

ORIGINAL

Impact of information and communication technologies on everyday life

Impacto de las tecnologías de la información y la comunicación en la vida cotidiana

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ABSTRACT

Information and Communication Technologies (ICT) have radically transformed the world in the 21st century. From the digital revolution to the expansion of the internet and social networks, these tools have deeply integrated into daily routines, altering the way people work, communicate, relate, and learn. In the workplace, ICT has created new opportunities with the emergence of remote jobs, automation of processes, and the rise of entire industries based on technology. Likewise, communication has undergone a metamorphosis with the immediacy provided by digital platforms, redefining the notions of distance and time.

In the social sphere, information and communication technologies have modified personal interactions and the ways in which they are built and maintained. Education has been innovated with the introduction of online learning platforms, democratizing access to knowledge and promoting continuous and flexible training. Despite these benefits, the advancement of ICT also have challenges, such as the digital divide, which separates those who have access to technology from those who do not. Additionally, concerns arise regarding privacy and information security. Therefore, technologies offer enriching benefits accompanied by challenges that require attention and reflection to effectively manage this new era of digital connectivity.

Keywords: Information and Communication Technologies (ICT); Digital Revolution; Internet; Communication; Social Networks; Everyday Life.

RESUMEN

Las Tecnologías de la Información y Comunicación (TIC) han transformado de manera radical la vida cotidiana en el siglo XXI. Desde la revolución digital hasta la expansión de internet y las redes sociales, estas herramientas se han integrado de forma profunda en el día a día, alterando la manera en que las personas trabajan, se comunican, se relacionan y aprenden. En el ámbito laboral, las TIC han creado nuevas oportunidades con el surgimiento de trabajos remotos, la automatización de procesos y la aparición de industrias enteras basadas en la tecnología. Asimismo, la comunicación ha experimentado una metamorfosis con la inmediatez proporcionada por las plataformas digitales, redefiniendo la noción de distancia y tiempo. En la esfera social, las tecnologías de la información y comunicación han modificado las interacciones personales y la forma en que se construyen y se mantienen las mismas. La educación ha sido innovada con la introducción de plataformas de aprendizaje en línea, democratizando el acceso al conocimiento y fomentando la formación continua y flexible. A pesar de estos beneficios, el avance de las TIC también plantea desafíos, como la brecha digital, que separa a quienes tienen acceso a la tecnología de quienes no. Además, surgen preocupaciones sobre la privacidad y la seguridad de la información. Por consiguiente, las tecnologías ofrecen beneficios enriquecedores acompañados de desafíos que requieren atención y reflexión para gestionar de manera efectiva esta nueva era de conectividad digital.

Palabras clave: Tecnologías de la Información y la Comunicación (TIC); Revolución Digital; Internet; Comunicación; Redes Sociales; Vida Cotidiana.

INTRODUCTION

Information and Communication Technologies (ICT) have radically transformed everyday life. From the presence of mobile phones to a constant Internet connection, ICT has changed our habits, perceptions of the world, and how we access information. This paper aims to delve deeper into the impact of ICT on everyday life, examining how these technologies have altered behavior, interpersonal relationships, consumer habits, productivity levels, and access to information.

Objectives

1. Analyze how ICT has changed interpersonal communication processes in everyday life.
2. To evaluate the impact of ICT on the productivity and efficiency of individuals' everyday tasks.
3. To explore how ICT has influenced consumption habits and how we access goods and services.

METHOD

To address this issue, a literature review will analyze previous research, academic reports, and relevant case studies that illustrate specific situations of how ICTs have impacted various spheres of daily life. Likewise, the change that information and communication technologies have brought about in people's daily lives will be evaluated.

"The impact of information and communication technologies on everyday life has been a determining factor in the construction of a digital society, where constant connectivity transforms the way the world is perceived, generating profound changes in the social structure."

Information and Communication Technologies (ICT) refers to a set of technological tools and solutions that enable the collection, processing, storage, and transmission of information in various forms.

This concept encompasses two main components:

1. Communication Technologies (CT) include radio, telephone, and television.
2. Information Technologies (IT) refers to all the processes and tools involved in digitizing data.

Combining these two elements provides various resources and tools that facilitate communication, access to online content, distance learning, and teleworking.

DEVELOPMENT

ICT has evolved from the invention of writing through the telegraph and telephone to the Internet, which emerged in the 1960s as part of ARPANET.⁽¹⁾ At the end of the 20th century, the convergence of technologies enabled the creation of multifunctional devices that integrated telecommunications and computing.

The types of technologies involved include:

1. Internet: A global network connecting millions of devices, facilitating access to information and instant communication.
2. Social Networks: Platforms such as Facebook and Instagram that enable social interactions and content sharing.
3. Mobile devices: Smartphones and tablets offer access to applications, web browsing, and communication anywhere.
4. Collaborative software: Tools such as Google Classroom and Slack that facilitate collaboration in educational and work environments.

Information and communication technologies are part of the technological developments that have changed how we live by becoming part of it.

ICT makes the use of mobile phones, surfing the Internet, social media, email, and other commonplace tools in today's society possible. More than 80 % of the population uses mobile devices (cell phones, tablets, etc.) or connects to the Internet.^(2,3)

The use of ICT helps simplify tasks by creating tools that perform many processes quickly and accurately. It has also transformed the way we access information and communicate.

Initially, email was a helpful tool, but today, mobile applications and social networks are efficient and effective communication channels used by many people and implemented in companies and educational institutions to improve their services.

Mobile telephony is a clear example of the development of ICT. Today, smartphones are intelligent devices that allow us to access all kinds of information and perform countless tasks, all thanks to the constant development of mobile applications.

Social media not only provides an opportunity to communicate but also to reach hundreds, thousands, or even millions of users around the world. There are various forms of communication on platforms such as Facebook, Instagram, and X, ranging from cultural and political opinions to brand and institutional campaigns

and the image of public figures and influencers. All of this is integrated into the feed or home page on social media. These digital platforms allow users to connect with others, socialize, and share ideas or experiences.

Social media has also proven to be a robust civic engagement and activism tool. Social movements have used these platforms to amplify their voices and mobilize communities. The ability to raise awareness and encourage action has transformed the dynamics of citizen participation.

However, social media does not offer only advantages. If you are not careful, using social media can become risky. For example, sharing your address and posting that you are going on vacation could make it easier for someone to take advantage of that information to rob your house, knowing that it will be empty and knowing what it looks like from the images you shared.

Language is another crucial aspect. Spelling and grammar are essential for many jobs and cultural life. However, the tendency to use abbreviated words and prioritize speed when writing can lead to common mistakes such as “ke” instead of “que,” as well as the omission of commas, periods, and other punctuation marks.

Technology is integrated into almost every aspect of our daily lives and is widely used to stand out in the market and drive the growth of businesses and organizations of various kinds. Information and Communication Technologies initially functioned as tools facilitating specific actions, but today, they determine how work should be done. Strategies, operating methods, and even business policies are designed digitally.

In this environment of constant advancement, options are limited. Companies that fail to adapt to the technological demands of their customers and markets risk becoming obsolete. Therefore, it is crucial to understand how ICTs work and their actual impact on business, business competitiveness, and employee productivity.^(4,5)

It has been proven that, when appropriately used, ICT enables companies to increase the work produced, improve its quality, and reduce delivery times. For workers, this translates into more free time. In addition, these technologies directly affect customers and their relationship with the company. Thus, everyone involved benefits from the effective use of ICT in an organization, provided it is implemented correctly.

However, as with any tool, technology also has disadvantages that can reduce the competitiveness desired by companies, especially in the office environment. Distractions and forgetfulness are common among users who spend too much time surfing the Internet, which can cause problems in the workplace. Experts have coined the term “cyberloafing” to describe this tendency to overuse technology for personal purposes during work.^(6,7)

The balance between ICT’s benefits and disadvantages must be managed by both companies and employees through firm policies on the part of organizations and active commitment on the part of staff. Digital education is essential to achieving responsible and positive use of these new technologies. Companies must learn to coexist with ICT, maximize its advantages, and educate their employees and customers on how to use it properly.⁽⁸⁾

According to the Inter-American Development Bank (IDB, 2020),⁽⁹⁾ ICTs play a fundamental role in distance learning today. These technologies ensure the continuity of the educational process and function as channels of communication and information exchange between teachers and students.

Thanks to them, students can take a more active role in their learning process, becoming the protagonists of their education. Some of the main benefits are (Universia, 2020):⁽¹⁰⁾

1. They allow interactions without geographical barriers, facilitating constant learning regardless of distance or schedule.
2. They offer learning adapted to the student’s individual pace, considering different types of intelligence and learning styles.
3. They introduce new educational methodologies that simplify teaching and increase student satisfaction.
4. They facilitate more systematic and rapid evaluation processes with immediate feedback.

The most common tools that facilitate learning include:

- Websites.
- Digital books.
- Videoconferencing.
- Animations, sounds, and images.
- Platforms like Moodle, Google, Blogger, WordPress, YouTube, and TED.

The internet at home has transformed how we communicate, entertain ourselves, and access information.

A notable example is online banking, which allows users to manage their finances from home. Customers can make transfers, pay bills, and check balances without visiting a bank branch. This service has gained relevance, especially during the pandemic, when convenience and security became essential.

The internet has revolutionized entertainment options. With streaming services like Netflix and Spotify, users can enjoy movies, series, and music anytime. This has expanded leisure possibilities, as it is now possible to access a vast library of content without leaving home. In addition, online video games have created new forms of social interaction, allowing players to connect and compete with others globally.⁽⁵⁾

Thanks to the Internet, access to information has also improved significantly. Today, anyone can research a wide variety of topics with just a few clicks. This not only benefits students and professionals but also allows citizens to stay informed about current news and events. However, being aware of the associated risks, such as misinformation and online privacy, is essential.

Excessive use of ICT has led to several significant problems, including:

1. Social isolation: Dependence on devices can lead to decreased face-to-face interactions, resulting in emotional and social isolation, especially among young people.
2. Device addiction: This addiction manifests itself as compulsive and repetitive use of technologies, affecting daily life and causing withdrawal symptoms when disconnected. The search for instant gratification on social media and video games contributes to this dependence.
3. Impact on mental health: Excessive use is linked to problems such as anxiety, depression, and low self-esteem. It can also cause sleep disturbances and stress.
4. Digital divide: Inequality in access to technology exacerbates the situation for those without resources, limiting their participation in digital society and perpetuating social and educational inequalities.

In general, the digital divide is linked to having access to the Internet. It is not only related to technological aspects but also reflects a combination of socioeconomic factors, particularly limitations and a lack of telecommunications and IT infrastructure. The lack of digital skills and resources perpetuates social exclusion, particularly affecting vulnerable groups such as children, older people, and low-income families.⁽⁶⁾

A clear manifestation of the digital divide is the inability of specific sectors or population groups to access technologies, resulting in unequal opportunities for information and knowledge.

Therefore, maintaining an adequate pace of change regarding current technological advances and establishing mechanisms for the incorporation of ICTs must be a cross-cutting priority. We must take on today's challenges and develop continuous improvement actions, given the imminent need to address all the difficulties imposed by society.

RESULTS

1. Internet penetration has increased exponentially in recent years, providing access to unprecedented information and online services.
2. Teleworking has become increasingly common, demonstrating technological tools' flexibility and efficiency.
3. Distance learning has boomed, providing learning opportunities on a global scale while also highlighting the need to address the digital divide to ensure equal access to education.
4. Social media has revolutionized communication, enabling instant global connections, but it has also raised issues of privacy and misinformation.

CONCLUSIONS

1. In an increasingly interconnected and digital world, information and communication technologies' profound impact on our daily lives is undeniable.
2. Despite the many advantages they offer regarding access to information, instant communication, and efficiency in various tasks, they also pose significant challenges in the digital divide.
3. It is crucial that we, as a society, address these challenges proactively, seeking a balance between the adoption of innovative technologies and the protection of fundamental values.
4. The future of human interaction is inextricably linked to the evolution of these technologies.

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FINANCING

None.

CONFLICT OF INTERESTS

None.

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