Scholar Publishing Group
International Journal of Art Innovation and Development
https://doi.org/10.38007/IJAID.2022.030303
ISSN 2789-7192 Vol. 3, Issue 3: 35-45

The Countermeasures of the Integration of Wearable Technology and Cultural Creativity——Based on the Market Perspective

Ankiit Singh*

Bangladesh University of Engineering and Technology, Bangladesh

**corresponding author*

Keywords: Wearable Technology, Wireless Communication, Cultural Creativity, Market Competition

Abstract: With the development of technology,Modern technology is a combination of technology and art and high technology. While satisfying the basic functions of clothing, it also needs to meet the requirements of consumers for aesthetics and health. Wearable technology is the trend of the future.Whether at CES International Electronic Consumption Exhibition or at the domestic electronic products exhibition, cultural and creative electronic products occupy a large number of booths.Under the impetus of scientific and technological innovation, people's consumption patterns and living habits are undergoing tremendous changes. The influence of science and technology on promoting economic prosperity and social progress can not be underestimated.As the most promising sunrise industry, the cultural industry is inseparable from the support of science and technology, using science and technology as a means to break the traditional cultural expressions and enrich the cultural communication methods, thus creating a new cultural product. People's recognition and attention gradually entered the life of ordinary people. The cultural and creative industry is an important force to promote the rapid development of the national economy.Effective integration of cultural and creative industries and wearable technology is an inevitable trend under the premise of rapid development of wearable technology, which can effectively improve the shortcomings of traditional cultural and creative industries. The integration of cultural creativity and wearable technology has become a highlight of reform in the context of rapid economic growth. In the context of wearable technology, the development of cultural and creative industries urgently needs market-oriented reform and innovation.This paper studies how wearable technology and cultural creativity can be integrated from the perspective of market user experience, and summarizes the business under market research.

1. Introduction

1.1. Wireless Communication

When a signal travels from the transmitting end to the receiving end and encounters the edge of a large object, the electromagnetic wave will "bend around the obstacle" and continue to propagate. This process is called diffraction. In practical mobile communications, the propagation medium contains a large number of particles with geometric dimensions much smaller than the signal wavelength or surface roughness, which will reflect and spread the signal energy in all directions, ie, scattering. Such as leaves, lampposts, signs, etc. Transmission waves are generated when electromagnetic waves propagate from the outdoors to the room, but in outdoor scenes, the transmitted signal is much weaker than other signals, so it can be ignored. In summary, reflection, diffraction and scattering are the three basic mechanisms of wireless propagation and the most critical factors affecting wireless signal propagation.

(1) Reflection

The reflection of electromagnetic waves occurs when an obstacle that is much larger in size than its own wavelength is encountered during propagation. When the dielectric constant of the electromagnetic wave propagation medium changes, part of the energy of the incident wave enters the second medium and the other part is reflected back to the first medium. When the electromagnetic wave is reflected, the Fresnel reflection coefficient of the incident wave in the transmission medium determines the energy intensity of the reflected wave and the incident wave. Reflection phenomena usually occur when electromagnetic waves encounter buildings, mountains, and the surface.

(2) Diffraction

Electromagnetic waves will be diffracted when they encounter obstacles of a small size, such as objects such as leaves and sharp objects. The shape and size of the obstacle, the amplitude and phase of the electromagnetic wave when the diffraction occurs, all affect the diffraction. Diffraction also plays an important role in the mobile communication system, because the electromagnetic wave propagation encounters the blockage of the object may form a shadow area, and if the receiver is in this area, a serious fading of the signal will occur. However, the existence of the diffraction phenomenon allows the electromagnetic wave to bypass the obstacle and thereby reach the shaded area to enhance the received power of the signal.

(3) Scattering

When there are objects smaller than the wavelength in the electromagnetic wave propagation medium, such as rough super-surfaces, sand grains and other small objects, usually only a few millimeters or a few micrometers, scattering occurs. The presence of a scattering phenomenon allows signals that propagate electromagnetic waves to diverge in all directions. Typically, the energy obtained by the receiver is higher than the energy predicted by a single diffraction and a single reflection model.

This is due to the effects of scattering.

1.2. Wireless Propagation Okumura-Hata Model

There are two types of propagation models: one is a deterministic model and the other is a statistical model. The more commonly used statistical models are the Okumura model, the Hata model, the Lee model, the Egli model, and the SPM model. Based on the propagation law and fading characteristics of the wireless communication system, a series of propagation models can be

fitted by using the test data. However, in the actual network planning, due to the different application environments, the theoretical analysis results in the strict sense must have different degrees. The error, which affects network coverage and signal quality. Model calibration should be combined with the specific environment. Continuous wave testing must be carried out for different propagation environments, and the parameters of the model should be corrected by appropriate algorithms. Finally, the actual propagation conditions can be compared, the error range can be reduced, and the prediction accuracy can be improved.Using stochastic process theory analysis, the propagation received signal of mobile communication can be expressed as:

$$r(x) = m(x) r_o(x) \tag{1}$$

Here x represents the distance. The Okumura-Hata model proposes a signal strength prediction model based on a large number of propagation loss test data, but the prediction model must be queried for various types of curve charts to predict, which is not conducive to computer processing. Hata improved on the basis of the Okumura model, and the Okumura-Hata model was obtained by setting constraints on the curve fitting. Almost all empirical propagation models proposed in the later period are corrections and improvements based on this. The model is mainly used for a quasi-flat terrain macrocell system with a frequency of 150MHz~1500MHz and a cell radius greater than 1km. The effective antenna height of the base station and the height of the mobile station antenna are 30m~200m and lm~10m respectively.The empirical formula for the Okumura-Hata model is:

$$L = 69.55 + 26.16 \log f_e - 13.82 \log h_{te} - a(h_{re}) + C_{cell} + C_{terrain} \tag{2}$$

$a(h_{re})$ is the height correction factor of the mobile station antenna, h_{te} is the effective height (m) of the base station antenna, and h_{re} is the effective height (m) of the mobile station antenna. C_{cell} and $C_{terrain}$ are the cell type correction factor and the terrain correction factor, respectively. The effective altitude is calculated by subtracting the average altitude from the height of the antenna to the ground above the ground level.

The representation of the height correction factor of the mobile station antenna will vary depending on the size and frequency of different cities, as follows:

$$a(h_{re}) = \begin{cases} \text{Medium and small cities} & (1.11 \log f_e - 0.7) h_{re} - \log f_e \\ \text{Big city} & \begin{cases} 8.29 (\log 1.54 h_{re})^2 - 1.1 (f_e \le 300 MHz) \\ 3.2 (\log 11.75 h_{re})^2 - 4.97 (f_e \ge 300 MHz) \end{cases} \end{cases} \tag{3}$$

The expressions of the cell correction factors in different propagation environments will be different, as follows:

$$C_{cell} = \begin{cases} 0 & \text{city} \\ -2 \left[\log \left(f_e / 28 \right) \right]^2 - 5.4 & \text{suburbs} \\ -4.78 (\log f_e)^2 - 18.33 \log f_e - 40.98 & \text{rural} \end{cases} \tag{4}$$

The terrain correction factor $C_{terrain}$ can reflect the influence of important environmental

topographic factors such as waters, trees, and buildings on propagation loss.

1.3. Multimedia Processing Technology

In the processing of wearable technology data, data transmission, source coding, bit-rate adaptation, etc. are used to compress the transmission information, so that only a small amount of data is needed in the communication process to restore the original multimedia information. It saves network resources without affecting the quality of multimedia reception. However, most video compression algorithms suffer from quality loss, such as typical MPEG-4 lossy compression coding with compression ratios between 20 and 200. In the process of lossy compression, there must be a trade-off between video quality, compression loss, and system requirements. Therefore, how to use limited network resources to ensure better multimedia transmission quality is the focus of discussion.

The compression of video data is actually the compression of a series of picture frames. Video compression can be performed in both spatial and temporal directions, including spatial compression and temporal compression. The system only stores the temporal or spatial difference of the picture frames, instead of saving all the original bit information, that is, effectively reducing the storage cost by using intraframe compression and interframe compression. Among the video compression standards, H.262 MPEG-2, which was developed in 1995, and H.264/MPEG-4 AVC, which was established in 2003, and H.265/MPEG-HEVC, which was proposed in 2013, are currently in popular use. Compared with the H.262 MPEG-2 encoding standard, H.264/MPEG-4 AVC has successfully improved coding efficiency by 50%, saving a large amount of bit-rate resources, and its encoding rate is adjustable for low rates. Or a high rate of coding. With the further development of video coding technology, the H.265/MPEG-HEVC standard not only has the characteristics of the previous generation, but also adds the encoding method of ultra high definition video. The H.264 compression coding method can be used in the wearable product, and the video is compressed by the reference software JM. The compressed picture format includes I frame, P frame and B frame. The I frame adopts the method of intraframe compression, which can be decoded by itself without the participation of other frames. The P frame adopts the interframe compression method, and the encoding of the P frame refers to the preceding I frame and P frame, which is higher than the I frame. Compression ratio; the compression ratio is the largest B frame, and the correct decoding of the B frame depends not only on its own decoding, but also on the previous I frame, P frame and subsequent P frame.

1.4. Market Positioning

What needs to be done after market segmentation and target market selection is to position the enterprise itself and the product according to the demand of the selected target market. In short, positioning products, corporate image, and market position provide consumers with a direction for development while satisfying consumers. The purpose of positioning is to perfectly integrate the product with the needs of the target consumer group. Finding the market positioning is crucial for the sales performance of the company's products, and even for the future development of the company. When many companies enter the wearable device industry, they only see the huge business opportunities in this market and ignore themselves. The problem of product market positioning, blindly following the development logic of large foreign companies, copying other people's models, leading to serious product homogeneity, no competitive advantage. Thus, they were eliminated in the fierce market competition. Although the current combination of wearable

technology and cultural creativity is in a stage of rapid development, most of the wearable technology and cultural and creative combination companies are holding a test of water, and do not think about the problem from the perspective of the user, but based on The resources that the enterprise itself can provide, the technical production products, and the corresponding marketing promotion strategy, blindly follow the trend that the product does not directly hit the selling point of the user's pain points, so it can not successfully attract users to pay for it. For the wearable device market: the closer you are to the user, the closer you are to success. In the era of wearable devices, the user experience will become the driving force driving the development of this industry, leading the coming of the next wave of business. The function, application, design and price of products will become the key factors for creating a first-class experience. For the user, it is also used for the user.

Wearable device companies must establish close relationships with users. The main practices centered on user experience are the following. (1) Consumer groups have different consumer needs: cultural and creative markets need to be segmented based on user needs. Smart Brace Plus can wirelessly connect the surrounding smart phones without connecting to Bluetooth, equipped with a specific operating system, without inserting a SIM card, and integrating various social elements. Users can directly exchange the contact information of each other by directly touching Plus, attracting avant-garde and A modern consumer who loves technology. For off-site lovers, just wear the AppleWatch smart watch and you can hear the other person's breathing and pay attention to each other's physical condition. Different consumer groups have different needs. The integration of wearable technology and cultural creativity should be based on user characteristics and needs to segment the market and design different products to meet the market segments, avoiding the high homogeneity of products and the vicious circle of the market. (2) Designing products based on user experience: factors such as non-interference, comfort, equipment endurance, handling convenience, product safety and privacy of wearable devices determine the user experience and affect the actual product. Market acceptance. Only by focusing on the user experience and integrating cultural creativity into the elaborate design of wearable products can cultural creativity enter people's lives through new technologies. (3) Serving the system as the center: Wearable devices are the supporting devices for the development of the Internet of Things and the mobile Internet. The wearable device can analyze and process the massive data source of the consumer provided by the cloud computing platform in real time, and the cloud computing platform will provide a wider service support for the device. Cultural creativity can only serve the market better if it is formed by a system based on new technologies such as wearable technology.

2. Experiments

2.1. Construction Principles of the Integration of Wearable Technology and Cultural Creativity

(1) Relevance principle: Although there are different facets of a problem between the level and the level, and between the indicators and the indicators, they are also related to each other. The elements and the elements are inseparable and are described from various aspects. The status of the target layer.

(2) The principle of representation: the selection of elements at each level follows the principle of representation. Indicator elements at least describe and reflect a certain aspect of the level of objectives, including the basic characteristics and connotation of things, reflecting the

characteristics of cultural industry competitiveness.

(3) The principle of dynamics: the integration of cultural creativity and wearable technology is the product of the new era significance that the development of the times has given the cultural industry connotation. This paper follows the principle of dynamic development in the design indicator system to ensure that the indicator system can be new. The era reflects the development requirements, and can not be separated from reality, ensuring that the indicator system is rooted in the reality of development and flexible in accordance with the development of the times.

(4) Principles of data accessibility: The purpose of building an indicator system in academia is more quantitative. The original intention of describing the development of things, the combination of wearable technology and cultural creativity, and the competitiveness of the cultural industry is consistent. Quantitative analysis is inseparable from the support of data. Most indicators can obtain data support through questionnaires, comprehensive review of yearbooks, interviews, field visits and surveys, etc. It is expected to avoid a large number of qualitative indicators resulting in high subjective randomness, thus improving the evaluation. objectivity.

2.2. Research Methods

Hypothesis testing and regression analysis. Correlation analysis method for consumer purchase behavior, firstly weighting the scores of each product of “product quality”, “reference group”, “purchase motive”, “brand marketing” and “consumer personality” to obtain the values of each variable. Then use SPSS20.0 for correlation analysis.

2.3. Survey Content

This paper applies the cultural industry competitiveness model constructed above, taking a questionnaire survey as an example to investigate 1,000 buyers. The main survey factors of this questionnaire are summarized into five categories: “product quality factors”, “reference group factors”, “purchasing motivation factors”, “brand marketing factors” and “personal characteristics factors”. The relationship between consumption factors is shown in Figure 1.

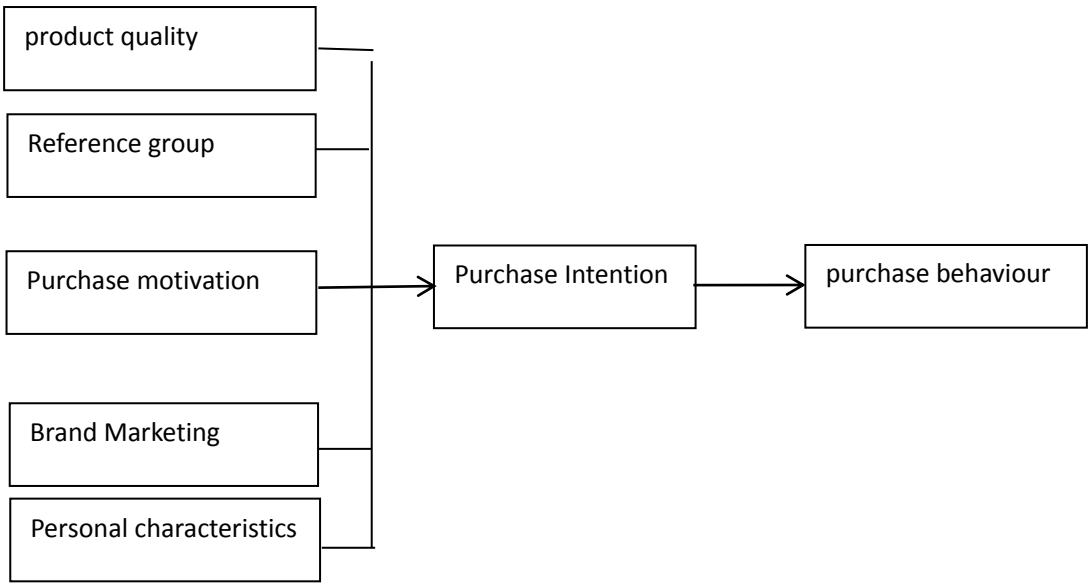

Figure 1. Consumption factor relationship

3. Discussion

Wearable products and cultural creative market segmentation need to be based on market research, understand the purchasing behavior, purchasing habits, and consumer preferences of different consumers, and then classify customer groups according to behavioral characteristics. Each type of consumer group with different behavioral characteristics is a market segment. In the same market environment, there is a commonality between market segments. However, due to the different consumption preferences of personal consumption habits, there are also large differences between market segments. Based on the establishment principles and related theories, this paper self-corrects the indicator system and removes the indicators that do not meet the established principles and theories. Summarize all aspects of the recommendations and correct unreasonable indicators. In order to scientifically establish the construction of the indicator system, the indicator system established is shown in Table 1:

Table 1. Cultural industry competitiveness index system under the integration of wearable technology and cultural creativity

Target layer	Primary indicators	Secondary indicators
Evaluation of cultural industry competitiveness under the integration of wearable technology and cultural creativity	Production factors A	Human Resources A1
		Cultural resources A2
	Demand conditions B	Income levels B1
		Consumer Culture and Entertainment Act B2
	Corporate Strategies C	Industry Development Strategy C1
		Enterprise competitiveness C2
	Technology Application and Innovation D	Cultural and technological integration levels D1
		Research status D2

In the hierarchical structure, for two adjacent layers, the upper layer is the target layer and the lower layer is the factor layer. In the construction of the cultural competitiveness index system, the cultural industry competitiveness is set as the target layer and several factors. According to the scale scale, according to the construction theory of AHP, the A-level element judgment matrix and the D-layer element judgment matrix (each of the two elements of the A-layer element are compared, and the AD judgment matrix is constructed according to its importance degree. Sort, and get the weight of the first-level indicator and the second-level indicator, as shown in Table 2 below.

Table 2. Hierarchical ordering of indicators and indicator weight table

	A2	B2	C2	D2
A1	1	1/3	1/2	2
B1	3	1	2	4
C1	2	1/2	1	3
D1	1/2	1/4	1/3	1

In the hierarchical structure, for two adjacent layers, the upper layer is the target layer and the lower layer is the factor layer. In the construction of the cultural and creative competitiveness index system, the cultural industry competitiveness is set as the target layer and several factors. This paper believes that the segmentation of the wearable cultural and creative market can be based on the actual environment of our society, such as the lack of culture for young people in China, and the feelings of the elderly for culture.

Among the 1,000 consumers who purchase smart wearable products, 39% value the product's

function, usability and security, 28% value the fashion and trend of the product, and 20% buy the product mainly to satisfy The curiosity of the other, the other accounted for 13%, the factors that users buy smart wearable products are shown in Figure 2.

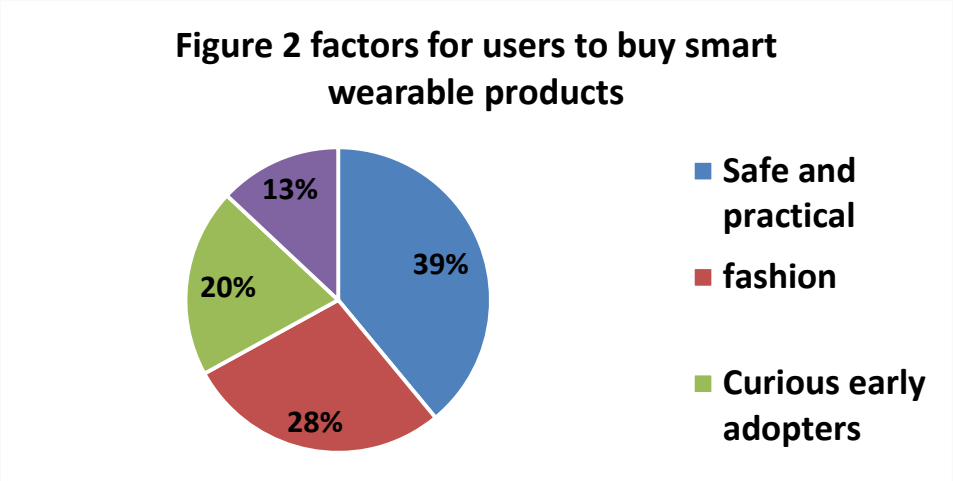

Figure 2. Factors for users to buy smart wearable products

As can be seen from Figure 2, the purchaser puts the safety and practicality of the product first, followed by the fashion trend and creativity. When investigating the users who have demand but not purchased, the price is too high and the appearance of the product is observed. Dissatisfaction, dissatisfaction with the function or safety of the product constitutes the most important reason for its abandonment of purchase, as shown in Figure 3.

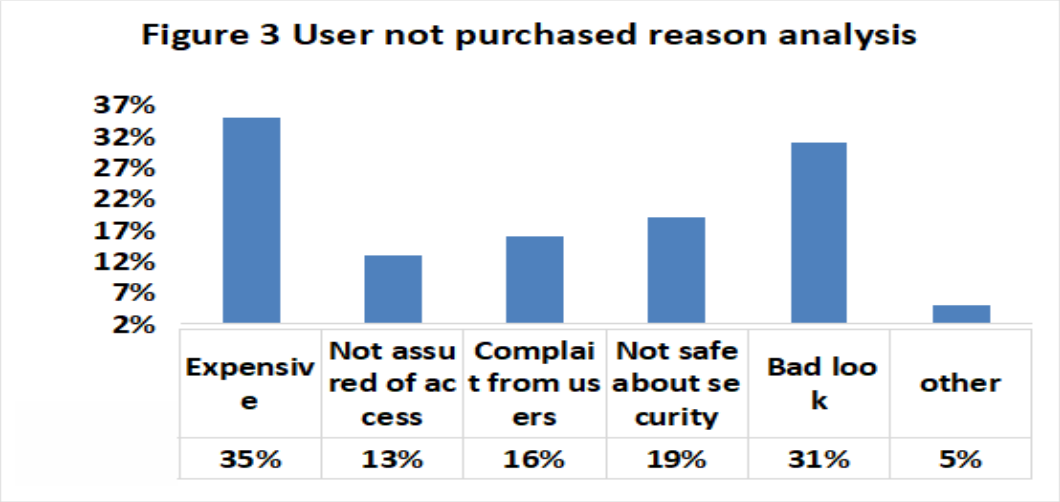

Figure 3. User not purchased reason analysis

As can be seen from Figure 3, the dissatisfaction with the appearance and the lack of understanding of safety accounted for the most. To build a user experience evaluation system for smart wearable products covering appearance, function, safety and reliability, to help solve problems in the appearance and function of products, to help users select satisfactory products and promote the development of the industry. Has an important meaning.

In order to verify the rationality of the user experience evaluation system of wearable cultural creative products, three wearable cultural creative products with different brands and different price

segments were selected for comparison test. The results of the evaluation of the three products were comprehensively scored, and the user experience comprehensive evaluation scores of the three products were obtained. After the conversion by the percentage system, the sample A received a favorable rate of 97.8%; the sample B was followed by a favorable rate of 96.4%; Sample C had the lowest score and the favorable rate was 87.5%. The results of the survey are shown in Table 3.

Table 3. Price and evaluation of three wearable cultural and creative products

SAMPLES	PRICE/RMB	NUMBER OF EVALUATIONS	FAVORABLE RATE/%
SAMPLE A	3500-4500	30000+	97.8%
SAMPLE B	2500-3500	15000+	96.4%
SAMPLE C	1500-2500	10000+	87.5%

As can be seen from Table 3, the sample user A has the highest favorable rate, and the sample C has the lowest user rating, which corresponds to the user experience evaluation score. Therefore, it can be stated that the user experience evaluation score can basically correctly reflect the popularity level of the product and the user experience feeling, and the test result is consistent with the expectation.

4. Conclusion

Wearable devices are still at the forefront of technology in the domestic cultural and creative industries. The main technologies closely related to wearable devices are: cloud technology, real-time image acquisition technology, sensing technology, positioning technology, language control technology, and Internet of Things. With the reduction of production costs, the cultivation of market atmosphere and the further improvement of user acceptance, wearable devices will become more popular, and related applications and products will penetrate various sub-sectors of cultural and creative industries. Wearable devices bring new value propositions to the industry, which are closer to consumer needs, especially in real life. This is a new trend in the application of wearable devices in the cultural and creative industries. The integration of wearable technology and cultural creativity is a dynamic process of applying technological innovation to the continuous creation of value in the cultural industry. The region promotes the integration and development of wearable technology and cultural creativity, helps to enhance the competitiveness of the cultural industry, optimize the industrial structure, and consume Bring more and more interesting entertainment experiences and help to improve the level of consumption.

This paper deeply analyzes the internal mechanism and operation mode of the integration of wearable technology and cultural creativity, and studies the countermeasures of the integration development of wearable technology and cultural creativity from the perspective of market user experience. It analyzes the main influences of wearable technology on cultural and creative industries, including user experience as the center, cultural and technological integration to be civilian, people-oriented, basic ethics, and intelligence covering appearance, function, safety and reliability. The wearable product user experience evaluation system helps users to select satisfactory creative products to help solve problems in the appearance and function of the products.

Funding

This article is not supported by any foundation.

Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

References

[1] *Zhang K, Yang K, Liang X, et al. Security and privacy for mobile healthcare networks: from a quality of protection perspective. IEEE Wireless Communications, 2015, 22(4):104-112. DOI:10.1109/MWC.2015.7224734*

[2] *Mosenia A, Sur-Kolay S, Raghunathan A, et al. CABA: Continuous Authentication Based on BioAura. IEEE Transactions on Computers, 2016, PP(99):1-1. DOI:10.1109/TC.2016.2622262*

[3] *Robertson K. Capitalist Cocktails and Moscow Mules: Activism in the Museum and Gallery. Ethics, 2014, 96(4):704-720.*

[4] *Baker C, Sicchio K. Hacking the Body 2.0: dancing between commercial and DIY wearable technology. International Journal of Performance Arts and Digital Media, 2018:1-14.*

[5] *Lazzeretti L, Capone F, I. Erdem Seçilmiş. In search of a Mediterranean creativity. Cultural and creative industries in Italy, Spain and Turkey. European Planning Studies, 2016, 24(3):568-588.*

[6] *Laakkonen I, Taalas P. Creativity as capital in the literacy classroom: Youth as multimodal designers. Literacy, 2015, 41(2):79-85.*

[7] *Adam A S. A Framework for Seeking the Connections between Technology, Pedagogy and Culture: A study in the Maldives. Journal of Open Flexible & Distance Learning, 2017, 21.*

[8] *Myers, D. E. Creativity, diversity, and integration: Radical change in the bachelor of music curriculum. Arts and Humanities in Higher Education, 2016, 15(3-4):293-307. DOI:10.1177/1474022216647378*

[9] *Fogarty L, Creanza N, Feldman M W. Cultural Evolutionary Perspectives on Creativity and Human Innovation. Trends in Ecology & Evolution, 2015, 30(12):736-754. DOI:10.1016/j.tree.2015.10.004*

[10] *Sengupta S, Kim J, Kim S D. Forecasting New Features and Market Adoption of Wearable Devices Using TRIZ and Growth Curves: Case of Fitness Tracking Products. International Journal of Innovation and Technology Management, 2018, 15(01):1850009.*

[11] *Chan Jeong S, Kim S H, Yeon Park J, et al. Domain-Specific Innovativeness and New Product Adoption: A Case of Wearable Devices. Telematics and Informatics, 2016:S0736585316302118. DOI:10.1016/j.tele.2016.09.001*

[12] *Zhang M, Luo M, Nie R, et al. Technical attributes, health attribute, consumer attributes and their roles in adoption intention of healthcare wearable technology. International Journal of Medical Informatics, 2017:S1386505617303568. DOI:10.1016/j.ijmedinf.2017.09.016*

[13] *Wu J, Li H, Cheng S, et al. The Promising Future of Healthcare Services: When Big Data Analytics Meets Wearable Technology. Information & Management, 2016:S0378720616300775.*

[14] *Mccann J. Co-design development: Design direction for the clothing layering system as a wearable technology platform. Textile-Led Design for the Active Ageing Population, 2015:385-423.*

[15] *Park Y J, Skoric M. Personalized Ad in Your Google Glass? Wearable Technology, Hands-Off*

Data Collection, and New Policy Imperative. Journal of Business Ethics, 2017, 142(1):71-82. DOI:10.1007/s10551-015-2766-2

[16]Levine J A. The Baetylus Theorem—the central disconnect driving consumer behavior and investment returns in Wearable Technologies. Technology & Investment, 2016, 7(3):59-65. DOI:10.4236/ti.2016.73008

[17]Wang, Chih-Hsuan. A market-oriented approach to accomplish product positioning and product recommendation for smart phones and wearable devices. International Journal of Production Research, 2015, 53(8):2542-2553. DOI:10.1080/00207543.2014.991046

[18]Arigo, Danielle. Promoting physical activity among women using wearable technology and online social connectivity: a feasibility study. Health Psychology and Behavioral Medicine, 2015, 3(1):391-409. DOI:10.1080/21642850.2015.1118350

[19]Smith-Dektor A H, Young S D. Marketing, Technology, and Medicine: Recommendations on How to Incorporate Psychological Principles into New Technologies to Promote Healthy Behaviors. Journal of Consumer Health On the Internet, 2014, 18(3):253-259.

[20]Wiederhold B K, Boyd C, Sulea C, et al. Marketing analysis of a positive technology App for the self-management of psychological stress. Studies in Health Technology & Informatics, 2014, 199(199):83.

[21]Chambers T, Pearson A L, Stanley J, et al. Children\"s exposure to alcohol marketing within supermarkets: An objective analysis using GPS technology and wearable cameras. Health & Place, 2017, 46:274-280. DOI;10.1016/j.healthplace.2017.06.003

[22]Radclyffe-Thomas, Natascha. Fashioning cross-cultural creativity: Investigating the situated pedagogy of creativity.. Psychology of Aesthetics, Creativity, and the Arts, 2015, 9(2):152-160. DOI:10.1037/aca0000014

[23]Hsiao S W, Wang M F, Lee D J, et al. A study on the application of an artificial neural algorithm in the color matching of Taiwanese cultural and creative commodities. Color Research & Application, 2015, 40(4):341-351. DOI:10.1002/col.21899

[24]Wang, Ming-Feng. A study on Fuzzy C-means application in Austronesian language cultural and creative product colors. Color Research & Application, 2018, 43(3):375-386.

[25]Zheng Z. Case Study on Cultural and Creative Commodity Development and Design Based on Value Creation/, International Conference on Arts. 2016.