

CROSS-DOMAIN NEW TECHNOLOGY IN NATIONAL PALACE MUSEUM, TAIWAN "TOWARDS KNOWLEDGE SOCIETY"

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Abstract: The diversity found within this information era prompts us to seek new knowledge, explain and solve problems from different sources. Knowledge societies, today, are more accessible and propose alternative ideas due to the way we solve the problems within education and learning facilitated by the emergence of contemporary museums and new media. Considering the impact of knowledge society and the emerging new media in people's lives, the National Palace Museum in Taiwan makes ingenious changes through audience orientation, use of innovative technology, and application of new media services. This study analyzes and explores new interpretations of the artworks created by new media technologies, giving viewers a different aesthetic experience.

Keywords: Art Education, Digital Education, Knowledge Society, New Media, Museum, Technology.

1. Introduction

Contemporary museums develop differently from traditional conservative positions, and museums have their own social mission in life aesthetics, cultural education, and artistic creative industries.¹ In this era of service economy, coupled with the overwhelming preponderance of technology, the position and presentation of digital education in exhibitions and displays make it necessary to examine the functions of current museums

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¹S. C. Lin, "Museums and Leisure - Institute of Contemporary Art/ Boston," *Taiwan Museum Journal*, 32, no. 4 (2013):100-105.

inevitably involving the introduction and use of new media technology.²

The progress of globalization and the update of technological information constantly challenges the operation and display mode of museums. Their management and service targets have expanded from the public who visit the museums in person to virtual audiences around the world. Museums should design interactive, entertaining, technological displays and meet educational learning trends, which repeatedly impacts the audience experience in traditional museums, and creates different personalized visits. Innovative media and technology breaks through the limited traditional presentation modes, and enhances the willingness of the audience to participate in museums and extend the viewing time of an audience. Thus, meeting the educational learning and consumption needs of the public.³

The new media technology display, which is not limited by time or space, makes it necessary for museums to use websites, apps, digital platforms, and new technologies in their design. Based on the literature review and the case study of the National Palace Museum in Taiwan, this study hopes to clarify whether the purpose of combining science and technology with museums is done only to cater to interactive, entertaining and technological display and educational learning needs, or whether it can also create new horizons for museums themselves.

The Palace Museum was officially opened on 10 October 1925. It is located at the centre of the central axis in Beijing, covering a total area of 720,000 sq. meters and a construction area of about 150,000 sq. meters. It was moved to Taiwan (ROC) in 1945, and the exhibits it now hosts date mainly from the Ming and Qing dynasties. The Palace Museum is a national first-class

²F. Y. Keng, "Breakthrough and Innovation: New Visions for National Museum Exhibitions," *Museology Quarterly*, 31, no. 3(2017): 79-98.

³C. C. Liu, "Creating a Personalized Visiting Experience: Museum Communications Integrating Humanity and Technology," *Museology Quarterly*, 23, no. 4(2009): 89-100.

museum, and is included among the five major museums in the world together with the Hermitage Museum in Russia, the Metropolitan Museum of Art in the United States, the Louvre in France, and the British Museum in the United Kingdom. In 2012, the highest daily number of visitors exceeded 180,000, and the annual number of visitors exceeded 15 million. In recent years, the Palace Museum, in addition to the development of online collections, focuses on online education channels, app guide development, Augmented Reality (AR) and Virtual Reality (VR) displays. It also organizes competitions and Research and Development cooperation in cultural creative industries, thus bringing the museum closer to the public. It further applies new media technology to increase the appeal of the museum for the new generation. In addition to the educational promotion, it also expands its service experience economy model.

2. Positioning of Museums

The purpose of the National Palace Museum ties into the functions of national museums. According to the definition of the International Council of Museums,

[museum is a] permanent non-profit organization that serves the society and its own development, is open to the public and is committed to the collection, preservation, research, interpretation and demonstration of the tangible and intangible cultural heritage of human beings and their environment to achieve the goals of museum education, learning and entertainment.⁴

Therefore, in addition to its display, collection, research, service, education, learning and leisure functions, the National Palace Museum is an authoritative indicator as a national museum, which presents national cultural characteristics or public values and acts as the leader for domestic museum development. It

⁴B. D. Han, R. Y. Chen, and H. C. Tseng, "Museology: Research on the Organizational Position and Business Model of National Museum of Taiwan. Research, Development and Evaluation Commission," *Executive Yuan* 11, no. 1 (2011): 73-104.

achieves the goal of social learning through education promotion to improve the living quality and knowledge.

3. Educational Functions of Museums

In Taiwan and the international community, the National Palace Museum enjoys an academic status of its own. The collection displays prioritize the best interests of the public. There are many historical relics in museums, and other rich collections for study and research. In addition to the experience of the museum, the National Palace Museum actively promotes services in remote places in various ways, by setting up branches and exhibition tours in order to benefit larger audiences. It can be seen that the activities exhibited and undertaken by the museums are mainly based on collection, research, and study. Therefore, the educational function includes the display of cultural relics, the enhancement of the professional knowledge of visitors, and the cultivation of visitors' learning attitudes and aesthetic concepts.

The Museum enhances the educational and academic functions, and promotes communication with the public to achieve cultural inheritance, artistic promotion, and lifelong learning. To achieve the above purposes, the museums use the following means:

- (i) Conduct research related to the establishment purpose and the collection theme.
- (ii) Convert the research results into display contents and collect the research results.
- (iii) Conduct educational promotion activities and publish related publications.

However, the displays in the National Palace Museum are not only a display of its collections, but also a representative field that reflects the function of social education. The National Palace Museum enhances the audience's vision, inspires society to think and encourages the willingness of the audience to learn, which could be the beginning of the development of innovative display education style.⁵

⁵General Information on Museum Law, 2015 <https://www.moc.gov.tw/information_306_37430.html> (5 December 2018).

2.2. Visitor Guides and Museums

Because the Museum needs to demonstrate its educational function, convenient mobile guide devices can increase the learning interest of visitors and cultivate better learning attitudes and concepts.⁶ The guide modes in most traditional museums are personal and group guides, and personal audio and text guides (maps and exhibition pamphlets). Moreover, in the actual visits to the museum exhibitions, many visitors come into contact with exhibition works in the designated exhibition area, and the visit time is not very long. The way to attract visitors' attention through appropriate guides and display designs, increasing the length of the interaction, and realizing important learning and educational inheritance functions are important questions for museums. The traditional modes of guides, personal or instrumental, are unable to meet individual visitor needs, and necessitates museums to introduce new media technology. Therefore, the improvement of the guide mechanism and mode has become an important area of innovation.⁷

2.3. Operation and Dilemma of Museums

As the development of museums is made more diverse and internationalized, museums should play more a crucial role in Taiwan. The developmental dilemma of Taiwanese museums is mainly the diversity of museum establishments, which are subordinate to different authorities. The lack of policy planning of museums and their counselling support mechanisms have limited their development. In view of the increasingly diversified museum management patterns and changing functional orientations, it is necessary to foster and enhance the professionalism of museums in order to nurture multicultural

⁶H. S. Hsiao, H. W. Huang, and W. T. Hong, "The Study of Mobile Guiding System Applied to Museum Learning," *Kaohsiung Normal University Journal: Natural Sciences and Technology Edition*, no. 23(2007): 29-52.

⁷C. H. Wang and J. C. Yu, "Using RFID to Identify Factors Influencing Museum Visitor Behaviors," *Technology Museum Review*, 11, no. 4 (2007): 19-40.

development and international competition. Museums need to refer to the museum laws established in other countries, the relevant organization charters, professional standards regulated through certification as in Europe and the United States, solicit opinions of the public and private museum practitioners, correspond with central and local authorities, establish the positioning of museums, use government resources, and promote the quality of professional service through supportive counselling mechanisms.⁸

In his book *Managing the Non-Profit Organization*, Drucker writes, "One of the forces driving the advancement of a cause is to have a strong and reliable support group. To develop such a foundation, it is best to start from your own sponsorship group. You need their support."⁹ Many experts and scholars have listed museums as important mining areas for the cultural industry. In many non-profit businesses, museums play an important role in the knowledge society, thus becoming an indispensable part of the cultural economy.

In the case of the National Palace Museum in Taiwan, the issue of the cultural creation plan in 2017 shows that it is working hard to promote digital project plans and review relevant implementation results. In addition, the Museum is eager to cooperate with the government-driven 'Smart Taiwan' initiative. With 'innovators' as the main idea, we will create knowledge of social aesthetic experience. Museums should consider how to transform museum artefacts into contemporary cultural goods, and enhance the visitor's experience through these commodities, thereby promoting the development of cultural creative industries. Some of the topics to be investigated are the following:

(i) Digital collection energy has not been fully utilized in the cultural creative value-added industries.

(ii) The value-added manufacturers lack product design innovation and cross-industry alliance capabilities.

⁸General Information on Museum Law, 2015, (online).

⁹Peter Drucker, *Managing the Non-Profit Organization*, Harper Collins e-books, 2012.

(iii) Creative value-added products are limited by the old marketing strategies and channels, and are not fully integrated into the international market.

(iv) Creative value-added products lack display settlement and sales channels so they cannot fully communicate with the people, and integrate art into life.

(v) Industrial talent teams have not been able to fully exchange and communicate on design, production, marketing, and promotion, and lack international views.

In addition to expanding the scale of the National Palace Museum and creating world-class sightseeing spots, it can start with its own museum education, collection, research, preservation, display, entertainment functions, and integrate its software and hardware resources in product development or life aesthetics. "The Palace Museum Creative Aesthetics" is the "new idea, new thinking" for revitalizing the development of Taiwanese cultural creative industries, which could become a new 'Silk Road' to enter the international arena.¹⁰

3. New Media Digital Service of Museums

With the assistance of the ever-changing technology, countries have applied digital media to all walks of life, and cross-field digital art works have been continuously produced. There have also been many new media works that are extremely shocking and attractive to viewers. As traditional museum exhibitions gradually lose their visiting audience, exhibition designers, experts and scholars should consider combining new media and digital technology display with education.

In the past exhibitions, the National Palace Museum was unable to fully integrate museums with science and technology, and failed to combine learning and collection exhibitions. In the case of "Business Emperor Wu Ding and the People in Harmony," Liu Junxi believes that in order to cater to the preferences of the Taiwanese audience, the wrong form of media exhibition leads in the wrong direction of knowledge barriers

¹⁰National Palace Museum 108 Annual Policy Plan, 2017, <<https://www.npm.gov.tw/Article.aspx?sNo=03006230>> (25 November 2018).

and expensive art exhibitions.¹¹ The purpose of the museum exhibition is to find the essence of education and the promotion of knowledge society, faithfully conveying the meaning of education and collecting information.

3.1. Websites and Digital Platforms of Museums

Museum education is worthy of sustainable development and promotion of knowledge societies. Specifically, the exhibition environment is an important tool for the promotion of museum education. How to design the exhibition environment from the perspective of educators include both the aesthetic and educational functions in the environment, and plan a variety of complex spaces to enhance the confidence of teachers in museum-based teaching.¹²

Traditionally, when a museum promotes education, it conveys educational content to users in a paper-based description. The paper guide only focuses on the overall description and does not present deeper details. It is limited by the fact that it is not fun and interesting to provide viewers with diverse and vivid content.

After the digital collection plan, the National Palace Museum hopes to break physical museum boundaries through cutting-edge communication technology and new media. In particular, younger generations will be able to access cultural relics and educational resources of the Museum better through the virtual world and digital media. The National Palace Museum is also embarking on the fourth phase of e-government in Taiwan, enabling its services to be delivered via personal computers or

¹¹Liu Junxi, "Preliminary Study on Museum News Communication and Organic Image Formation," *Museum of the Quarterly Journal* 27, no. 4(2013): 67-85.

¹²R. C. Ma, and C. L. Chen, "Education of the Exhibition Context in Yingge Ceramics Museum: From the Perspectives & Experiences of Art Teachers," *Technology Museum Review*, 12, no. 2 (2008): 47-69.

portable devices and enhancing interaction between the Museum and younger generation.¹³

The visiting information on the official websites of museums is like a service desk. Visitors can search for visit timings, ticket price and traffic guide information. These websites are just 'information-based museum websites.' The world's top museums are using different forms of websites to create new media displays through more lively content, collections, links to museums and audiences. This is known as the "Social Museum Website." It is our direction to "go to the knowledge society."¹⁴

The online learning concept concentrates on building closer relationships between museums and audiences through the narrowcasting model supplemented by remote learning tools, to explore how to use the online learning environment to assist museum education, expand audiences, and create new interaction modes with visitors on the Internet or in-house; it emphasizes learner-centred and participation-based education, and provides practical advice through different case studies.¹⁵ The online platform complements not only the physical exhibits, but also play a more significant role in education promotion. Faced with the future development of science and technology, if the museums do not consider the development of network services, a large number of the viewers would be lost. The digital platform is another aspect of the physical museum display. With the help of digital technology, the Museum can understand the online habits and needs of its audience, and develop an aesthetic experience different from traditional exhibitions. The emergence

¹³Liu Weijie, "Discussion on the Operation Management Mechanism of the Special Exhibition of Public Museums in China--Taking the National Palace Museum as an Example," *Museum Quarterly* 31, no. 4 (2017): 41-65.

¹⁴W. H. Din, L. W. Wang, W. F. Chan, Y. R. Chou, and H. Ho, "Museum Media Technology: Is It Education, Entertainment or Both?" *Technology Museum Review*, 19, no. 1(2015): 51-66.

¹⁵K. Y. Yeh, "Museum Learning across Time and Space - Professor Herminia Din Interview Record," *Museology Quarterly*, 23, no. 3 (2009): 69-78.

of educational services aims to achieve high educational goals, but also enhances the interaction between the Palace Museum and younger generation.¹⁶

3.2. Mobile App Learning

The traditional museum visiting experience requires visitors to hold maps and exhibition pamphlets as well as audio guides. The tour guide app, on the other hand, integrates museum maps, audio guides and camera functions on the same interface, which can greatly improve the visiting experience. With the popularity of mobile phones and tablets, museums need to pay attention to the educational value expected by the audience. Interactive exhibition apps and mobile learning combined with exhibition planning can increase the audience's initiative to learn and explore.¹⁷

Mobile learning apps could also include digital guides and virtual displays that integrate educational and learning purposes. A total of five mobile apps are planned, including 'The Palace Museum Permanent Exhibition App,' which is a cultural relic guide created by the Museum following the 'The Palace Museum Walk App,' which allows viewers to explore the Museum through smart mobile vehicles. Additionally, apart from the Amazing National Treasure AR Play, there is the Giuseppe Castiglione App which was designed for the 90th anniversary of the Palace Museum in 2015 and allows the audience to see the Hundred Horses Painting created by the Italian missionary painter Giuseppe Castiglione through the original "linear perspective" during the reign of Emperor Yongzheng. Three hundred years later, with the help of science and technology, the Hundred Horses Painting shows the

16S. Y. Huang, Y. T. Chao, and R. H. Tsai, "ICT-enabled Service Design Suitable for Museums – The Case of the iPalace Channel of the National Palace Museum in Taipei," *Library and Information Science*, 39, no. 1 (2013): 84-97.

17C. C. Liu, "The Museum and "Me": Creating Participatory Experiences through Personalized E-Services," *Museology Quarterly*, 31, no. 1 (2017): 27-55.

majestic momentum of the Qing Dynasty once again. The blending of ancient and modern times within technology gives art new vitality, and also attracts digital generations to experience new artistic and cultural forms in museums.

For hearing-impaired visitors, the Palace Museum launched the sign language guide app, and selected 33 artefacts from the collection for sign language videos, text guides and pictures, ranging from the Neolithic Age to the Qing Dynasty. The collection contains jade and bronze sculptures and ceramics, and the guide content includes slogan videos, text guides and pictures to help hearing-impaired visitors to understand the contexts of various cultural relics. New media technology is thus shaped to meet the diverse needs of many people, and solve dilemmas encountered in the traditional exhibition process. The multi-function mobile service app combined with interactive technology enables people to move through the museum exhibition information anytime and anywhere, making it easier, faster and clearer for those looking to visit the museum and its treasures.¹⁸

3.3. AR and VR exhibition of museums

Now, diverse new media technologies and mobile device vehicles can be regularly applied to enhance learning interest and teaching effectiveness for audiences. With the advancement of technology, Augmented Reality (AR) and Virtual Reality (VR) technology has emerged, which allows for exciting possibilities in museum design and innovation.

AR is a new information technology that breaks away from traditional imaging methods and combines virtualization technology to observe and experience the world. The core of this technology is to put the virtual world on the real world. The AR-based mobile platform game Pokémon GO, which was popular in 2016-2017 is based on this technology. The public can see the real environment and the virtual animation through the camera lens of the mobile device. The National Palace Museum

¹⁸National Palace Museum Mobile App, 2017 <<https://www.npm.gov.tw/en/Article.aspx?sNo=02007052>> (22 November 2018).

responded to this trend and commissioned the “Amazing National Treasure AR Play” AR app, which was combined with the Children’s Audio Guide. The public can scan the artefact pictures on the audio guides after the exhibition, watch 3D animation of cultural relics, and experience the fun of virtual interaction with cultural relics.

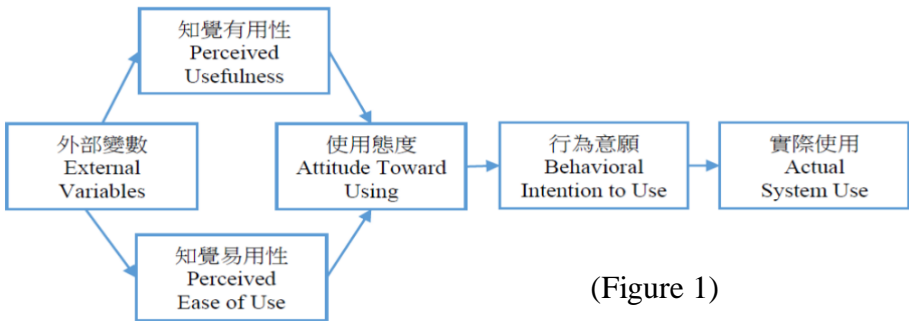
On the other hand, VR creates a virtual world through computer simulation. It can make people feel like they are immersed in a situation, and allow for 3D observation. From the technical perspective, the VR system has the following three basic characteristics: immersion-interaction-imagination, which emphasizes the leading role of the public in the virtual system. In the past, people could only interact with digital information in the computing environment through a keyboard and mouse. Now, audiences are able to interact with the environment using a variety of sensors and multidimensional information. The users are immersed in the environment established by the computer system, and the computer program creates an accurate 3D world image that is sent back to the user to create a VR presence.¹⁹

The rapid development of science and technology brings about comprehensive changes for all ages in various fields. The changes are not only manifested in daily life. The measures and guidelines for education and learning are inseparable from the combination of digital learning and new media technology.²⁰ From the acceptance mode architecture diagram (Figure 1), we can see that when people receive external information, the variables or changes will have a decisive influence on their

¹⁹L. Tsai, "Enabling Magical Approaches for Exploring Virtual Environment in Limited Physical Space," *Dissertation*, Graduate Institute of Computer Science and Information Engineering, National Taiwan University,(2017): 1-54.

²⁰C. Y. Chou, "Exploring the Attitude Differentiation on e-Learning Systems Based on TAM: the Strength of Growth Need as A Moderator," *Journal of Information Management*, 21, no. 1 (2013): 83-106.

attitude and willingness to accept and learn new things.²¹ Through the acceptance model of technology, in the process of moving forward to the knowledge society, if learners can use the museum's new media technology, they will feel the usefulness and ease of use of technology. New media enables learners to intuitively absorb and generate positive learning attitudes. Museums can learn about it and promote innovation in education and exhibitions.



(Figure 1)

4. Diverse Digital Cultural Creative Services of Museums

The diverse digital media technology and platforms of the National Palace Museum have been imported into the exhibition and education promotion, including mobile video, education channel, social media, audio and video platforms, mobile apps, which make digital operation modes combining Internet marketing and communication. They not only provide common museum digital website services, including video-stream multicasting, video-on-demand and information retrieval, but introduce AR and VR technology into the diverse digital services of the National Palace Museum, which are more attractive to the audience. The collection of cultural relics containing original Chinese art treasures is combined with new media technology to break through the limitations and framework of traditional exhibitions.

²¹Fred D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, (1989): 319-340.

In recent years, the National Palace Museum combines the digital collection plan with the National Science and Technology Development Fund project to actively create the cultural creative industrial resources of the National Palace Museum, and cooperate with the Taiwanese design industry and professional executive team in the application of cultural creative industries. It organizes student design competitions and design camps, develops a number of cultural boutiques, and fosters collaboration between domestic and international design teams to jointly develop cultural products, thus becoming a treasure trove for the development of cultural creative industries in Taiwan. This transforms the National Palace Museum into a more international cultural creative cause, and relatively changes the perception of cultural products in traditional cultural industries.

The 'cultural and creative industries,' include new media exhibitions, cultural and creative products, and cultural and educational innovations. In 1995, the United Kingdom took the lead in promoting 'cultural creative industries' as a major policy, and declared the importance of 'art culture' in the 'knowledge societies.' The success of the programme also allows the world to see the 'soft power' of culture. The prosperity of the cultural and creative industries has enabled the UK to use cultural creative marketing and social innovation to make the country's power more stable. In the face of Taiwan's booming cultural creative industries, the National Palace Museum must let go of its image as a treasure house. It is also necessary to actively use the development of new media and cultural and creative industries, conduct education, plan learning courses, preserve cultural knowledge, but also move towards the creation of knowledge societies. It should not only preserve traditional Chinese artefacts, but also think about how to transform the historical spirit, cultural significance and aesthetic beauty of the collections into contemporary cultural commodities as well as integrate Chinese culture and art into contemporary life, thus developing cultural creative industries.

The efforts of the National Palace Museum in the preservation of Chinese cultural relics have advanced from traditional restoration of collections to digital collections and exhibitions. The Museum is endeavouring to enable younger generations to enter into the aesthetic experience of Chinese cultural relics in their own environment. In addition to the exhibition of cultural relics, since 2010, the Museum holds creative competitions based on the previous digital collection plan, selecting representative cultural relics each year, different themes, such as landscape paintings, porcelain, and sculpture, are brought into life aesthetics and creativity. This shows that cultural relics are not only the traditional objects displayed through the glass cabinets, but are applied to the aesthetics of life in a more interesting manner. For example, the landscape painting is integrated into the home's aromatherapy style, and the traditional sculpture shape is also brought into the modern tea making apparatus (Figure -2).



(Figure 2)

In recent years, with the changes in museum marketing strategies, entry ticket income is not enough. In contrast, museum stores, cultural goods and affiliated restaurants have become the key to increasing museum revenues. Such changes, in addition to bringing the market economy, bring cultural creativity into life and enhance the knowledge economy. They attract viewers to participate in its exhibitions, create new aesthetic experiences through various digital media exhibitions and increase the value of 'artworks,' linking cultural creativity with consumption, and creating more diverse merchandise and

aesthetics of life.²² The ideas from the student creative design competitions and camps have been developed into many groups of products. In addition, the National Treasures Creation Competition, held annually since 2010, jointly develops cultural creative products with the Taiwanese design industry and renowned designers at home and abroad.

The Palace Museum has three restaurants. The classic dishes that have been conceived by the Palace Museum have not only attracted the people of Taiwan, but also visitors from all over the world. According to Chris Smith, former British Minister of Culture, Media and Sports,

The characteristics of the cultural creative industries include the cultural creative products. They are not necessarily visible or touchable objects, but they make us exciting and deeply touched, or entertain us. From this perspective, the cultural and creative industries are not just a form of reproduction of traditional culture, decoration and styling. Pay more attention to cultural connotations, rooted in the cultural and educational industry, and bring people to the knowledge society. Improve the added value of products, and promote the cultural aesthetics to the aesthetics of the public life through creative marketing strategies and digital channels in order to develop the influence of past aesthetic experience and enhance the refined life of the public.²³

5. Conclusion

The museum is a unique collection of artefacts that offers opportunities to learn from a variety of resource applications. The museum will be a treasure trove of knowledge, learning through new media, planning education, becoming a knowledge house and leading us towards knowledge societies. At the present stage, the cross-field application of multimedia has been linked to a large number of functions and purposes,

²²S. C. Lin, "Museums and Leisure - Institute of Contemporary Art/Boston," *Taiwan Museum Journal*, 32, no. 4 (2013): 100-105.

²³K. N. Huang, "Museum Enterprise: Taipei City," *Artists*, (2007): 79-81.

which brings the museum closer to the people and cultural relics closer to everyday life. If the exhibition operation of contemporary museums is not assisted by innovative multimedia technology, it seems that it cannot attract the attention and interest of the public. The New media technology should focus on coming up with more possibilities for the application of cultural relics and technology. As the times continue to advance, the use of technology in museums is bound to undergo changes.

The value of the knowledge society has also changed as contemporary museums have changed in the direction of exhibition planning and educational learning. Through a variety of vivid new media exhibitions, providing more interesting textbooks, learners can learn in multiple directions and shape the knowledge society. The museum can no longer simply attract experts and scholars or limited groups. Through multimedia and digital technology, contemporary museums can gradually become new exhibition areas that attract diverse groups of viewers. The museum is no longer just a treasure house of cultural relics. In response to social and cultural trends, with the help of new media technology, museums have been transformed into leisure and entertainment spaces. They thus become spaces for social interactions, and hold an important place in a country's national life.

Today, people face the challenges to cross the distance of knowledge and skills provided by today's schools and learn from the knowledge society. The actual and potential resources are available through the new media network. Knowledge is spread through the network, and new forms of media play important roles.

Contemporary museums are highly stimulated by global technology, interdisciplinary and cross-regional culture. The use of multimedia integration of new forms and educational learning models is a change towards the knowledge society. Service and experience economy is also a contemporary phenomenon. It adjusts the diverse ways and patterns of knowledge transfer in museums, injects vitality into the

cultural and creative industries, promotes the deepening of its service experience economy, seeks the self-positioning of museums, and deepens the promotion of knowledge society. Through our education systems, we form and nurture future citizens, and the emergence of the Internet and new media, require information search skills, imagination and originality to assess and identify important or real information, and develop critical thinking in them. This fact makes us rethink the way we deal with teaching concepts, with a focus on the way students learn. The era of information prompts us to seek new knowledge from different sources, to recognize the existence of various kinds of knowledge, and to discover, explain and solve problems in many ways. In order to achieve the above goals, we must encourage people to cultivate alternative views on things and ways to solve the problems between education and learning. The emergence of contemporary museums and new forms of media makes social knowledge more susceptible to perception and acquisition.