THE DIGITAL AGE AND FACTORS INFLUENCING THE NEEDS OF INFORMATION USERS: A CASE OF VIETNAM

Huynh Tan Hoi

1Language Department, FPT University, Vietnam

ORIGINAL ARTICLE

ABSTRACT

Purpose: We are in the period of industrial revolution 4.0 - the most brilliant stage of development so far in the digital age. Many activities have been gradually changing the mode of organization and operation, including information activities.

Methods: The article uses survey and comparison method to serve the research process and the results of the article show occupation, age, ability to use technology, etc. has a great influence on people's information needs.

Results: People can search for information anywhere through media such as books, newspapers, magazines, television, radio, Internet, etc. to satisfy their own needs. To organize better information operations, it is necessary to consider how factors in the digital age affect the information needs of information users in order to have appropriate information organization measures well meet the needs of information users.

Conclusions: Students in universities need to use information to serve the learning process in order to achieve high results.

Keywords: Digital age, development, information users, students, information technology

I. INTRODUCTION

Digital age also known under other terms such as computer age, information age or new media age. This is a period in human history with the transition from the traditional industry brought about by the industrial revolution through industrialization, to an economy based on computerization [1]. The digital age has been shaped by taking advantage of the advancement of computers. The evolution of technology in everyday life and social organization has led to the modernization of information and communication processes, becoming a driving force of social evolution.

The digital age is the present time, when most information is in the digital form [2]. The digital age is about to begin in the 1970s with the introduction of personal computers and the next technology introduced to provide the ability to transmit information freely and quickly [1-3]. These concepts all associate the emergence of the digital age with the form or ability to transmit information electronically.

More specifically, the digital age can be understood as a period in history when the use of digital technology has become widespread and popular around the world. The digital age has actually begun with the widespread use of the Internet. Since about 1980, coinciding with the advent of the World Wide Web. Sometimes referred to as the information age, or the computer age, this concept stems from the ubiquity of computers and the widespread use of technology in most human activities, thus interacting [4-5]. Number is a trait that defines human activity. Current development era, in which social, economic and political activities / processes are driven by the application of Information Communication Technology (ICT).

II. CONTENT OF THE RESEARCH

Status of Information users and information needs
Information users

Information users is a term defined by scientists in many different ways. Information users are users of a library's resources and services, not necessarily a borrower [7]. Information users is anyone who accesses the library for the purpose of exploiting resources to meet their information needs [6]. The word "access" was emphasized in the twenty-first century, including remote access to a library portal or website.

The term "information users" includes everyone who makes use of the services provided by a library [6]. This term includes different terms such as customers, information users, information seekers, consumers, readers, etc. These terms can be used interchangeably, because all of these are used by those looking for library services.

It can be seen that, in the above definitions, the term "Information users" is understood with a broad meaning, is the user of the resources and services of a library in general, not just the person in need of information. Believe and use library-information services just to meet your information needs [5].

In this article, information users are those who have information needs and at the same time have the need to use information products and services to satisfy their information needs.

Information needs

According to the view of Marxist psychology: information needs is the objective requirement of human (individual, group, society), for receiving and using information in order to maintain human life activity [1].

Information needs are difficult to quantify, study or measure. Information needs often arise when a human has a problem that cannot be solved. It can arise when people realize that their current state of knowledge is insufficient to handle work, to resolve contradictions on a topic, or to fill in their knowledge gaps. Thus, the information needs are not primary needs, but it is a secondary need generated from other needs.

In 1954, Maslow classified human needs into five categories in a pyramid-like order (Figure 1). The basic needs at the bottom of the tower have to be met before higher needs can be thought of. Higher order needs will arise and the desire to be satisfied more and more intensely when all the basic needs below (the bottom of the tower) have been met [8].

![Figure 1: Maslow’s hierarchy of needs for humans](image)

Based on this Maslow's figure, information needs are divided into five fairly similar categories as follows:

Demand for copied information. It is the human needs for information at the lowest level. People need to copy information due to job requirements or duties [5-6].

The need for information to help. This is the need for information to avoid risks and dangers in daily work, activities and decision making. The sources of information to meet this need are diverse such as principles, tools, practice instructions, etc. to equip people with knowledge so that they can better perform activities and solve problems. daily problem [3].

Needs clarification information. This is the information that people in a higher position in Maslow's needs hierarchy need. It gives people insight, sheds light on specific activities and allows them to understand why
people do what they do - giving them insight into their work with other socially relevant activities [6]. This information may come from material and professional human resources - seminars, the Internet, etc.

Empowered information needs. Information helps people gain respect. This information is different from information that is required for routine activities or general information [2]. It is required to help people gain a better understanding of the environment, work situation and it can help people to understand company policies or strategies, political understanding, or social problems related to their environment. The source of information can be formal or informal and may be based on expertise rather than literature [7].

Information Needs Enlightenment. Information is requested by the person who reaches the highest level in Maslow's needs hierarchy, who needs information for self-expression. This information may not be intended to solve a particular problem or a particular task, but instead is a higher degree of psychological attainment [4]. This information can be obtained from sources of information about religion, psychology, history, science, etc. or from human expertise - wise people and reputable people.

III. METHODOLOGY
By analyzing data, comparing and comparing as well as surveying, articles with the aim of finding out the needs of students at FPT University in searching information. This need serves learning as well as practical life. In addition to online surveys, face-to-face interviews also aim to determine the necessity and importance of information needs to people.

IV. RESULTS AND DISCUSSION
There are a number of factors that affect the information needs of users in the digital age. Information users is a social entity, governed by certain social conditions. Their information needs are therefore different and always volatile [6]. The information needs of information users will be influenced by subjective and objective factors in the process of formation and development. Factors affecting information needs include objective and subjective factors such as social environment, natural environment, occupation, age, gender, level of satisfaction of needs, educational level and personality [1]. In the digital age, these factors also affect the information needs of information users, but some factors will affect more strongly than others. In this article, some of the factors have been mentioned and have the strongest influence on information needs of information users in the digital age such as state policy on ICT, development of ICT, careers and capabilities. ICT usage of information users [4].

State policies on information and communication technology
It can be said that ICT is one of the basic factors building up the digital age. Every country has its own ICT policies based on that country's development strategy and perspective. These policies greatly affect the ability to access and use digital information of information users in that country. Which countries have an open policy that does not limit the ability to access information of information users, the more digital information needs (digital information demand) of information users develop and vice versa, which countries Restrict the ability to access information, the demand for digital information of information users will be limited. This makes it difficult for people to know, access and use digital information products and services. Therefore, their demand for digital information is also very limited.

Development of information and communication technology
As mentioned above, ICT is an important component in creating the digital age [5]. This is the platform that helps digital information product and service providers develop their products and services, creating favorable opportunities for many organizations and individuals to participate in the creation process. information products and services [6]. This leads to strong competition among actors in creating diverse and quality information products and services to attract their target information users [2]. These subjects can be publishers, libraries, book publishers, public agencies, digital information service providers, etc. It can be said, if ICT develops, it will make digital information service products are diversified, plentiful and attractive to information users [9].

Not only from digital information product and service providers, the development of ICT also helps information users to easily access information technology devices in accessing digital information sources. In the first years of the twenty-first century, the opportunity for information users to use computers and have Internet access in major cities in Vietnam is extremely difficult [10]. With the strong development of ICT, in a few years, most of the people in the world in general and in Vietnam in specific can own personal mobile devices, have Internet
connection, can access any products and services, digital news anytime, anywhere [4]. The habit of accessing the Internet to search for information and solve problems of people has become popular in society and most of the respondent (76%) in the survey showed their strong interest in ICT (Figure 2).

Thus, it can be affirmed that the development of ICT has a great influence on the information needs of information users [2]. If ICT develops, digital information products and services will develop, and information users will be easier to access and use with IT equipment, which leads to digital information demand of information users. Increase [11].

Job

Information needs is the secondary information needs, it only appears when people want to solve their specific job. Meanwhile, the occupational labor activity is the main activity in a very long period of life, from the time of adult (being a citizen) to the end of working age [1]. It can be said that career is one of the factors that give rise to the most problems that need to be solved of each person in life. To solve the posed problems, people will have to seek information to fill the knowledge gaps to make solutions and decisions to perform their tasks.

Through a survey at FPT University, careers clearly have a certain influence on information needs. Different occupations leave a different mark on the content of information needs and the habits of using information of each person [1]. In the digital age, most information users from leaders, researchers, office workers to houseworkers tend to use information in digital form to solve problems. my job. The difference in their information needs is how they are informed and how they are found. For example, with researchers, scientists, to solve the task of scientific research, they often have the need to use scientific papers and documents [6]. These documents are usually located in databases of libraries, publishers of scientific documents, etc. To use documents with high scientific content, most information users have to pay fees. For houseworkers, their information needs can be as simple as searching for recipes or entertainment information. This information is easily searchable on the Internet and is rarely paid for [12].

Figure 2: Prevalence of information access via the Internet

Figure 3: The situation of IT human resources in Vietnam

The advantages of ICT development in the digital age, especially the ability to store, transmit and access information easily and quickly, greatly affect the career structure in society [7]. Many types of careers change the way they operate, some careers disappear, and jobs are born. Most of the works compared to before are done many times faster. Therefore, this also affects the habits and ways of using information of current information users [4] (Figure 3).
Age

Each age stage in human life has its own psychological characteristics dominated by the dominant activity [5]. Psychological characteristics of the age group have a significant influence on the content and method of satisfying information needs [1].

The content of information needs is dominated by the main activities of each age period. For example, children love to read children's books; young people love to read romance novels; middle-aged people tend to give priority to information associated with their professional activity fields; Elderly people love to read books about medicine and protect their health, etc. [1].

There are differences between ages in terms of documentation needs. Elderly people are more likely to use materials in traditional form than younger people. Meanwhile, young people often have a need to use more digital sources. There are several reasons for this problem. First of all, young people tend to more easily adapt and access new technologies than the elderly [13]. Therefore, it is also easier to access digital sources of information for this group of people. In addition, young people tend to be more active, so they will have faster, more up-to-date information needs and digital documents that meet this requirement better than traditional documents. In addition, to access digital information requires the use of electronic devices. [4] Reading information on electronic screens for a long time can easily make the human eye tired and uncomfortable. This is also one of the reasons preventing the elderly from accessing digital news sources when their visual abilities deteriorate [8].

Ability to use communication technology of information users

In the digital age, interaction between information officers and information users will require the use of ICT - daily use of digital technology, including the use of computers, tablets or phones, mobile, email, browse the Internet, video call, etc. to communicate [3]. Thus, information users' ICT skills will greatly affect their information needs, especially their digital information needs (Figure 4).

For information users who do not have ICT use skills (42%), even with the guidance of information officers, they still have to use ICT [6]. This makes their resource use of the information system very weak. These information users are almost exclusively able to use information products through a third party with ICT skills. This makes their need for digital information very limited [8].

Those with normal ICT use skills can use technology devices to access the information system with little or no assistance. This group of people may use the basic search engines, but cannot effectively use all the features of the information system's search engine. Therefore, their need for digital information is also at a higher level [11].

Those with very good ICT use skills (12%) - these are those who have gone through ICT training courses and have a fair amount of experience in using new technologies involved in information collection. These information users can get the information they need easily and quickly [4]. In other words, this group of people is comprised of people who can turn their information needs into keywords, build an optimal search strategy, use basic or advanced search engines to crawl, fully believe and updated. The demand for digital information of this group of people is very high [7].
V. CONCLUSION

In short, in the digital age, factors such as state policies on ICT, the development of ICT, careers and the ability to use ICT of information users have a strong impact on information needs of information users. In order to solve different problems in life people are always looking for information. Each different object has different information needs. It is important to capture the trust needs of each user group. The renovation is taking place all over the world, the open-door policy and the globalization trend are posing for us great challenges, integrating and still promoting the national cultural identity. With the rapid development of the information technology industry and the explosion of information, the needs of information are becoming more and more diversified and demanding to be met at a higher level in terms of quality and quantity. Information product and service providers need to capture and analyze their impact on their target group of information users to create information products tailored to their needs.

REFERENCES