

## **Using smart technologies in electronic archiving in the exhibition on the architecture of the Prophet's Mosque: a proposed model**

By

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### **Abstract:**

The study aims to identify the smart technologies used in electronic archiving, assess their current application at the Exhibition of the Architecture of the Prophet's Mosque, and propose a model for archiving its collections using these technologies. A case study approach was employed to illustrate the use of smart technologies in electronic archiving, alongside a content analysis method to analyse local and global models, resulting in a checklist of 38 applicable technologies categorized by stages (digitization, preservation, publication). The findings indicated that the exhibition utilized smart technologies in electronic archiving at a rate of 18.4%, with notable technologies including holography, interactive screens, and wireless guides, while 81.6% of smart technologies remained unused. The application of these technologies in Saudi Arabia is notably increasing across various sectors. The study recommends prioritizing smart technologies, understanding their application, and organizing training workshops to teach necessary skills for their use in electronic archiving. It also emphasizes the importance of implementing the proposed model and collaborating with technology companies and experts to enhance execution quality.

**Keywords:** Electronic Archiving, Smart Technologies, Museums, Exhibitions, Digitization, Preservation, Publication, Exhibition of the Architecture of the Prophet's Mosque, Saudi Arabia, Digitization of Cultural Heritage, Digitization of Museums, Digitization of Documents.

## **Digital twinning and its role in documenting and reviving cultural heritage: a future study**

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### **Abstract:**

Digital twin technology represents a modern and effective means of preserving and documenting cultural heritage in interactive and advanced ways. Societies can preserve their cultural heritage accurately and comprehensively. Digital twinning can be used to record audio, video, artistic and theatrical performances, document texts, images and drawings, and document customs, traditions and oral heritage. This is done by creating applications and interactive digital platforms to explore heritage

In an innovative way, which makes it more attractive to the public and facilitates its transfer to future generations, in addition to the fact that digital twin technology provides broader access to cultural heritage. It can be published and shared across the Internet and through social media, which enhances cultural communication and interaction between different cultural.

Accordingly, this research aims to explore how to employ digital twin technology in the field of cultural heritage preservation, analyze its impact on traditional processes, and evaluate the effectiveness of its use in documenting and reviving cultural heritage. It also highlights the opportunities that digital twinning opens for local communities in preserving their cultural identity and enhancing interaction with heritage in new ways.

Using the descriptive and analytical approach in order to identify the best practices used in digital twin technology to preserve cultural heritage and analyze the role of this technology to explore the challenges and obstacles that may face the process of documenting cultural heritage using this technology, in order to arrive at providing practical recommendations to enhance the use of digital twin technology in the future.

And an attempt to realize the extent of its impact on the cultural and heritage awareness of local communities, and this has resulted in a set of results: The most important of which are: presenting new models or documentation tools based on digital twinning, highlighting the cultural and historical benefits of using digital twinning in heritage preservation.

Determine practical directions for concerned institutions regarding how to implement digital twin technology in heritage preservation projects. Through these results, the research reached a set of recommendations and proposals, the most prominent of which are:

The importance of strengthening cooperation between cultural and technological institutions to develop and implement projects employing digital twinning in heritage preservation. The necessity of developing specialized technical tools and platforms for documenting and preserving heritage using digital twin technology that suits the needs and requirements of the field of heritage preservation. Directing attention to standards and standard practices, which contributes to unifying efforts and ensuring the quality of results.

**Keywords:** Digital twinning; cultural heritage; cultural identity

## The impact of the digital revolution and the increasing volume of data on the economy

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### Abstract:

This research addresses the struggle among major nations for big data and how this struggle influences international relations and cyber security. The study explores the impact of technological and economic transformations on the nature of this conflict, with a focus on cyber security, data protection, and their effects on international cooperation, national policies, and economies.

The research sheds light on the security challenges associated with data collection and utilization and the potential impact on the global balance of power. It also discusses how big data can be used as a tool to shape foreign policies and increase international influence.

Furthermore, the research delves into the economic ramifications of the struggle for big data on international trade relations and how these factors intersect with ethical issues and human rights.

In summary, this research highlights the profound changes that the world is undergoing due to the struggle for big data and how this conflict affects cyber security, international relations, and both national and global economies.

**Keywords:** capitalization; big data; developing countries; Technological transformation; economic development.

## **The electronic reference service provided on the websites of Jordanian university libraries (governmental and private): An analytical study**

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### **Abstract:**

The study aims to identify the nature of electronic reference services provided on the websites of Jordanian public and private university libraries, which number (27), including (10) government, and the extent to which they keep pace with rapid technological developments, while trying to compare and measure their levels on those websites. The unified index service, automated search, and response to inquiries were analyzed along with the ongoing briefing service and selective broadcast of information by accessing and analyzing websites. It was found that the unified index and automated search service is available in public university libraries by virtue of their participation in the Center of Excellence, which provides the cooperative service. While private universities vary in this regard, due to each university sharing databases or cooperative subscriptions with other libraries, while the service of responding to inquiries and selective broadcasting of information is almost formal and inactive in all university library sites. Therefore, the study recommends the importance of activating the participation of libraries in private universities with the Discrimination Center and activating the services available on their computerized systems to achieve the greatest possible benefit from these systems.

**Keywords:** Electronic reference service; Jordanian university library websites; Center of Excellence

## Utilizing Artificial Intelligence (AI) for sustainable development in smart cities

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### Abstract:

Digital transformation is the process of continuous development of digital technologies within information institutions and research centers that have a lasting impact on the economy and society. Thus, digitization is a major driver of permanent change, and this extends to the field of sustainable development. In the wake of digital transformation within information institutions, expectations have changed, creating pressures at the societal level to develop the design of smart environments and balance everything that means sustainable development.

From this standpoint, the solution lies in integrating sustainable artificial intelligence technologies from information institutions and research centers with sustainable development, as artificial intelligence can be an effective means of achieving realistic and low-cost solutions in sustainable development in smart cities.

In order to activate the current status of AI in sustainable development, and to ensure the dimensions of sustainable development that are taken into account when integrating AI, this research aims, through following a content analysis approach that includes analyzing the literature and studies published in this field and extracting what the study provides from a vision based on theoretical review, to providing an overview of artificial intelligence and sustainable development, explaining the artificial intelligence applications in information institutions' research and its effects on achieving sustainable development in smart cities, pointing out the artificial intelligence technologies used in sustainable development in modern cities and the information institutions support for this use, and what are the new challenges facing sustainable development in smart cities.

**Keywords:** Artificial intelligence; sustainable development; smart cities

# **Impact of employing flipped learning on developing engagement in learning in Islamic studies at the primary level in Riyadh**

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## **Abstract:**

The study aims to find out the effect of employing flipped learning on the development of engagement in learning for the subject of Islamic studies in the primary stage in Riyadh. The two equal groups of female students, and the researcher will use two equal groups, one experimental and the other control, and the variables are as follows: The independent variable: the flipped learning strategy .The dependent variables: represented in engaging in learning Islamic studies The researcher applied the research tools represented in the sources and references and the scale of engagement in learning on the experimental and control groups of sixth grade female students in one of the schools in the city of Riyadh representing the study community. The results of the analysis showed that the use of the flipped learning method (method) has a significant impact on increasing engagement in learning. This environment, as the students had the freedom to learn and provided tools for effective participation between learners and their peers, and between learners and the teacher, which had the greatest impact in helping to increase engagement. As for the second part of flipped education, it was represented in the traditional learning environment (lecture), dividing the lecture time and utilizing this time in active learning activities, cooperative learning and sharing among the students helped to develop engagement in learning. After reaching the results of the study, the researcher recommended the following -:The



importance of developing a strategic plan for the use of flipped learning in different subjects and different educational stages.- Interest in employing flipped learning as one of the entrances to e learning and distance education in educational institutions -. The importance of training male and female teachers to use and employ flipped learning in all courses to improve the teaching and learning processes and make them more motivating, engaging and fun - Paying attention to measuring the dimensions of engagement in learning and the extent to which it is achieved in the curricula of the different educational stages . Holding training workshops on engagement in learning, its importance in the educational process, and how to achieve it -. Training on the use of flipped learning in educational curricula to increase rates of engagement in learning -. The need to keep abreast of the technological developments that characterize the current era and to deal effectively with the information overflow.

**Keyword:** Flipped learning; Engagement; Islamic studies.

## **Degree of use of e-learning management systems tools from the point of view of students of the Arab Open University in the Riyadh region**

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### **Abstract:**

The study aimed to identify the degree of use of digital environments based on adaptive learning in developing deep understanding skills among master's students in colleges in the Arab East, and to identify the obstacles to their use, as well as arriving at the requirements for using digital environments based on adaptive learning in developing deep understanding skills among master's students. In the colleges of the Arab East, it also sought to identify the presence of statistically significant differences between the average scores of the sample regarding the degree of use of adaptive learning environments in developing deep understanding skills due to the variables (college, scientific specialization), and the descriptive approach was used in its analytical style, through the application of a tool The study, which consisted of a questionnaire consisting of (35) items divided into three axes, was applied to a sample of (296) male and female students at the Master's level at the Arab East private colleges. The study concluded that the degree of use of digital environments based on adaptive learning in developing... The deep understanding skills of master's students in colleges in the Arab East were at a moderate level, and the obstacles to using digital environments based

## **Abstracts**

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on adaptive learning in developing deep understanding skills were at a weak level, and the requirements for using digital environments based on adaptive learning in developing deep understanding skills were at a moderate level. The study also found that there were statistically significant differences between the average scores of the sample regarding the degree of use of adaptive learning environments in developing deep understanding skills according to the specialization variable.

**Keywords:** Adaptive learning; deep understanding; digital environments.