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Information society : selected aspects

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Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

TEORIA ORGANIZACJI I ZARZĄDZANIA

THEORY OF ORGANIZATION & MENAGEMENT

Od rozważań o zarządzaniu w grupie sportowej (ostatni artykuł Z. Czajkowskiego) przechodzimy do analiz bardziej ogólnych, dotyczących problemów organizacji i zarządzania w skali makro.

Dr Kazimierz Krupa (Zakład Polityki Społecznej IS UR) w swej pracy podejmuje ważny i bardzo aktualny w obecnym czasie temat 'społeczeństwa informacyjnego'. Prof. Stanisław Marczuk (Zakład Socjologii Gospodarki IS UR) ocenił artykuł dr Krupy wysoko, wskazując na interesujące ujęcie badanego problemu.

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Key words: information society, globalization.

Features of the information society

What is an information society? A bureaucrats' political creation or an exact definition describing condition of the contemporary society that uses advanced computing technologies? It seems that more and more developed countries become participants of that society. We also observe a steady tendency to enrich forms and facets concerning this phenomenon. Tadao Umehao¹ was the first who determined main features of the information society. In France this issue was studied by Alain Minc and Simon Nora. However, it is Martin Bangemann² undoubtedly who is an exceptionally enthusiastic propagator of the concept of information society in Europe.

According to Alvin Toffler, the author of the "Third Wave", transition from pre-information to information society takes place when the national product generated by the service sector of the economy exceeds that of the production sector.³ Therefore, it refers to a society of sufficiently high level of development and of proper information culture; society that can exist and develop thanks to companies which primary field of business is their intellectual work. This definition implies that the dynamics of implications generated by the digital technique will be observed in practice and that the information society will be at various stages of development in various countries and time. Manuel Castellas, a popular analyst of information technology influence on society, foresees that the unknown before global social relationships will be created soon, leading to the *Network Society*, where the concept of time and space should be redefined (in Castellas's opinion such highly developed society will live in an incorporeal space, i.e. in a so-called Virtual Reality).

Information society – features, phenomena, challenges

In developed countries and in mature information society the widely used computing techniques will improve standard of living of many inhabitants. Access to broadband databases and multimedia repositories of information on most of the fields of human activity

¹ In Japanese the term "Johoka Shakai" means "information society". It was introduced for the first time in the *Hoso Asahi* daily newspaper in 1964. A lively discussion on probable directions of development of a society based on information processing was led in the columns of this paper.

² As the EU Commissioner responsible for the development of telecommunications and information technologies he published the report on ramifications of computer science, signed off by most of the directors of European information and telecommunication companies.

³ Many authors propose that the date when the first PC was made or the first Internet browser was created should be considered as a point of this transition.

will facilitate effective work and enable saving time. Universality of multi-aspect communication, development of robotics and artificial intelligence will improve the production of goods. Vision of a virtual office and full availability of all the services without the necessity to get about become real. The paradigm of geographical centralization, according to which the biggest metropolises of the world, e.g. Mexico, grow, will be revised, simultaneously generating problems, which are difficult to be resolved. It is real, because the global network of Internet servers and WWW pages has been already perceived and used as a efficient platform of communication and doing business. Currently the highly developed information societies think very highly of the companies that invest in computing technology. Their stock prices steadily grow (it is estimated that currently in the USA the value of so-called Internet Companies and companies with “com” in their names is very overvalued). WWW pages are a classic world-wide information panel, a platform to present information about the company, and a medium for advertising as well, which enables e-business and e-commerce. At the same time it seems that absolute hipercapitalism – the system, where supranational nature of activities of the greatest companies reduces the importance of state authorities and local legal rules – will be a direct result of development of information society and digital global network. However, the techniques of computer science, being a main factor of information society development (or level thereof), are not able to overcome all threats. Crucial problems, which should be solved now, are protection of:

- privacy,
- good manners,
- freedom of speech,
- against breach of the right to secrecy,
- against interference from the state authorities and the government in the Internet and against underestimating the

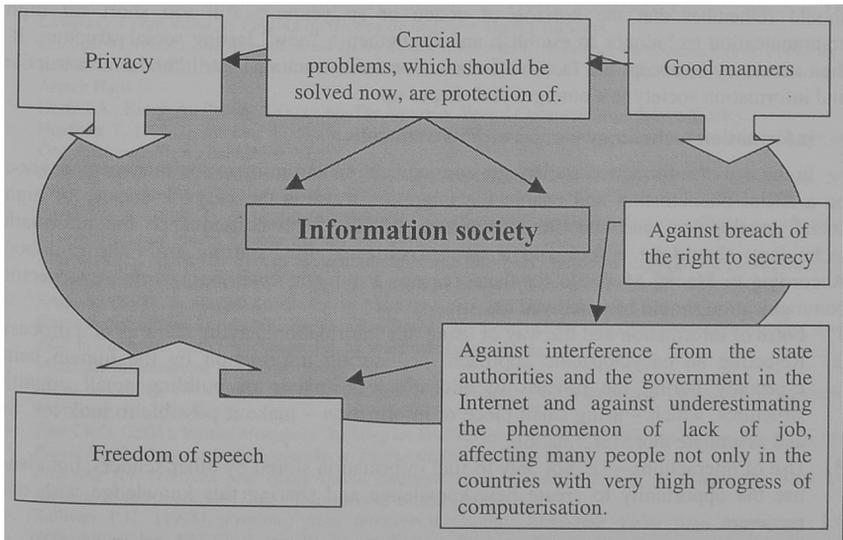


Figure. 1. Information society – selected aspect
Source: own elaborate.

phenomenon of lack of job, affecting many people not only in the countries with very high progress of computerization (fig. 1). It seems that during the next few years education will become a factor of growing importance. Education should build innovativeness and creativeness, because stratification of society and insufficient amount of work for people of low education level and mediocre intellectual potential can surely become the main threat for information society. Lack of improvement in this field will result in regression instead of development. At the same time one should remember that the process of building a creative information society is difficult, because the development of information civilisation can be assumed to have features of a chaotic process – as Andrzej Wierzbicki notices. Therefore, any fundamental activities and initiatives aiming at the creation of so-called “information world”, also called “cyberworld”, seem to be purposeful. In this context it will be necessary in the nearest future to revise some intellectual patterns and views on many fields of human activity, and interactions between them as well. Simultaneously a goodwill is necessary to understand and accept this new peculiar world, since even nowadays we can observe an information space contamination, growing in frenetic pace. Ryszard Tadeusiewicz called this phenomenon a “information smog” and stated that now it is still an inevitable side effect of information globalization. Most of available information is dispersed throughout teleinformation networks and scattered on thousands of servers and millions of WWW pages. It is mixed in such a way that to separate valuable information from inaccurate or even false one is practically impossible – which sometimes converts the usefulness of information into the opposite. Besides, some harmful information can also be found in the Internet. More often the attacks paralysing the operation of Internet take place. A peculiar rule of inducing influence of “dark” information on network break-up proliferation, which is the next challenge for information society.

In our country the telecommunication does not seem to be a contemporary power building a social structure to increase the dynamics of information society creation. One should remember that the horizon of dozen or so years is still too short for digital communication techniques to establish and strengthen a “new” lasting social structure. It is then necessary to accept the fact that information infrastructure is still “under construction” and information society just emerges and shapes up.

Information technology – expectations and tasks

In the age of information society the communication and information management should be a social phenomenon and enable the migration towards the network society of higher social development and specific information culture. As a consequence the information technology should be a tool and a part of citizens’ life, starting from the childhood. According to Maciej M. Sysło for these reasons a modern, enabling synergy, interpersonal communication should be perceived as:

1. Form of information and the way of using this information, having features of a process
2. Rejecting an encyclopaedic approach, i.e. storing information by the human being, especially during the process of education, in favour of building small cognitive structures, which – using small piece of information – make it possible to look for, find and assimilate more information.
3. Use of interactions – i.e. not only to find information stored by other senders, but also to use the opportunity to create new knowledge and sharing this knowledge with other receivers.
4. Multi-aspect interactions and feedback, which enable communication both with the sender and receiver of information, as well as the use of expert system databases and learning modules. Available now are new opportunities of interactions: an on-line dialogue of participants.

5. Globalisation – disappearance of any time and space barriers. Nowadays it becomes less important where the information is, since we have an access to senders, receivers and sources of information from each virtual computer panel.

Contemporary education in the field of computer science should be directed in this way, since the world of business that develops so quickly utilises new tools in the field of: CRM (customer relationship management), SCM (supply chain management), EDI – all of this within the confines of Global Partnerships, B2B (business to business) i B2C (business to consumer).

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Spółeczeństwo informacyjne – wybrane aspekty

Słowa kluczowe: społeczeństwo informacyjne, globalizacja

Dokonania wynikające z szybkiego rozwoju wykorzystania systemów informatycznych wymagają ponownego redefiniowania wielu aspektów życia społecznego. Coraz częściej bowiem rutynowe procedury są zastępowane niekonwencjonalnymi odwołaniami i zachowaniami. Automatyzacja wielu czynności, instalowanie manipulatorów i robotów to doskonałe rozwiązania, lecz również powód do obaw, zmniejsza się bowiem zapotrzebowanie na prostą pracę fizyczną. Jeremy Rifkin w książce *Koniec pracy*, prognozuje, że za kilkadziesiąt lat potrzeby w zakresie pracy zmniejszą się do 5% obecnych potrzeb, jednocześnie wzrosną: niezawodność, efektywność, wydajność⁴. Logika wzrostu znaczenia tzw. rozmytych i mobilnych zastosowań systemów teleinformatycznych muszą spowodować konieczność zdefiniowania na nowo pojęcia rynku i zakresu jego oddziaływania na społeczność. Jednocześnie kapitał intelektualny⁵ staje się coraz częściej bardzo ważnym zasobem współczesnych podmiotów zorganizowanych. Wszystkie wymienione determinanty stanowią wyzwania dla współczesnych działań społeczeństwa informacyjnego.

⁴ Zobacz więcej [w:] Andrzej Gontarz: *Kapitał w gminie*. Computerworld nr 9, 2002, s. 28–29.

⁵ Kapitał intelektualny za T. Stewartem definiujemy jako sformalizowany „materiał” intelektualny który jest wykorzystywany do tworzenia majątku o wyższej wartości.