Digital Citizenship Behaviours

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This article analyses the contemporary cultural transition towards postmodernism/the technological knowledge society and its impact on the changing needs of cities and society. This transformation is characterised by a variety of use of techniques in most economical, political, educational, social, cultural and environmental activities of various human groups. The behaviour of digital citizenship aims to shift towards the concept of smart cities where the roles and behaviours of citizens in physical spaces, in their interactions in reality and the virtual sphere, are redefined and work to regulate this interaction. There is a need for emerging models of social and cultural behaviour to analyse and organise these Facts, understand how to increase efficiency at work, and reconsider the work. All these processes are based on phenomena of innovation and management mediated by technology. Through many studies, a measure of the behaviour of digital citizenship has been reached to shape a holistic and technological human vision of society and move to a new contemporary vision of a digital world, and this requires more effort and training. There will be a change in our lifestyles to move to a more modern concept.

Keywords: *Digital Citizenship Behaviour, Postmodernism, Society changes*

Introduction

A modern and emerging concept in information technology is the concept of digital citizenship. During these years, after the development of internet communication, individual, social and cultural characteristics have changed. The concept of digital citizenship, defined as "appropriate and responsible code of conduct with regard to the use of technology", or "those who use the Internet regularly and effectively (Saxby, 2015)

Nunes, (2017) believes that digital citizenship "tries to make the individual citizen, critic, enjoy the integrated freedom in the real and digital world". They are able to distinguish between the Internet and real life, know their rights and duties in cyber experience, and encourage citizens to criticise using social networks. To become digital citizens, they must have extensive access

to new technology, information and communication technologies, such as; mobile phones, the Internet, computers, televisions and all related services such as social networks, blogs, forums, etc. The technical elements allow them to run. Bringing citizens into new ways of awareness and accessing multiply knowledge and a new world of cultural practices and everyday social relationships means creating different digital skills. Yusuf et al. (2016) noted that these features, which digital citizens must have, are defined as education and empowerment. Digital citizenship is in three main dimensions, including sub-dimensions that can be applied to employees in the organisation to determine the extent to which they have shifted from organisational citizenship to adoption of the behaviour of digital citizenship as follows:

Employees Knowledge

1. Digital Access: Full electronic participation in the community.
2. Digital communications: Electronic exchange of information.
3. Digital literacy: The process of learning about technology, the use of technology and the use of multiply software.

Employee Environment and Behaviour

4. Digital Security (Self-Protection): Electronic precautions to ensure safety.
5. Digital Etiquette: Electronic Standards of Conduct or Procedure.
6. Digital rights and responsibilities: These freedoms have been extended to everyone in the digital world.

The Life of the Employee outside the Organisation Environment

7. Digital Law: Electronic Responsibility for Acts and Practices
8. Digital Health and Wellness: Physical and Psychological Well-Being in the World of Digital Technology.
9. Digital commerce: buying and selling goods electronically.

The Concept of Digital Citizenship

Isman and Canan Gungoren (2014) believed that digital citizenship is a person who uses information technology to engage in society, politics and government, as represented in the Internet, society, and participation. "Digital citizens are those who use the Internet regularly, effectively and are digitally efficient." Jennett and Cox (2018) They also have a comprehensive understanding of digital citizenship, which is appropriate and responsible behaviour when using technology, because digital citizenship assesses the quality of the response of individual to membership in a digital community. It often requires the participation of all members of

society, whether visual or those who are less visible. For citizens to become digital, digital literacy, ethics in digital behaviour and safety in the use of the Internet, must be introduced, and private information in exchange for public information must be recognised.

Balnaves and Luca (2006) noted that for citizens to move to the stage of digital citizenship, they must have digital competence and be defined as a set of competencies that facilitate the use of digital devices, communication applications and networks to access information and implement better management. These competencies allow for the creation and exchange of digital content, communication and collaboration, as well as problem-solving to achieve productive and creative development in life, work and social activities in general.

O'Hara (2013) and Nunes (2017) noted that digital citizenship (also called cyber citizenship or e-citizenship) includes understanding political, cultural and social issues related to the use of ICT (information and communication technology), as well as applying appropriate behaviours to this understanding and the principles guiding it: ethics, legitimacy, security and responsibility in the use of the Internet, social networks and technologies available. Digital citizens are entitled to have access to and allocation of information and communication technologies to improve digital skills, to access information over the Internet in a safe, transparent and private manner, as well as to participate through technological means.

Carrasco-Sáez et al. (2017) and Saxby (2015) noted that digital citizens often use information technology on a large scale, create blogs, use multiple social networks, and participate in online journalism. Although digital citizenship begins when any child, teenager, and adult registers for an email address, post photos and uses e-commerce to purchase goods online, and participates in any online function by being an equipper, a seller through the Internet or even a promoter for many online products. The process of becoming a digital citizen goes beyond simple Internet activity. Nov et al. (2011) considered that the basic framework for citizenship consists of three different traditions: liberalism, the republic, and the mandatory hierarchy. In this context, digital citizens need to exist to promote equal economic opportunities and increase political participation. In this way, digital technology helps reduce barriers for citizens to participate in society.

Roh Seungyong (2007) noted that digital citizenship provides both a social and political perspective and is used at the local level in organisations when they are also discussed at the national level. There are many ways to participate as a digital citizen to defend specific controversial causes or issues. Being a digital citizen includes a level of responsibility and global goals to follow.

Banaszak and Rodziewicz (2004) and Jennett and Cox (2018) added that digital citizen participation could be divided into several categories, the first category being through the

dissemination of information. It includes one subcategory whose work is focused on the consistent dissemination of information, which is primarily characterised by citizens who use read-only websites where they obtain data from reliable sources to formulate judgments or facts. Many of these sites, where reliable information can be found are through the government, have communicated with government agencies to obtain valuable and important information, reformulate and interpret it in a systematic manner based on their accumulated experience and republish it in a way that affects the behaviours of viewers or readers of this news. The second category includes dynamic dissemination of information, which is more interactive and includes citizens as well as government officials. This is done through government officials having their social networking sites and interacting directly and quickly with the comments and opinions of commentators and can communicate through questions and answers and see comments written on social media. Citizens have the opportunity to participate in question-and-answer dialogues through two-way communication platforms. The other category of digital citizen participation is citizen deliberations, which assess the type of participation and the role it plays when trying to ignite some kind of change in policy for participants who are established citizens. Citizens can also play a role by participating in online polls through complaints and recommendations sent mainly to government that can make changes in policy decisions. Dynamic participants can discuss with each other their ideas and recommendations at city council meetings or various media sites.

Czerniewicz and Brown (2010) saw one of the main advantages of participating in online discussions through digital citizenship is that it includes social integration. In a report on civic participation, citizen-led democracy can begin either through information shared over the web, state direct communication signals to the public, and social media tactics for both public and private companies. Bouzguenda et al. (2019) found that the societal nature of social media platforms allowed individuals to feel more socially integrated and familiar with political issues that were also found with their peers, known as the 'second-class effect'. Two types of opportunities emerge, as a result, the first being the ability to reduce barriers that can make exchanges much more accessible. In addition, they have the opportunity to participate in the transformational turmoil, allowing people with historically less political participation to mobilise more quickly and conveniently.

Choi et al. (2018) believed that digital citizenship is a term used to identify the appropriate and responsible use of technology among users. Three principles on how to use technology responsibly to become a digital citizen have been developed, include respect: rules of conduct and law are used to respect other digital users; education: literacy, communication, and commerce are used to learn about the appropriate use of the digital world; and protection: elements of rights, responsibilities, security, health and wellness are used to stay safe in the digital and non-digital world. Each principle contains three of the nine elements of digital citizenship.

According to Ohler (2010), Rahm and Fejes (2017) and Tan (2007), among these three basic principles, there are nine elements to consider concerning digital citizenship. These nine topics include:

1. **Digital access:** This is probably one of the essential blocks to prevent you from being a digital citizen. However, due to the socio-economic situation, location and other disabilities, some individuals may not have digital access. More recently, organisations have become more connected to the Internet, often offering computers and other forms of easy access. This can be provided through kiosks, community centres and open laboratories. This is often associated with the digital divide and the associated factors. Digital access has become available in many remote countries through small and internet cafes.

2. **Digital commerce:** The ability of users to realise that most of the economy is regulated online. It also addresses understanding the risks and benefits of online purchases, online credit card use, etc. As with legal benefits and activities, there are also serious activities such as illegal downloads, gambling, drug deals, pornography, plagiarism, etc.

3. **Digital communication:** This element deals with understanding a variety of online communication methods such as email, instant messaging, Facebook Messenger, a variety of applications, etc. There is a standard of manners associated with every means.

4. **Digital literacy:** This deals with how to understand different digital devices. For example, how to properly search for something on a search engine with a huge database, and how to use various online records. Often, many educational institutions will help shape the digital knowledge of individuals.

5. **Digital etiquette:** As discussed in the third element, digital communication, this is the expectation that multimedia requires a variety of manners. Some media need more appropriate behaviour and language than others.

6. **Digital law:** This is where the application for illegal downloading happens, plagiarism, hacking, creating viruses, sending spam, identity theft, cyber-bullying, etc. Many countries have, therefore begun to develop digital laws to control the behaviour of individuals.

7. **Digital rights and responsibilities:** A set of rights enjoyed by digital citizens such as privacy, speech, etc.

8. **Digital health:** Digital citizens must be aware of physical stress on their bodies through the use of the Internet. They should be mindful of not being overly dependent on the Internet, causing eye strain, headaches, stress problems, etc.

9. **Digital security:** This simply means that citizens must take action to be safe by practising using complicated passwords, protecting viruses, backing up data, etc.

Jakisch (2000) and Tan (2007) referred to a set of primary goals of digital citizenship.

1. **Digital print:** The dissemination and receipt of information over the Internet can be tracked, customised and marketed to users. Digital prints can lead to both beneficial and negative results, but the ability to manage a digital print can be part of digital literacy. Digital prints do not merely consist of active participation in content production as well as sharing ideas on different social media sites. Still, they can also be created by other Internet users (both active and negative forms of digital sharing). Examples of digital printing include liking, preferring, following up, or commenting on creating certain content online. Other data can be found by searching through the record, purchases, and searches.

2. **Digital literacy:** 'The ability to understand and use information in multiple formats from a wide range of sources when delivered via computers', it includes locating and consuming content online, creating content and delivering that content among a group of people.

3. **Literacy information:** The overall ability of the individual to target, evaluate and use valuable information. This can be done by creating information, search, scientific conversations, or simply the ability in keywords to facilitate the search process through a variety of search engines.

4. **Copyright, honour the intellectual property, and attribution:** By knowing who published the sources and whether the creation of content is credible or not, users can be better educated about what they do and do not believe in when they participate digitally.

5. **Health and wellness:** The health community allows for an interactive conversation between educated citizens familiar with their environment.

6. **Empowering the voice of employees, agency, and advocacy:** By leveraging non-profit organisations as well as government organisations to enable employees to talk about the political changes that must be made. Right now, social media is helping to give employees the opportunity to speak and defend rights online.

7. **Safety, security and privacy:** Freedoms of action for all in the digital world and the balance between the privacy right and the safety risks that accompany it have been

extended. This area of digital citizenship includes helping employees understand when they are provided with appropriate opportunities, including appropriate access to the Internet and products sold online. Staff should, therefore, be supported that it is necessary to protect others online.

8. **Personality and ethics education:** Ethically speaking, everyone will come up with different opinions online, they must remain balanced, and there are ethics in online behaviour.

9. **Parenting:** Emphasising the efforts of teachers, many want to continue publishing rules and policies that address issues related to the internet world. Online bullying, text messages and other negative issues are regulated.

Through this, a number of questions can be found that can be used in the future to improve practical research to measure the availability of digital citizenship behaviour in organisations, or its measurement in any category in the society as being applied to students if we were to move to the stage of e-learning and conducting exams electronically. Perhaps we wanted to identify the weaknesses in any dimension of digital citizenship behaviour to correctly diagnose and treat the defect, as shown in Table 1.

Table 1: Main and sub-dimensions of digital citizenship behaviour

	Details
	First Dimension: Knowledge of the employee consists of three sub-dimensions:
	1. Digital Access
1	You are continually conducting a survey of beneficiaries about the availability to access the computer and the Internet at home and work.
2	Provide paper and digital options for the targets to suit their accessibility.
3	Provide equal access to technology for all people and organisations.
4	Contribute to the application of software to give a custody computer device to each employee or allow them to bring their own devices such as a personal computer (laptop) and mobile phones to use them while working.
5	Provide facilities for people with poor economic conditions and special needs.
6	Provide access to technology via high-quality sources and devices.
7	Provide appropriate and relevant technical content.
8	Encourage employees to use the technology they want in their workplace.
9	Provide open computer labs to reduce the digital divide between employees and increase their knowledge through ongoing multi-software training.
	2. Digital Connectivity

1	Do you have full knowledge and awareness of the various digital means of communication (smartphones, instant messaging, blogging, visual and audio communication)
2	Do you use digital communication technologies consciously and responsibly
3	Do you think thoroughly about what you write and send through digital communication technologies? (Digital print: the activities and information posted by someone on the Internet such as comments, likes, etc.)
4	You have the ability to control and communicate with followers using digital technologies.
5	You can control the time and place of the use of specific digital communication technologies.
6	You have the ability of placement of digital communication technologies such as social networks to support the activities of your co-workers inside and outside the organisation and to share ideas with others.
	3. Digital Culture (Digital Literacy)
1	1. You have the ability to learn and master the technology before using it.
2	2. You are accurate in verifying information and evaluating different sources on the Internet.
3	3. You have an absolute desire to share the right information on social media sites for the benefit of others.
4	4. You have the ability to research and detect programs and lectures that contribute to the development of online and distance learning patterns.
5	5. You want to use technology in new and innovative ways to stimulate your colleagues' learning and skills development in line with the aspirations of the 21st century.
6	6. You have experience in providing accurate digital content relevant to a variety of educational areas.
	Second Dimension: employee environment and behaviour, includes three sub-dimensions
	1. Digital Security
1	Buy anti-virus software for your PC.
2	Use protection software to keep children safe on the Internet and not to talk and play with strangers.
3	Activate the firewall to protect the computer system from hackers.
4	Update the operating system regularly.
5	Download and update spyware protection software
6	Use a filter for spam messages and not to open suspicious message attachments.
7	Use the filtering/blocking software for inappropriate websites on the Internet.

8	Maintain your privacy and not to give your information to any site without verifying it.
9	Have the full awareness of piracy and fraud.
	2. Digital Code of Conduct (Digital Etiquette)
1	Spelling and sound rules are used in writing letters.
2	Abbreviations are used in a limited way.
3	Use the appropriate size of the font to write.
4	Do not send your personal information to anyone without verifying it.
5	Commit to the manners of dialogue and conversation through the Internet.
6	Stay away from hostility towards others, even if they disagree.
7	Give credit to others when you benefit from their production.
8	Download legal software from its trusted sources only.
9	Not to speak out on a smartphone in public.
10	Do not send text messages, check email, search on the Internet and engage in smartphones during business meetings and visits.
	3. Digital Rights and Responsibilities
1	Do employees are aware of their rights and responsibilities when using digital technologies
2	Do employees comply with the policies of acceptable use by the competent authorities, digital laws and ethical regulations in the digital world
3	Do they use technology responsibly and consciously
4	Do digital employees have the right to own ownership rights to their business or to allow free online production to be published for everyone
5	Do you use the resources in the web ethically
6	Do you recall the source of digital content when you take advantage of it
7	Do you have an awareness of not harming others and organisations with irresponsible behaviours and words
8	Do you report irresponsible behaviours such as 'threats, extortion and harassment' to competent authorities and adults
9	Do you contribute to enriching digital content with digital products and businesses that are significant to your ideas
10	Do you help to employ modern technology to improve the current environment, develop skills and raise awareness of all aspects of life
11	Do you have green ideas that contribute to the development of awareness of the importance of greening education and preserving the green environment by reducing digital waste and taking advantage of electronic clouds and digital applications in the network
12	Do you contribute to the publication of pamphlets that help raise awareness of the digital ethics of network users and positive ways to use technologies and networks

	Third Dimension: The life of the employee outside the organisation environment, consists of three sub-dimensions
	1. Digital Law
1	Do you have an awareness of not sharing digital content that holds copyrights with others
2	Do you respect the opinions of others on the Internet and will not abuse or infringe on their rights
3	Do you have an awareness of not sharing the inconsistent digital content with public morality
4	Do you have an awareness of not penetrating the systems and computers of individuals or organisations
5	You have an absolute awareness of not using hacking software or stealing other people's identity
6	Do you have access to the laws and penalties of the system against the crimes of Informatics issued by government agencies
	2. Digital Health and Well-Being
1	You use technology, responsibly and moderately.
2	Have an awareness of the physical effects of prolonged/ use of technology.
3	Have an awareness of the phenomenon of addiction to technology and how to reduce its impact.
4	Commit to the correct session while using the computer.
5	Ensure proper lighting in the computer screen and the workplace to reduce eye strain.
6	Give yourself some rest periods and do some physical exercise while working on the computer.
7	Balance the positive and negative aspects of mental and physical health when using technology.
	3. Digital Commerce
1	Possesses the ability and efficiency to ensure the credibility and reliability of the commercial site.
2	You have business dealings with popular websites.
3	Have the experience of ensuring the security of the site by searching for the (https) icon in the address bar and lock icon.
4	Have the awareness and skill in ways to find sites that offer goods at a better price.
5	Do not want to open annoying commercial spam messages that may cultivate viruses and spyware on a consumer device.
6	Before you make a purchase, you make a proper reading of the website policy and information.
7	You read consumer opinions and assessments about the site or the goods.

| 8 | You are careful when entering visa card data and paying through visa shopping card "prepaid". |
| 9 | Favours the payment process by choosing a broker site between the consumer and commercial sites, such as; PayPal. |

Table prepared by the researcher

Conclusion

Researchers believe that states and associations should take a role in defending digital citizenship to reach an information society that respects identities and pluralism and avoids creating/promoting elites because organisational citizenship contributes to the dissemination of cooperation over the Internet, allowing the implementation of projects on Ground level such as urban/ environmental developments for the benefit of all. The idea of digital citizenship is close to the concept of "digital public service". In addition, the state is committed to citizen development through digital public spaces and support for local initiatives. In developing countries, digital citizenship is blurred and irregular and consists of people who use technology to overcome their own domestic obstacles, including development issues, corruption and armed conflict. Digital citizenship is the knowledge, skills and attitudes necessary to demonstrate responsible and respectful behaviour when using technology or when engaging in a digital environment. It is more comprehensive than the general e-mail protocol. Digital citizenship behaviour relates to avoiding plagiarism, how to search and evaluate information, respect copyright, protect personal information, safe use of the Internet, and know how to deal with cyber-bullying. Therefore, citizens must be adequately prepared for this concept. Digital civic awareness that focuses on both ethical behaviour and security is an essential element in educating citizens, as well as using digital technology to make the best use. The issue of digital citizenship has become of fundamental importance today because of the level of public services in terms of quality. Ease of use and access depends on the "technological" situation of those who use them and the difference in the treatment of citizens is directly proportional to their needs and the extent to which they are able to access the network. The digital divide must, therefore, be reduced because citizens need to acquire the digital skills necessary to exercise their rights.

If you want to be a digital citizen, you should create blogs. You must be active on social networks; this means that it must be used entirely. The beginning may be the simple steps of owning a computer and mobile phone, and then you learn how to create email, browse and make phone calls through internet communication programs. As you progress, you will learn how to send photos, how to do e-commerce to take advantage of it and learn how to shop online. After a while, you move on to your electronic transactions such as obtaining a passport or obtaining a market clearance renewal through e-government programs, booking airline tickets and after continuing and learning you will move to a high-level digital citizen stage.

This is because digital technology is now effectively used to govern and manage the country. It is essential to have full digital access to pay taxes and invoices online and to know what is left of your bank balance by accessing your online account. Digital citizenship would reduce much of the excess bureaucracy, reduce unnecessary staff inflation and could reduce costs for the government. To fully implement digital citizenship, digital citizenship must exist to enhance opportunities, which contributes to increased political participation. In this way, digital technology helps to reduce barriers to entry into society. Digital citizenship covers both a social and political point of view. It is used locally in school and other educational systems, while it is discussed at the national level of developed countries. There are many ways to participate as a digital citizen to defend specific controversial causes or issues, and being a digital citizen includes a level of responsibility and includes global goals that must be met.

It is, therefore, our duty as users of technology to move and cooperate for the placement of technology in the right direction in accordance with sound ethical rules and to observe religious and legal controls. To reduce the cons of technology on society, working together could contribute to the dissemination and application of the concepts of digital citizenship to move towards a conscious and educated digital society. The concept of smart cities must also be expanded beyond the magic of technology to include an approach that invests in the growth of human, social and environmental capitals to generate 'smart sustainable cities'. One of the most recent discussions in this context is citizen digital participation. The behaviour of digital citizenship contributes mainly to the building of smart, sustainable cities through digital participation after providing free digital space without restrictions to individuals with digital citizenship. They will contribute to social sustainability through the digital participation of citizens proposed.

Another thing to consider is psychological characteristics such as self-efficiency in internet use and anxiety from the Internet. If efficiency is low, it will not help staff to rise to a distinct level of organisational citizenship behaviour. The psychological aspect is essential if the employees suffer from anxiety continuously this will not help them to achieve the behaviour of digital citizenship so you must follow this aspect and provide them with periods of rest from time to time to get rid of the pressure of work. It was found through a review of previous studies that the best period for achieving digital citizenship is to turn to young people and younger age groups where they will accept technology faster. Still, it must be directed in the right form and trained in multiple programs in the field of communication and trained to understand the nine sub-dimensions for the behaviour of digital citizenship. If we do not keep up with the rapid technological changes in the field of technology, communications and software, the technological gap will increase, and there may come a period that we cannot respond due to the lack of examined decisions at the present time. The behaviour of digital citizenship in countries that support freedom will contribute strongly to the formation of an educated digital

society that has a significant role to play in influencing the political aspect, positively influencing democracy and contributing to the country's rapid development.

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