Seniors in the Czech Republic and Modern Information Technologies

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Abstract
The paper is focused on the aging population in the Czech Republic and especially to the elderly and their relationship to modern information technology. It also analyzes problems of information complexity for seniors and the contribution shows how information literacy is important for seniors and their mental development in retirement. The paper presents the reasons on which implies the importance of information literacy and these reasons have seniors awaken the desire to learn to work with modern technologies. The article evaluates aspects and issues related to modern technologies seniors.

Keywords: seniors; modern technology; computer literacy.

INTRODUCTION
The involvement of seniors in active social life through modern information technologies is very important. Seniors, after leaving work, experience major social changes that are not always easy to cope with. Often, this change prepares for contact with the surrounding affair, which is very important and wakes up in the person.

Modern times are very fast in technology development and complicated for the elderly. On the other hand, a lot of developers think and try to develop technology for them. These technologies make it easier for pensioners to communicate with the environment.

A major advantage for seniors are also emerging learning centers where they learn how to work with IT equipment and programs. These centers also offer help with device selection, installation, and training. They also offer technical support online very often [5].

POPULATION IN THE CZECH REPUBLIC
Population in the Czech Republic has an aging tendency. For this reason, it will be important in the future to integrate seniors into an active society. The good news is the prolonged age of mankind, while maintaining a fairly good health.

Demographic aging is mainly due to a decline in birth rates and a change in mortality rates [1].

INFORMATION LITERACY
The current society is often referred to as information, knowledge, or learning. The level of literacy is a sign of society. A literate person is a person who can write and read, or count. This has resulted in functional literacy, including literary literacy, documentary and numeracy. Functional literacy is complemented by language literacy.

Over time, a new concept began to emerge, namely computer literacy. This concept was created thanks to new technologies and work with computers and the Internet. Computer literate is considered to be the one who can work with the most commonly used hardware (hardware) and software (software) of the computer. Such a person must be able to handle communication over the Internet, to be able to search for and process information [7].

Information literacy = functional literacy + computer literacy [7]

MODERN INFORMATION TECHNOLOGY IN SENIOR LIFE
Today's modern times are typical of the constant changes and advancements of today's society. This is related to growing demands on each of us. Young people compare with this progress much more easily than older people. Time requires the necessity to learn with new things and the inclusion of modern technologies in everyday life. For many seniors, this is very complex and they do not want to incorporate modern technology into their lives.

One of the most important parts of life is the use of advanced technologies to communicate. Modern technologies without which we can not imagine the day are smartphones and computers. For young people, it is a matter of course without which you can not get around. For the elderly, these two devices seem rather unnecessary. Today, the standard is that every home is a computer, often a tablet. Smartphone is a matter of course.

Retirement is a social change that gives people the status of seniors. This event is a major change for many individuals. This often changes the lifestyle and financial needs.

Each of such major changes can cause problems for man. These
problems can be a bio-psycho-social one where a senior can find himself in social isolation, which may cause other health or psychosomatic problems [2,3].

For the seniors, it becomes a great advantage if they come into contact with information technology already in pre-retirement age. This experience becomes invaluable for him. After changing status to seniors, these people remain much more in touch with other people. Notwithstanding the fact that they have the opportunity to find information and engage in new activities or work.

It is also invaluable to maintain social contacts and to find different information. For pensioners with different kinds of motion-restricted illnesses, the computer and Internet connection can only be the means to keep in touch with the family. The advantage of contacting over the Internet is free calling, sending an e-mail. Seniors are also often looking for help in maintaining the comfort of the Internet [3].

For the seniors, there are many training courses that aim to improve the IT literacy of the senior and thereby make his life more enjoyable. Very popular are Universities of the Third Age [1].

Despite the efforts made and the senior positive attitude towards modern technology, problems can arise that may limit or disable work with the computer and the Internet. Modern technologies could be involved in improving the health of the elderly and increasing the access of the elderly to information technology [2].

There may be several types of barriers. Some are solvable and some are not. If it is a financial, technological or psychological barrier, the company may be a supportive tool to remove these barriers.

### USING MODERN TECHNOLOGIES IN SENIOR LIFE

In the process of technological progress and marketing activities, the purchase price has been significantly reduced and the availability of the equipment is now easy and most affordable for most households.

The development has also led to a considerable simplification of the machine's handling, which has become very clear and easy. Unfortunately, seniors are often not interested in gaining information about progress and news from the world of information technology, and thus the possibility of a simple connection with the information world [7].

Senior must be best motivated to learn information technology control. It is easier to motivate younger people with computers and mobile phones to find their job. Learning to use modern technology also contributes to free time that is often lacking in people at work. The motivation is also the desire to remain in active contact with the environment [4].

### Benefits of using information technology:

- Use strengthens the ability of living in a home environment with disability and self-sufficiency.
- Easier communication with services, administrative authorities, emergency care.
- Contribute to better education and awareness of things around.
- Contribute to solving loneliness.
- Allow the operation of smart-operated computers.
- Allow patient sickness monitoring in home environment and communication (telemedicine).
- Enable ethical legal monitoring and guarding of wandering patients with advanced dementia syndrome (GPS locators).
- Strengthen the self-esteem and quality of leisure time for older people with physical limitations. They greatly increase the possibilities of their activities [5].

### DEVELOPMENT OF INFORMATION LITERACY FOR THE ELDERLY IN THE CZECH REPUBLIC

In the Czech Republic, projects are being developed to help seniors with information technologies. Several organizations already offer seniors assistance with choosing, purchasing, and setting up facilities.

Other services for the development of information literacy of seniors:

- First launch - is a service that will help you set up with the commissioning of your device.
- The test room and the rental facility offer seniors the opportunity to try out the equipment for a long time.
- An hour IT specialist will teach seniors to use information devices. You can also do this at senior addresses and do not have to go anywhere.
- Technical support is designed for advanced students and will teach them to use information technology through online technology.
- Courses - in larger groups, and seniors come in contact with young people and learn about new things they learn to use [5].

### CONCLUSION

The content of the article highlights the problem faced by the aging population in the Czech Republic. Seniors often retire after their retirement and are excluded from society. Pensioners, who have enough energy to learn new things and, above all, modern technologies, are much better integrated into society. Often using modern technology, they maintain much better contact with their family and loved ones. They know what is happening in the world, they are able to find services more easily and satisfy the needs for their lives.
Modern times begin to think of old people as well. Many IT manufacturers are developing hardware and software for seniors. There are clubs where seniors have the opportunity to learn how to use information facilities and can become literate.

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