SMART TECHNOLOGIES IN EDUCATION, SCIENCE AND ART

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In modern life, we often hear about smart technologies; they surround us on all sides, from scientific research to new masterpieces created by AI. In general, the term "smart technologies" encompasses a number of different elements. Smart technology involves devices that use AI, IoT, and automation to optimize performance, improve efficiency, and enhance user experience through connectivity. Smart technology refers to devices and systems that use advanced software and connectivity to automate tasks, improve efficiency, and enhance user experience (*What is smart technology*, 2025).

Today, many different things are called "smart." From smart watches to various automated machines that perform complex tasks. In general, the word "smart" refers to technologies for self-monitoring, analysis, and reporting. However, over time, the definition has changed somewhat for the general public. "Smart" is often characterized as a system that analyzes input data and can perform certain

actions and functions assigned to it.

Smart technologies are widely used in science for processing large amounts of data, conducting experiments, and automating processes. This gives a significant boost to development. There are many areas of application for smart technologies, from data processing to the automation of various systems, the creation of statistics, the organization of data, and its analysis. They are also used for machine learning and the creation of automatic control systems. Another important area of application for smart technology is virtual and augmented reality, where various types of content are modeled for use in games and the development of virtual reality technologies.

Smart technologies are widely used in the educational process. For example, in Ukrainian schools. SMART technologies are used in different formats for teaching the Ukrainian language, including online, face-to-face and blended learning processes (Hnatyuk et al. 2024). They are also applied for organizing online courses, seminars, and conferences. Smart technologies have helped to rethink education and its principles (Yang et al., 2025). Smart education is gaining considerable popularity around the world, and rightly so. It has what it takes to keep up with the times and fully meet the needs of the world.

Over the past few years, and particularly in recent months, smart technologies have made significant advances in the arts. Video and photo creation have reached a new level. Not only has quality improved, but so has the ability to respond to queries with the most accurate results. Systems are constantly being updated, and new AI systems have huge databases that allow them to respond accurately to queries. Per the Veo 3 model card, "Veo 3 is a video generation system capable of synthesizing high-quality, high-resolution video with audio from a text prompt or input image" (Skelton, 2025). Veo 3 is the most powerful video generation model yet. The integration with the audio generation model alone elevates it far above the competition.

In conclusion, smart technologies have become an integral part of modern life, transforming industries, education, science, and the arts. Their ability to analyze data, automate processes, and enhance efficiency demonstrates how deeply they influence

human progress and daily experiences. As innovation accelerates, the challenge lies in using smart technologies responsibly and effectively to ensure they serve society's best interests while fostering sustainable and intelligent development.

References:

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