УДК 613.98

PEOPLE OVER 55 YEARS OF AGE AND THEIR RELATIONS WITH INFORMATION & COMMUNICATION TECHNOLOGY

Katarzyna Maria Logwiniuk

The ability to use computers and internet technology is a necessary skill in modern times and plays a huge role in our everyday lives. The internet allows us to work in a more flexible way at home, use less expensive forms of communication and social interaction, improve access to public services; it also expands education possibilities and opens the gate to online products and services, which very often turn out to be less expensive. Numerous studies have proven that factors such as age, gender, education, lifestyle or even social and economic status play an important role in the acceptance and spreading of information technology. Older people's greatest barrier is the fear of technology. There is the danger that they will eventually be excluded from the rising computerization of society.

Research shows that in Poland, as in all of Europe society is aging. Although most modern communication technologies are used by the younger and better educated, every year more and more people over 55 years are joining the digital society (significantly larger increase). People who have a higher education and are in the 55+ age group are more willing to surf the internet. They also decide more often to use e-services such as internet purchases or electronic government administration.

Key words: People over 55, Digital divide, Elderly population, Internet use, Digital society, Elderly and computers, ICT, Poland.

ЛЮДИ СТАРШЕ 55 ЛЕТ И ИХ ОТНОШЕНИЕ К ИНФОРМАЦИОННЫМ И КОММУНИКАЦИОННЫМ ТЕХНОЛОГИЯМ

Логвинюк Катаржина Мария

Возможность использования компьютеров и Интернет-технологий является необходимым навыком в наше время и играет огромную роль в повседневной жизни. Интернет позволяет нам работать более гибко, дома, использовать менее дорогостоящие формы коммуникаций и социального взаимодействия, упрощает доступ к государственным услугам, кроме того, расширяет возможности образования и приобретения онлайн-продуктов и услуг, которые очень часто оказываются более дешевыми. Многочисленные исследования доказали, что такие факторы, как возраст, пол, образование, образ жизни и даже социально-экономический статус, играют важную роль в принятии и распространении информационных технологий. Наибольший барьер для пожилых людей — страх перед новыми технологиями. Существует опасность того, что они в конечном итоге могут быть исключены из компьютеризации общества.

Исследования показывают, что в Польше, как и во всей Европе, общество стареет. Хотя большинство современных коммуникационных технологий используются молодыми и более образованными людьми, с каждым годом все больше и больше людей старше 55 лет вступают в цифровое общество. Люди, которые имеют высшее образование, и в 55 + возрастной группе в большей степени готовы путешествовать по Интернету. Они также чаще используют электронные услуги, такие как Интернет или электронные закупки.

Ключевые слова: люди старше 55 лет, цифровые технологии, пожилое население, использование Интернета, цифровое общество, пожилые люди и компьютеры, информационно-коммуникационные технологии, Польша.

INTRODUCTION

The ability to use computers and internet technology is a necessary skill in modern times and plays a huge role in our everyday lives. The internet allows us to work in a more flexible way at home, use less expensive forms of communication and social interaction, improve access to public services; it also expands education possibilities and opens the gate to online products and services, which very often turn out to be less expensive.

Even though the World Wide Web (WWW) was brought into use in the year 1990, its implementation in certain countries took place in the years 1991—1995. The first internet services and portals started out in those years and were mainly used for distributing information to society. These new technologies met with great interest among younger people first, while people in the older generation were mostly preoccupied with their work.

These days, the internet has reached the status of being a worldwide method of communication. It has influenced the global market by creating a so-called Information Society. In this type of society most people are employed in a sector that deals with gaining, gathering and processing information [1—2]. Our modern generation is a digital one and is able to use information and communication technology in a very easy and natural manner.

Numerous studies have proven that factors such as age, gender, education, lifestyle or even social and economic status play an important role in the acceptance and spreading of information technology. Older people's greatest barrier is the fear of technology. There is the danger that they will eventually be excluded from the rising computerization of society. Reaching back to the 1970's in the USA there were suggestions that new technologies, especially computers, could help the elderly [2]. The use of such technologies among older people is increasing but they are still far behind the young members of the digital society.

1. Goal, study methods

This article's goal is to analyze results of a study on the usage of information and telecommunication technology in Polish households by individual users aged between 55—64 and 65—74. These individuals are either just before (working age) or straightly after retirement (post-working age).

Statistical data available on websites of The Central Statistical Office of Poland (GUS) served as a source for this analysis. Each statistical calculation has been generated by SPSS v. 18 pl., a program for statistical analysis of data and also by Microsoft Office Excel which is a spreadsheet program used for storing, organizing and manipulating data.

2. Study results

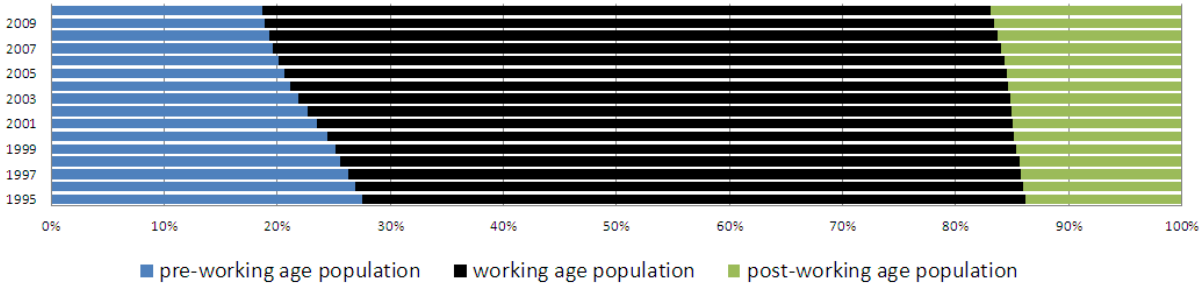
One of the more frequently analyzed subjects in the last couple of years not only by scientists is the problem of our aging society. This is a natural and inevitable process, that takes place in each highly developed economy, and it also concerns Poland. The Republics structure of society is changing with each upcoming year. In Poland, similarly to most industrialized countries, one can observe a systematic increase of people of 55 years of age in the general population [2—4]. According to Eurostat's data, Poland's growth rate of older people is among the highest. Its rate is 1.57 % year after year whereas for Europe it is 1.29 % (e.g. Germany 1.39 %, Great Britain 1.17 %).

Data from The Central Statistical Office show that in the year 2010 16.9 % of Poles belonged to the group of people in a post-working age[1], whilst in 1995 it was barely 13.8 %. According to estimates by GUS in the year 2030 the percentage will be 23.8 %, while data from The European Commission forecasts that to the year 2050 the number of people aged over 65 will rise by 70 percent and people over 80 years of age — by 170 percent. We can also notice a change within

[1] Age at which people usually end their professions, i.e. for men – 65 years and more, for women – 60 years and more.

the group of people who are in a pre-working age[22]. In 2010, it was 18.7 %, whilst in 1995 it was as much as 27.6 % (pic. 1). During the last sixteen years, studies have shown a 2.6 % decrease year after year of people in a pre-working age and a 0.56 % increase average of people in a post-working age. The information above proves that in the XXI century there should be greater access for seniors to computer courses that can eventually help them reach new sources of information on The WWW network.

Picture 1. Share of population according to economic age groups in Poland from 1995 to 2010



Source: Own study based on the Local Data Bank, GUS

This sort of change in society's age structure brings harmful economic and social effects. A wide range of studies and experience indicate a positive correlation between usage of modern information processing technology and people's standard of living. Limiting access to information and communication technology between people of varying social and economic status, age or even gender might deepen the distance between specific groups of society. This negative outcome that came to existence during the rise of information and communication technology [2; 5—6] is determined as digital exclusion. This relates to both computer operating and usage of internet services.

[2] Age at which the population has not yet achieved the ability to work professionally, i.e. age group 0 – 17 years.

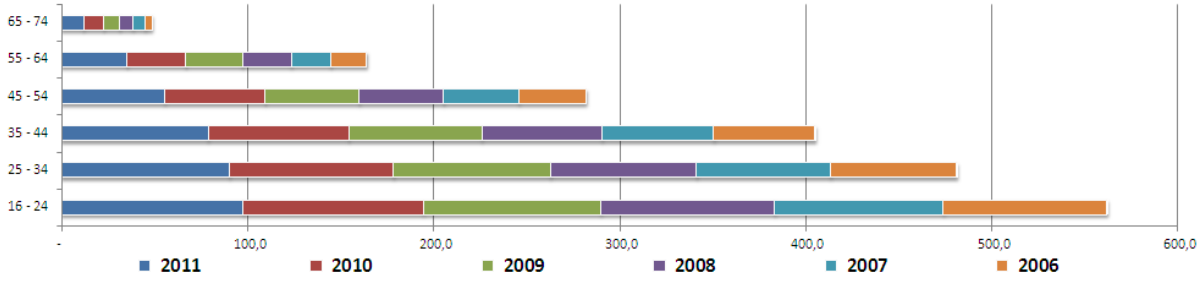
2.1 Barriers, which older people have to bear whilst operating a computer

Computers these day are basic work and communication tools. In 2011 71.3 % of households had a computer, most were ones where there was a relatively high income per household member, i.e. with an income above 2323 PLN. Computer possession is also dictated by the age of household members, it appears more often, where there are people who are still attending school, i.e. under the age of 16. The gap between computer possession among villages (67.1 %) and cities (73.4 %) and also different regions of Poland is fading away. The percentage of computer possession in households in northwestern Poland is 74.5 %, whereas in the northern part it is 68.8 %.

There appears to remain a deep conviction that computers are a good solution for younger people. Nonetheless, more and more older people, over the age of 55 are using computers and the internet. Poland, in terms of using computers by older people aged 55—75[3] takes 22nd place among other countries in the European Union, such as: the Czech Republic, Lithuania, Bulgaria, Ireland, Greece and Romania. The percentage of older people using computer regularly, i.e. in the last three months, is systematically increasing. During the examined period of 2006—2011 for age group 55—64, it was at the height of 35.4 % and was greater by 16.3 percentage points in comparison with 2006. For the age group of 65—74 in 2011 growth amounted to 12 % and was higher barely by 8.3 percentage points in comparison with 2006 (pic. 2). Yet the largest increase of computer usage occurs in the group of 35—44 years of age — growth by 24.4 percentage points.

[3] There are over 7 million people in Poland in the range 55—74 years.

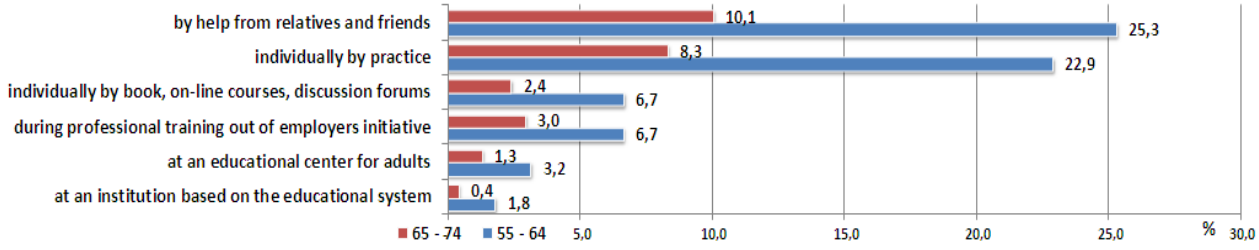
Picture 2. People regularly using computers from 2006 to 2007



So urce: Own study based on the Local Data Bank, GUS

People of an older age most often acquire computer and internet skills by the help of their relatives and friends and individual practice, whilst the young generation usually gets these skills from the educational system (pic. 3). Even though many people do not have the possibility to use the computer themselves, they most likely have someone in their surroundings who can easily check a wide variety of information or resources on the computer and internet if such is needed. Thirty percent of these people use the web from time to time with help from their children.

Picture 3. Method of acquiring the ability to use a computer or the internet — data of the year 2011



Source: Own study based on the Local Data Bank, GUS

2.2 Barriers in using internet services among older people

The internet defines the statement of "a window to the world" giving the possibility to gain information, expand knowledge, maintain social activity and to stay informed in general. Thanks to information and communication technology, seniors have the chance to improve their standard of living and extend independence.

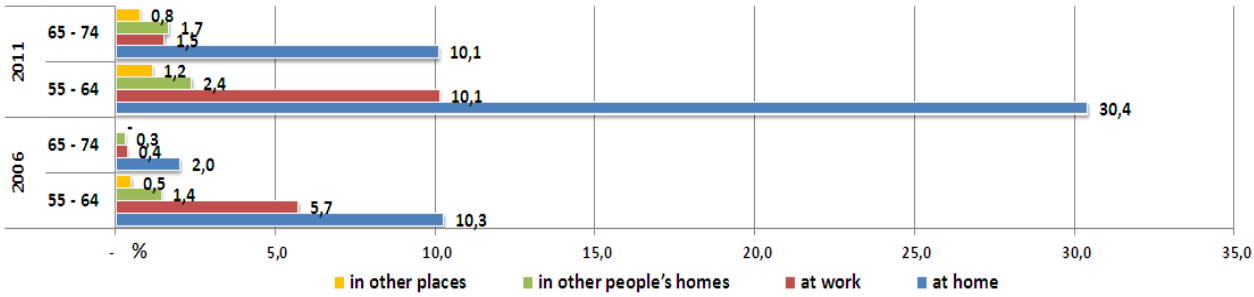
In Poland, there is a large gap in competence regarding usage of the internet. Many people over the age of 55 are not able to take advantage of the possibilities thoroughly, that it gives. Fortunately, this situation has been improving over the years. In 2011, 25.1 % of Polish people aged 55—74 have been using the internet regularly which is astounding compared to the 8.9% back 2006. There are differences in this age group depending on gender and education. The type of lifestyle also has a big impact right at the moment of first contact with the WWW. Observing data from GUS, it appears that people who use the internet and are over the age of 50, are better educated and professionally active. In 2011, internet usage among men had reached 28.5 % (growth of 16.6 percentage points compared to 2006) and among women 22.3 % (growth of 15.7 percentage points). Most people in age group 55+, who surf the internet, have a higher education — 67.7 %, secondary education — 26.2 %, however the people with only primary education use it the least, only 2.7 %.

The place where older people use the internet most often is at home, i.e. in the group 55—64 years of age it is 30.5 % and 65—74 it is 10.1 % (pic. 1). Seniors, who already stopped working professionally, mostly attend their first computer lessons drawn from younger family members, i.e. children or grandchildren. However, an increasing number of training courses can be found aimed directly at this group of people. An example of this is the basic course of computer and internet usage for people over the age of 50 organized in 2010 under the "Active countryside. Building the Information Society e-VITA[4]" and "Internet for Seniors". These courses are often organized by libraries or through employee

[4] http://www.internetnawsi.pl/UserFiles/System/Files/file_4cea4fa602125/Poradnik%20dla%20trenerow_fww_opt.pdf [on-line 2012-04-25]

volunteering, such as the training organized by Ericcson in 2010 for the Senior Club members working in the Warsaw district of Ochota[5].

Picture 4. Location of internet use in the last 3 months



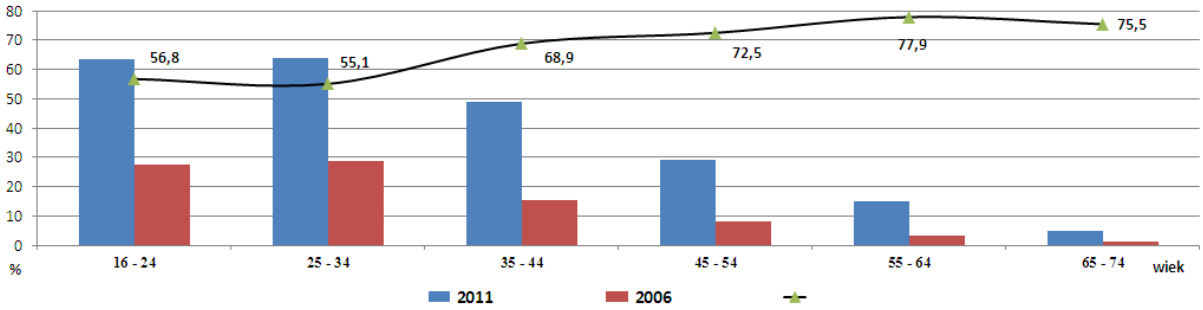
Source: Own study based on the Local Data Bank, GUS

Although there is still widespread belief that older people just before retirement are not able to make up the missing competence in computer skills, a growing number of people using the computer at work can be seen in Picture 4. It is associated with broader use of new technologies by employers. Depending on your profession, there is a need for a PC. As the data of GUS from 2011 shows, there is little difference in this group between men and women involved in computer training, i.e. 35.4 % — men, 31.5 % — women.

Persuading the elderly to use the Internet is not easy. However, as the present GUS statistics have proven, people born before 1960 are increasingly using the World Wide Web in the following web activities: contact with other people, electronic shopping, and contact with public administration. Although there is a very large difference in activity between different age groups (16—34 years is 63 % and 55—74 years is only 11 %), the rate is steadily growing each year (pic. 5). Men show greater activity, while women only 8.8 %.

[5] http://www.chip.pl/news/wydarzenia/nauka-i-technika/2009/05/ericsson-poprowadzil-kursy-komputerowe-dla-seniorow#ixzz1t24YdicE [on-line 2012-04-25]

Picture 5. Persons ordering goods or services through the internet for private use



Source: Own study based on the Local Data Bank, GUS

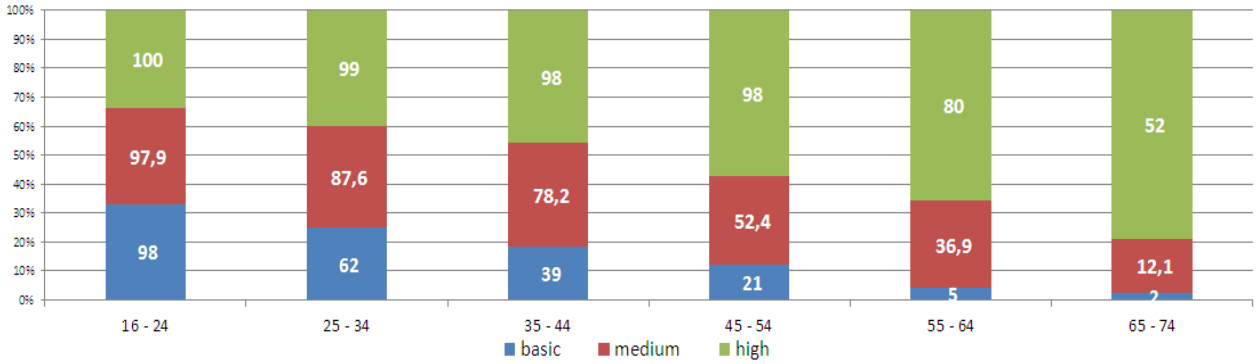
Analyzing the interest of Polish Internet users in online shopping, we can conclude that in cases where their years of age exceed 45, growth has been highest in the years 2006—2011 (pic. 5). As shown in many studies, online shops attract us with their lower prices, but what is important for the elderly — the convenience of home delivery of the goods. To maintain this growth rate, we should pay special attention to the clearness of websites. The creators of e-shops are usually young people who are not familiar with the difficulties older people encounter. Therefore, when planning a platform to support e-shops, special attention should be paid to how it will be perceived by people with weaker eyesight , less mobility, as well as no experience and skills in using the Internet. Seniors may have a problem with understanding the basic techniques and solutions so obvious to other Internet users.

Another important website activity that people 55+ should use more and more, is the possibility of getting things done electronically with government offices. Public services, which use new technologies to support the activities of public administration, are often defined as e-administration. The interaction of Administration to Consumer (A2C) can be implemented in the following e-services: electronic voting, subscription services,

the availability of electronic documents, billing taxpayers with the tax office,

requests for an ID card, passport, a virtual job market, etc. E-administration in Poland is on a poor level until this very day. An example of this critical situation is one of its main elements, the e-PUAP[6] (Platform of Public Administration) system that is not running.

Picture 6. People using the Internet to deal with public administration by age (as of 2011)



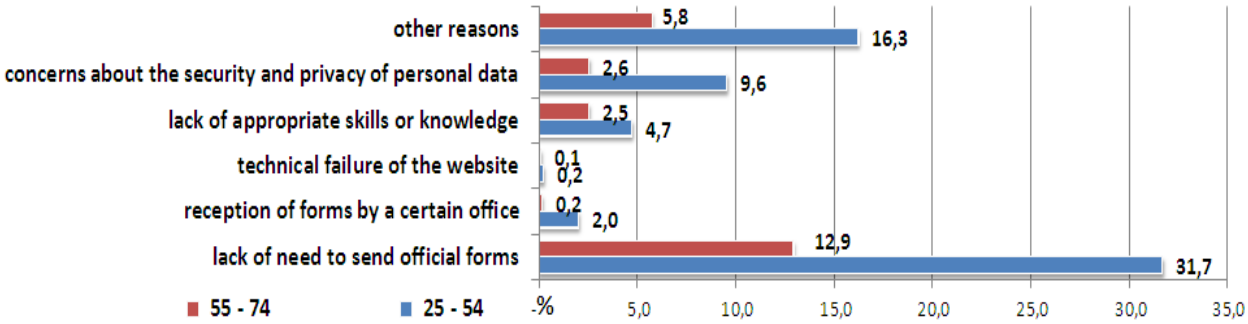
Source: Own study based on the Local Data Bank, GUS

The statistical analysis of Internet users in dealing with public administration in the last three months showed that people with higher education often use such a service. Persons 55+ with higher education visited public administration websites in order to search for information (30,5 %) and to download fill-in forms (24,6 %). Those remaining in the same age group, but with primary education use e-government services sporadically, i.e. only 0,6 % searched for information on public administration websites. Definitely the most frequently mentioned reason for not filling in the forms is because it is not needed (pic. 7). The reason for such a response can be both a lack of knowledge about the possible uses of the Internet in this area, as well as lack of interesting content and services for the respondent,

[6] e-PUAP is an electronic service, where you can take care of most administrative matters electronically.

coupled with the belief that the same can also arranged and obtained otherwise.

Picture 7. Reasons for not sending filled in administration forms through the Internet in two age groups



Source: Own study based on the Local Data Bank, GUS

3. ENDING AND CONCLUSIONS

Research shows that in Poland, as in all of Europe society is aging. Although most modern communication technologies are used by the younger and better educated, every year more and more people over 55 years are joining the digital society (significantly larger increase). People who have a higher education and are in the 55+ age group are more willing to surf the internet. They also decide more often to use e-services such as internet purchases or electronic government administration.

So far, the social group 55+ extends its computer skills in the greatest way based on family members, friends or self-study. To increase the range of educational training for this group in the acquisition of computer knowledge there should be more intensified training opportunities pursued by local authorities. This will allow reducing the number of digitally excluded persons.

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