kim	The effects of augmented reality fashion application on pleasure, satisfaction, and behavioural intention	2013	17	5
17	EY Kim, MY Lee	An exploratory study of perceived benefits and risks for QR code-based virtual fashion stores	2013	11	427
18	MA Park, HZ Ko	The analysis of the characteristic types of fashion brand applications in Korean application cases	2014	11	154
19	S Idrees, G Vignali, S Gill	Technological advancement in fashion online retailing: a comparative study of Pakistan and UK fashion e-commerce	2020	11	40
20	FZX Ng, HY Yap, GWH Tan, PS Lo, KB Ooi	Fashion shopping on the go: A Dual-stage predictive-analytics SEM-ANN analysis on usage behaviour, experience response, and cross-category usage	2022	9	269

4.2 Research Trend in the Field of Fashion Trade Show Virtual Reality

Figure 3 shows the development of research related to virtual reality technology in the fashion field published in the Google Scholar-indexed journal. Based on the data shown in Figure 3, the total number of publications related to keywords is 987. The lowest number of research publications was in 2014 and 2016, with 47 publications, while the highest in 2021 was 189 with these keywords. According to the statistics, there are only 126 publications in 2022. The popularity of fashion tradeshows based on virtual reality technology is volatile and expected to fall through 2022.
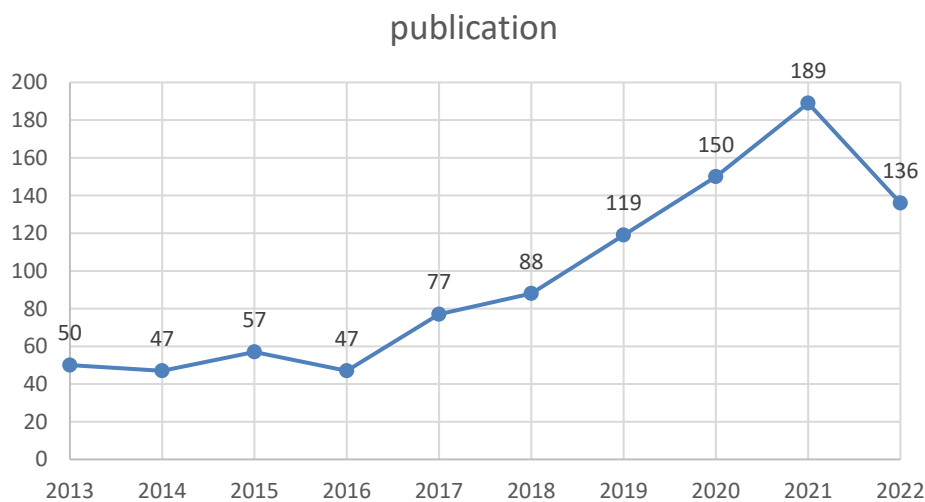

Fig. 3. Distribution of fashion trade show-virtual reality technology research

4.3 Visualization Virtual Reality Fashion Trade Show Topic Area using VOSviewer

The VOSviewer application is used in soft computing mapping to analyse the data obtained. From the results of computational mapping, 74 items were received. For each item found related to fashion

trade shows- virtual reality technology, the topic area is divided into 6 clusters as follows and can be seen in Figure 4 below.

i.   Cluster 1 has 18 items and is marked in red. The 18 related items are addition, attention, business, challenge, company, digital technology, evolution, exhibition, industry, innovation, mixed reality, opportunity, product, project, service, strategy, trade show, virtual reality technology.

ii. Cluster 2 has 16 items and is marked green. Items that appear are age, concept, development, education, environment, model, person, simulation, style, technique, time, virtual reality, virtual reality environment, and virtual world.

iii. Cluster 3 has 15 items marked in blue: analysis, COVID-19, effect, fashion, fashion industry, implication, pandemic, paper, performance, problem, relationship, review, study, trend, and virtual reality system.

iv. Cluster 4 has 15 items marked in yellow: the article, augmented reality, consumer, example, experience, framework, future, impact, influence, research, role, theory, virtual reality application, and work.

v.   Cluster 5 has nine items marked in purple: applications, artificial intelligence, internet, new technology, orders, surveys, technology, things, and trade-offs.

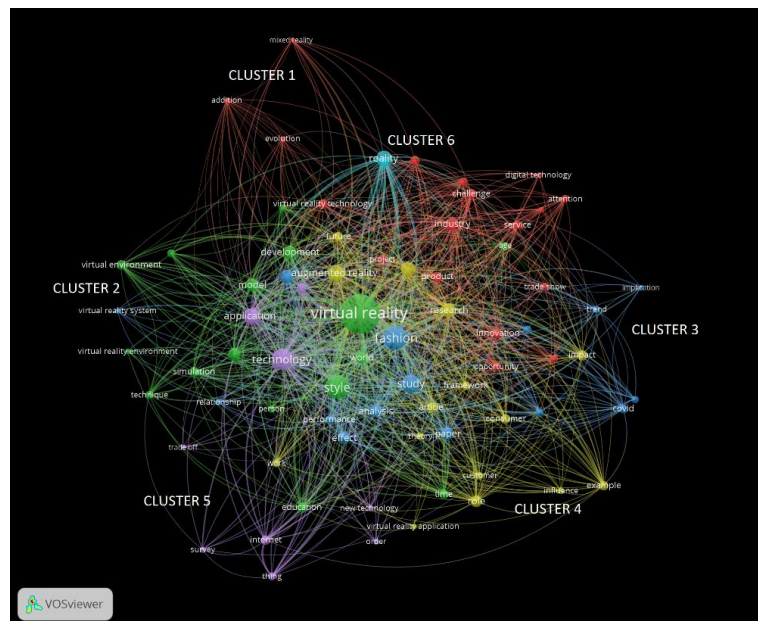vi. Cluster 6 has 1 item marked in turquoise colour, consisting of reality.

Fig. 4. Visualization of 6 clusters with different colours

Based on the result of VOSviewer, there seems to be a correlation from 1 item to another item, so items with a high correlation will be on the same cluster and have the same colour. Depending on how frequently a thing occurs, the size of the circle changes for each item. When a word appears more regularly, the circle grows more prominent. Computational mapping representation was examined in three visualizations. They are network visualization (Figure 5), density visualization (Figure 9), and overlay visualization (Figure 10).
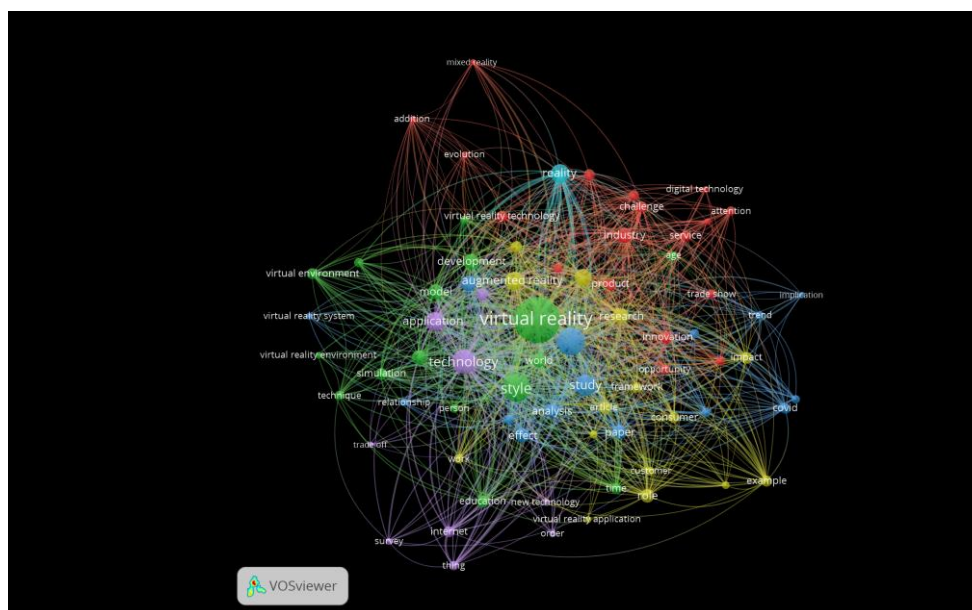
Fig. 5. Network visualization of virtual reality technology trade show keyword

The clusters and correlation of each item are shown in Figure 5. The relationship between the Virtual Reality Technology-Fashion Trade Show items can be seen in network visualization, where an interconnected network represents the relationship between each item. The network visualization clusters in Figure 5 revealed that Virtual Reality Technology-Fashion Trade Show research has two dominant items, "Virtual Reality" and "Fashion." The item "Virtual Reality" comes from cluster 2, connected with 73 links with a total link strength of 1483 and 494 occurrences. Meanwhile, the item "Fashion" from cluster 3 is associated with 70 links with a total link strength of 507 and 192 circumstances, as seen in Figure 5 above.

Based on the network visualization, there is a high correlation between 'virtual reality' and 'style' in the same cluster 2, which means the keyword has a good chance of being researched. There is also an interesting side to these data: "Fashion" and "virtual reality" on another cluster, cluster 3. It means that research in fashion trade shows virtual reality is usually about fashion virtual reality featuring style, so it seems both are union in Figure 6 and Figure 7. On the other side, the items "trade show" (cluster 1) with "fashion" (cluster 3) and "virtual reality" (cluster 2) still correlate with each other but not strongly by the firm term; it can be seen in Figure 8. This means there's still a lot of space for exploring this field of research.
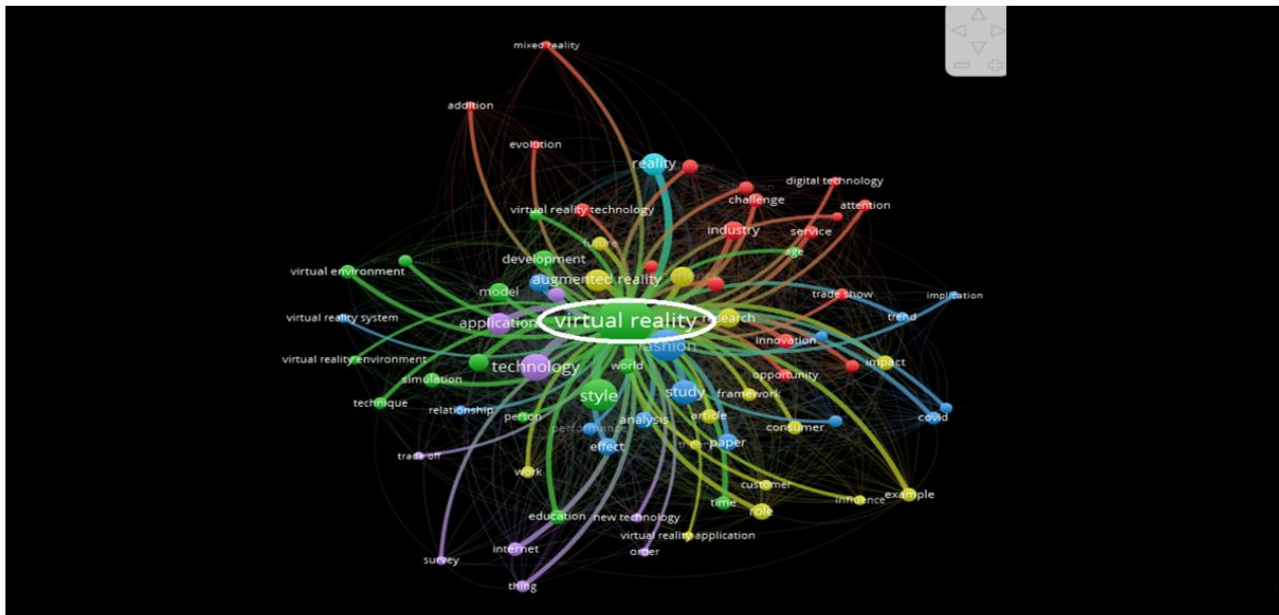
Fig. 6. The term "virtual reality" network visualization shows the network of "virtual reality" with another item, both of the same cluster and the others, such as technology, style, fashion, study, tradeshow, education, simulation, virtual reality environment, augmented reality, industry, etc
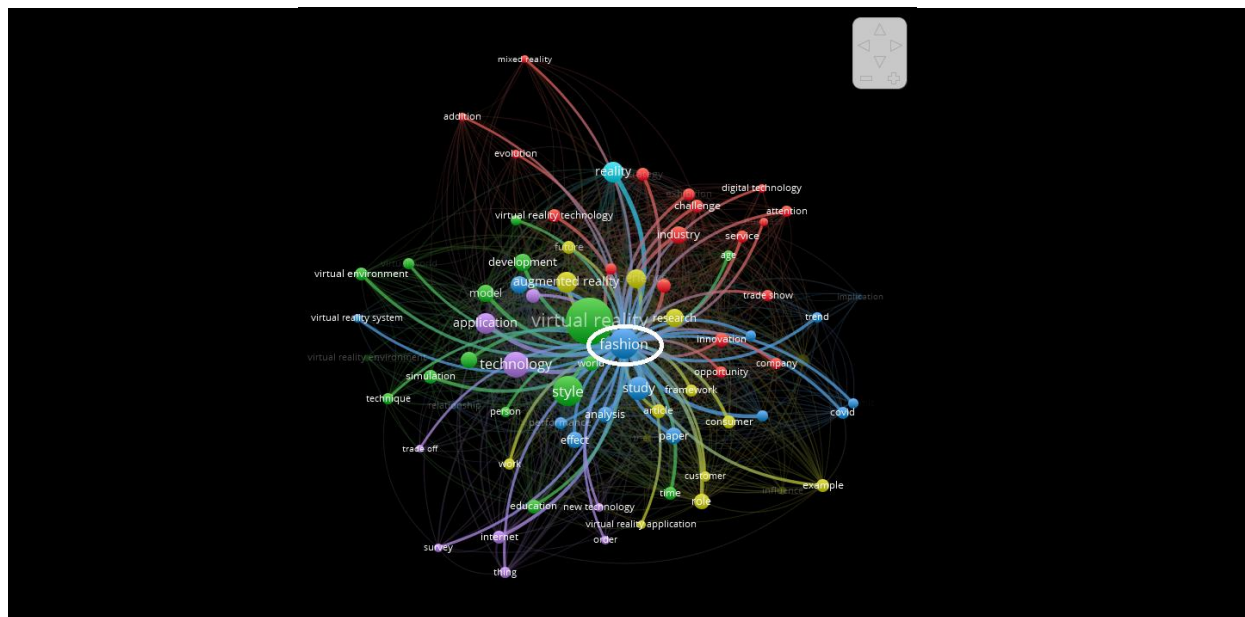

Fig. 7. The term "fashion" network visualization shows the "Virtual reality" network with another item of the same cluster and the others, such as virtual reality, technology, style, tradeshow, study, education, etc.

Figure 8 shows that "trade show" related to "virtual reality" and "fashion" have link 36, total link strength 61 occurrences 24. This value is not as high as "virtual reality" and "style"; however, it still shows that there is a connection between "fashion," "trade show," and "virtual reality" even though it is relatively weak. The following data illustrate opportunities for future research.

Fig. 8. The correlation between "trade show," "fashion," and "virtual reality" items in network visualization

The second visualization of bibliometric computational mapping can be seen in Figure 9 as an overlay visualization to determine the year the item became mainstream. It can be called a history trail of the topic; unlike the overlay, density visualization can be used to see the part of research that is still rarely done. The visualization shows the item has a bright yellow until green with dark blue as a background colour. The more brilliant colour and the diameter around the item label will be more significant if many researchers use those research areas.

Fig. 9. Overlay visualization

Conversely, items rarely used in research within that period will be dim in colour from green to bluish. From Figure 10, standard research fields are attractive for many researchers, such as virtual reality, fashion, style, technology, and study, but the item "trade show" is still in the green to bluish colour, which means item "trade show" items still have the opportunity to be studied as future research. These findings can also validate the efficiency of bibliometric analysis in describing current research and literature (, which we can use to define the development or future research topics [33-35].
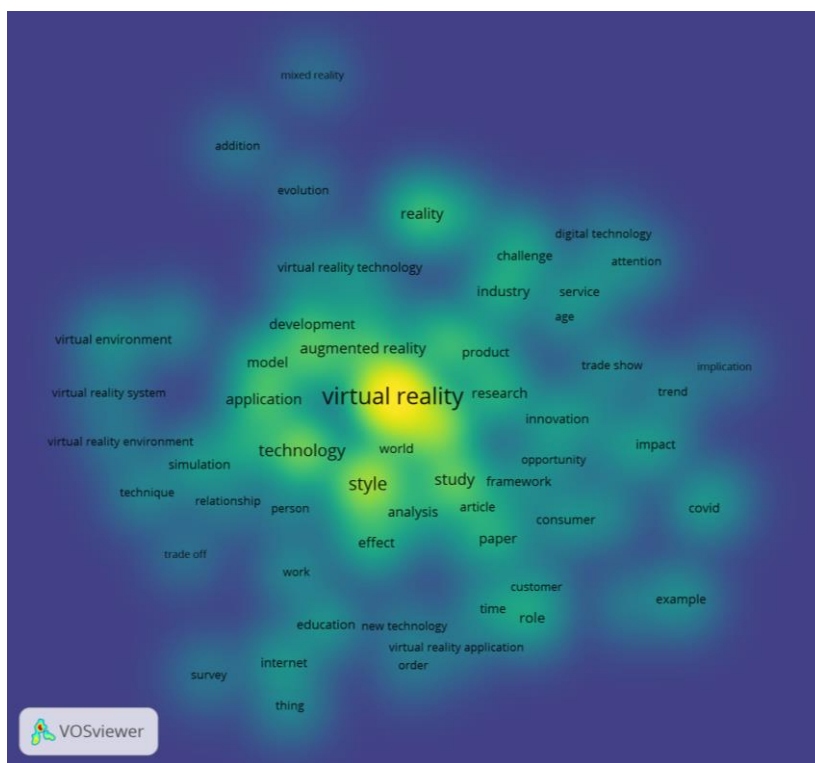

Fig. 10. Density visualization

5. Conclusions

This research's objective was to find out the trend of fashion trade shows virtual reality research by using Harzing's Publish or Peris and VOSviewer. Articles used in this research were harvested from the Google Scholar database using Harzing's Publish or Perish software. There are 960 articles relevant to keywords published for the last ten years, from 2013 to 2022. Based on the findings in the previous ten years, there were a few fluctuations in 2013-2016 but increased in 2017-2021, with the highest publication as 183 publications in 2021. The result of this study shows that the fashion trade show virtual reality technology topic still has an increased opportunity to be researched and associated with other terms and has the potential to be a novelty related to future research.

Acknowledgement

References
[1]   Smeds, Kerstin. "On the Meaning of Exhibitions: Exhibition èpistèmes in a historical perspective." *Designs for learning* 5, no. 1-2 (2012): 50-72. https://doi.org/10.2478/dfl-2014-0004
[2]   Herbig, Paul, Bradley O'Hara, and Frederick A. Palumbo. "Trade show: who, what, why." *Marketing Intelligence & Planning* 16, no. 7 (1998): 425-435. https://doi.org/10.1108/02634509810244444

[3] Kerin, Roger A., and William L. Cron. "Assessing trade show functions and performance: an exploratory study." *Journal of marketing* 51, no. 3 (1987): 87-94. https://doi.org/10.1177/002224298705100306

[4] Arifin, Raihan Mohd, Nik Fadhilah Nik Him, Ahmad Shidki Mat Yusoff, and Borhanuddin Ahmad. "Rabbani Education: Facing Realities and Readiness for the Challenges of Future Education." *International Journal of Advanced Research in Future Ready Learning and Education* 31, no. 1 (2023): 1-8.

[5] Zulkifli, Faiz, and Rozaimah Zainal Abidin. "Identity in the Digital Age: An Investigation of Malaysian Perspectives on Technology and Privacy." *Journal of Advanced Research in Applied Sciences and Engineering Technology* 43, no. 2 (2025): 1-20. https://doi.org/10.37934/araset.43.2.120

[6] Isa, Helmi Mohamed, Rosilavi Mat Jusoh, Muhammad Hafiz Aswad Ahmad Kamal, Fatin Shairah Md Amin, and Puteri Fadzline Muhamad Tamyez. "Enriching User Experience among Senior Citizens in the Digital Era: A Design-Thinking Approach to Constructing a Prototype of a Mobile Application." *Journal of Advanced Research in Business and Management Studies* 29, no. 1 (2022): 20-27. https://doi.org/10.37934/arbms.29.1.2027

[7] Sari, Rianita Puspa, and Deri Teguh Santoso. "Pengembangan model kesiapan umkm di era revolusi industri 4.0." *Jurnal Media Teknik dan Sistem Industri* 3, no. 1 (2019): 37-42.

[8] Sugiono, Shiddiq. "Industri Konten Digital Dalam Perspektif Society 5.0 (Digital Content Industry in Society 5.0 Perspective)." *JURNAL IPTEKKOM Jurnal Ilmu Pengetahuan & Teknologi Informasi* 22, no. 2 (2020): 175-191.

[9] Ashaari, Hasbullah, and Yuhainis Mohd Yusoff. "Understanding Factors Influencing the Adoption of Digital Marketing Among Small Businesses: The Application of Decomposed Model of the Theory of Planned Behaviour (TPB)." *Journal of Advanced Research in Applied Sciences and Engineering Technology* 43, no. 2 (2025): 134-147. https://doi.org/10.37934/araset.43.2.134147

[10] Zaman, Nur Badriyah Kamarul, Muhammad Haziq Hasbullah Azmi, and Wan Noranida Wan Mohd Noor. "Perception on E-Wallet Application among Night Market Consumer in Lembah Klang." *Journal of Advanced Research in Business and Management Studies* 34, no. 1 (2024): 14-22. https://doi.org/10.37934/arbms.34.1.1422

[11] Ayatullah, M. Wahyu, and M. Ruslianor Maika. "Analisis bibliometrik perkembangan fashion muslim: publikasi ilmiah di negara-negara dunia." *SYARIKAT: Jurnal Rumpun Ekonomi Syariah* 5, no. 1 (2022): 155-170. https://doi.org/10.25299/syarikat.2022.vol5(1).9432

[12] Oliveira, Rimena Canuto, Irenilza de Alencar Näas, and Solimar Garcia. "Fashion Industry 4.0: A Bibliometric Review in the Fashion Industry." *Research, Society and Development* 11, no. 12 (2022): e490111234203-e490111234203. https://doi.org/10.33448/rsd-v11i12.34203

[13] Castillo-Abdul, Bárbara, Luis M. Romero-Rodríguez, and Amor Pérez-Rodríguez. "Branded content in fashion research: Bibliometric analysis by correlations." *Academy of Marketing Studies Journal* 24, no. 1 (2020): 1-7.

[14] Wazarkar, Seema, Shruti Patil, and S. Kumar. "A bibliometric survey of fashion analysis using artificial intelligence." *Libr. Philos. Pract* 4462 (2020).

[15] Shokeen, Aarush, Anshu Lochab, and Ravi Sharma. "Fashion Consciousness: A Bibliometric Analysis."

[16] Rathi, Rubal, Ruchi Garg, Aakanksha Kataria, and Ritu Chhikara. "Evolution of luxury marketing landscape: a bibliometric analysis and future directions." *Journal of Brand Management* 29, no. 3 (2022): 241-257. https://doi.org/10.1057/s41262-022-00273-x

[17] Hasbullah, Nornajihah, Zuraidah Sulaiman, and Adaviah Mas'od. "Assessment of Sustainability in Fashion Marketing by Bibliometric Analysis." *Test Engineering and Management* 83 (2020): 14720-14734.

[18] Moniaga, Travis, And Viany Utami Tjhin. "The Use Of Augmented Reality In Ecommerce: A Bibliometric Study." *Journal of Theoretical and Applied Information Technology* 100, no. 13 (2022): 4814-4826.

[19] Goel, Pooja, Kala Mahadevan, and Krunal K. Punjani. "Augmented and virtual reality in apparel industry: a bibliometric review and future research agenda." *foresight* 25, no. 2 (2023): 167-184. https://doi.org/10.1108/FS-10-2021-0202

[20] Seon, Joon-Ho, Seong Eun Kim, Hyun-Jung Lee, and Kyu-Hye Lee. "Evolution of the intellectual structure of clothing and textiles literature - A bibliometric study of RJCC." *The Research Journal of the Costume Culture* 27 No. 4 (2019): 299-309. https://doi.org/10.29049/rjcc.2019.27.4.299

[21] Yeshin, T. "Sales Promotion." *London: Cengage Learning EMEA.* (2006).

[22] Evers, Natasha, and John Knight. "Role of international trade shows in small firm internationalization: a network perspective." *International Marketing Review* 25, no. 5 (2008): 544-562. https://doi.org/10.1108/02651330810904080

[23] Kijewski, Valerie, Eunsang Yoon, and Gary Young. "How exhibitors select trade shows." *Industrial marketing management* 22, no. 4 (1993): 287-298. https://doi.org/10.1016/0019-8501(93)90025-3

[24] Tanner Jr, John F. "Leveling the playing field: factors influencing trade show success for small companies." *Industrial Marketing Management* 31, no. 3 (2002): 229-239. https://doi.org/10.1016/S0019-8501(00)00132-2

[25] Becker, Doreen. *Color trends and selection for product design: Every color sells a story*. William Andrew, 2016. https://doi.org/10.1016/B978-0-323-39395-9.00026-8

[26] Wang, Ru Guang, Huai Lin Dong, Min Wen Wu, and Qing Feng Wu. "Research and design of digital museum based on virtual reality." *Advanced Materials Research* 926 (2014): 2516-2520. https://doi.org/10.4028/www.scientific.net/AMR.926-930.2516

[27] Sunan, Ronald Sumichael, Samuel Christopher, Novandy Salim, and Andry Chowanda. "Feasible Technology for Augmented Reality in Fashion Retail by Implementing a Virtual Fitting Room." *Procedia Computer Science* 227 (2023): 591-598. https://doi.org/10.1016/j.procs.2023.10.562

[28] Nantel, Jacques. "My virtual model: Virtual reality comes into fashion." *Journal of Interactive Marketing* 18, no. 3 (2004): 73-86. https://doi.org/10.1002/dir.20012

[29] Han, Xue. "Research on multi-mode human-computer interaction design evaluation system based on virtual reality technology." *Procedia Computer Science* 228 (2023): 1054-1058. https://doi.org/10.1016/j.procs.2023.11.138

[30] Liu, Linyan, Zheng Xiang, Yuyao Liu, Florian J. Zach, and Nancy McGehee. "Factors influencing exhibitor satisfaction and loyalty: A meta-Analysis on the Chinese exhibition market." *Sustainability* 12, no. 20 (2020): 8390. https://doi.org/10.3390/su12208390

[31] Derani, Nor Emmy Shuhada, Mazita Mokhtar, Gusman Nawanir, and Haziman Zakaria. "Bibliometric Review on Indigenous Entrepreneurship: Past Findings, Present and Ways Forward." *Journal of Advanced Research in Business and Management Studies* 31, no. 1 (2023).

[32] Tan, Huiyi, Keng Yinn Wong, Hong Yee Kek, Kee Quen Lee, Haslinda Mohamed Kamar, Wai Shin Ho, Hooi Siang Kang *et al.,* "Small-scale botanical in enhancing indoor air quality: A bibliometric analysis (2011-2020) and short review." *Progress in Energy and Environment* (2022): 13-37. https://doi.org/10.37934/progee.19.1.1337

[33] Rahman, Mahfuzur, Che Ruhana Isa, Teng-Tsai Tu, Moniruzzaman Sarker, and Md Abdul Kaium Masud. "A bibliometric analysis of socially responsible investment sukuk literature." *Asian Journal of Sustainability and Social Responsibility* 5 (2020): 1-19. https://doi.org/10.1186/s41180-020-00035-2

[34] Zhao, Liming, Miles M. Yang, Zhenyuan Wang, and Grant Michelson. "Trends in the dynamic evolution of corporate social responsibility and leadership: A literature review and bibliometric analysis." *Journal of Business Ethics* 182, no. 1 (2023): 135-157. https://doi.org/10.1007/s10551-022-05035-y

[35] Khatib, Saleh FA, Dewi Fariha Abdullah, Ernie Hendrawaty, and Ahmed A. Elamer. "A bibliometric analysis of cash holdings literature: current status, development, and agenda for future research." *Management Review Quarterly* 72, no. 3 (2022): 707-744. https://doi.org/10.1007/s11301-021-00213-0