

INFORMATION SOCIETY HIDDEN COMMUNITIES AND THEIR INFLUENCE ON ECONOMICS

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Abstract.The information society innovative technologies create new opportunities to manage markets by different innovative tools of management. The article highlights a latent problem of an appearance of hidden communities that are able to change free market economy rules and global economics as consequences. Historical analogies of the contemporary development stage of economics in the information society with evolution economic relations in the Middle Ages have been proposed as a hypothesis of influence of the hidden communities to economics and their future development.

Keywords: innovative technologies, management, information society, hidden community, marketing prediction, universal humankind values

Introduction

Various methods of data transmission by "air" such as, for example, Wi-Fi, 3G, 4G, 5G, etc. and information and communication technologies (ICTs) as a whole, at the intersection of industrial and information societies, form an infinite number of communities or so-called "parallel worlds". For a growing number of non-specialists, even active members of the information society, such "parallel worlds" and the principle of their functioning are becoming inaccessible for understanding because of too rapid updating of technologies [1]. However "parallel worlds" have been given the opportunity for those who are integrated into the information society to create closed groups and communities. And this, in turn, can turn into a powerful tool for managing

¹ Yudina N. V. Methods of the Startup-Project Developing Based on 'the Four-Dimensional Thinking' in Information Society. *Marketing and Management of innovations*. 3'2017, P. 245-256. DOI:10.21272/mmi.2017.3-23 URL : <http://mmi.fem.sumdu.edu.ua/journals/2017/3/245-256>.

other people and even entire industries and markets. Such kind of the hidden activities can turn into a secret "collusion" and they are not available for managing by the outside traditional instruments. But these hidden communities and closed groups can manage economic branches by the traditional management instruments.

Analysis of researches and publications of recent years and identification of previously unsettled parts of the general problem

There are many works that investigate information society from different aspects and its influence to economics. Such the scientists as R. Kurzwell, J. Rifkin, A. Koch, R. Solou, L. Piddubna, L. Yurchenko, V. Rjabinin, D. Itskov, V. Pifogov, S. Zav'yalov, G. Mukushev, S. Markova, B. Geresimov, Ye. Tret'yakova etc study technologization marketing and management problems of the information society. There are also many works about psychological dependences of people and their influence on the set of effective marketing tools. But there is no singular approach to theory of how information society communities and their innovative management tools can influence on economics, particular in aspects of changing management decisions. Therefore, the problematic of hidden communities influence needs to be defined in information society.

Settings objectives

The purpose of the article is to highlight influence of hidden communities to economics in the information society.

Presentations of the main research material

In the times of industrial society, the collusion concept has already existed too. For example, in industrial society, it was widely practiced when employers in a particular industry and recruitment agencies created different

black lists of workers, which made it impossible for specific applicants to get a job in this industry [2]. The essence of this phenomenon can be told by many representatives of the film industry, show business, writers and scientists, who in certain circumstances were undesirable and in relation to which the instruments of open or hidden censorship, closed doors, bans, withdrawal from roles, etc were implemented. But in the industrial society the direction of the conspiracy influence was local and in most cases temporary in nature, though it could last for decades. With the disappearance of the CEO or his loss of power to influence other participants in the conspiracy (for example, as a result of his loss of high office, his death, etc.), this influence disappeared.

However, in the information society neither time nor space exist [3]. The fundamentally new technogenic man-made capabilities, been available in the information society, have conferred some particularities to collusion. Therefore the collusion in the information society turns into the specific “parallel world” with some unique features in contrast to offline- collusions of the industrial society. Firstly, the potential geographic coverage of the impact and the number of conspirators involved are almost unlimited. That fact gives scale and power to the collusion. Secondly, in the information society collusion opens up the possibility for participants to remain anonymous. For example, employers already create closed groups and communities with similar functions, but the employer may remain anonymous in the information society, as opposed to the industrial society [4; 5; 6]. This creates conditions in the information

² Robotodavtsi sklaly "chorni spysky". Sajt UBR.ua vid 07 noiabria 2011. URL : <https://ubr.ua/tv/osobystyi-kapital/obotodavc-sklali-chorn-spiski-135180>.

³ Yudina N. V. Upravlinnia majbutnim na osnovi kontseptsii innovatsijnoho rozvytku. *Antykryzove upravlinnia ekonomikoju Ukrainy: novi vyklyky* : materialy III Mizhnarodnoi naukovo-praktychnoi konferentsii (Kyiv, KNEU im. V.Het'mana, 15-17 hrudnia 2015 roku). K., 2015. S. 124–127. URL : http://futuolog.com.ua/blog_konferencia_kneu_2015_12_15.phtml.

⁴ Swartz Mark. How A Workplace Bully Can Harm Your Staff! Monster. URL : <https://hiring.monster.ca/hr/hr-best-practices/workforce-management/improving-employee-relations/workplace-bullying-ca.aspx>.

society for the participants of the "parallel worlds", regardless of the gravity of the consequences of their actions, to remain unrecognized and, most importantly, unpunished. "The mouths of others talk to each other", since in the information society everyone can create a lot of artificial accounts with a variety of avatars.

The absence of external punishments and the artificial impression of the parties to the agreement that they will continue to be unpunished (including through their anonymity) are the main causes of all the negative manifestations of "parallel worlds" on human society as a whole. The absence of punishment corrupts the participants in the conspiracy, encouraging them to do even more powerful negative actions. For example, all of these were the main reasons for the spread of such phenomena as bullying, trolling and hate. Even the public disclosure of a consensual mechanism in a "parallel world" (when, for example, one participant publicly, knowingly or unknowingly, reveals the secret of the existence of a conspiracy) does not overcome the problematic consequences, as participants in such groups open additional groups into which all the chief executives of the conspiracy and their followers.

The introduction of various means of data transmission by "air", as well as technology of speech recognition, the proliferation of smartphones and their dependence make almost every member of the information society be vulnerable. In addition, the rapid introduction of new technologies makes them inaccessible to users of previous technologies unless they are innovators by their psychological behavior. The rapidity of technological updates transforms such users into conservatives and renders them inert to the perception of further innovations. On the one hand, this leads to their technological degradation. On the other hand, other users who are more easily aware of innovative

⁵ Razoblachenie sekty IT HR-ov Ukrainy. URL : <https://ebanoie.it/2016/07/29/it-hr-sect/>.

⁶ Hluschenko N. Proty reketu i svavillia. Yak vidkryti dani dopomahaiut' vidstoiaty sebe. URL : <https://nv.ua/ukr/techno/it-industry/proti-reketu-i-svavillja-jak-vidkriti-dani-dopomahajut-vidstojati-sebe-2469979.html>.

technologies, especially if they have no previous ICT experience, will degrade even faster. This is due to the fact that technologies are becoming more consumer-oriented, which makes it even easier for people to depend on them. For example, known cases of mass suicide by members of so-called "death groups" [7], extreme acts of self-publishing on social medias, bullying, trolling and classmates in most cases were common among children and adolescents for whom today's ICT are the only that they saw in communications. This clearly demonstrates the earlier conclusion.

However, because the concept of "age" in the information society also disappears, and human behavior in the information society does not depend on its age [8], similar processes of degradation and corruption of people in the direction of bullying, hating, etc. are also widespread in older Internet communities today too. Just in groups of adults, such processes still remain more secret and carefully hidden. There is also little public discussion about this because of the inability to actually prove it, the lack of tools to combat the phenomenon, and the fear of retaliation.

However, in the information society there is no time prescription limitation due to the destruction of the concept of time in it, fundamental to industrial society [9]. Any information transmitted by today's communications media is stored in special caches, can be obtained by hacking accounts or being intercepted during the transfer process. According to experts today, it is only a matter of money, time and value of the information that needs to be accessed.

⁷ Titova A. Krim «Syn'oho kyta», v Ukraini pidlitkiv zamaniuiut' u novu smertel'nu HRU. URL : <http://asn.in.ua/ua/news/publishing/88159-krome-sinego-kita-v-ukraine-sklonjajut-podrostkov.html>.

⁸ Yudina N. V. Obrazovanie vzroslyh na protjazhenii zhizni i teorija pokolenij. *Nauchnyj rezul'tat*. Serija «Sociologija i upravlenie». 2016. №1 (7). DOI: <https://doi.org/10.18413/2408-9338-2016-2-1-83-89>. URL: <http://rsociology.ru/journal/sociology/annotation/83>.

⁹ Yudina N. Resurrection through Crucifixion: Michal Szpak. Nonfiction. *Upravlinnia majbutnim na styku tekhnolohichnykh ukladiv* : tezy, dopovidi, statti (Kyiv, 15-17 lypnia 2016r.) / [uklad. – L. I. Yudina]. K., 2016. URL : http://futuolog.com.ua/publish/michalszpak_en.phtml. ISBN 978-966-97581-0-1.

However, what may seem too time-consuming to even a cyber-skilled person can be quite easy to realize by technology. Therefore, given that, information in the information society will not disappear, it can become available at any time in the future and can be quickly scaled.

It should be noted that such technologies already exist today, although they are not yet officially used for advertising purposes alone (it cannot be said that such technologies have not been used for other purposes as well). A new "behavioral approach" to the "targeting" (targeting) of advertising Internet messages, promoted by companies such as Phorm, involves the installation of special software in the Internet Service Provider (ISPs) [¹⁰]. It intercepts all searches of ISPs' users in order to form a profile of interests of each internet user. According to the official version of the developers, this allows more effectively to offer such a user advertising that will be solely relevant to his interests. However, the same technology allows third parties to find in this personalized profile each internet user also other information about his behavior on the network.

"For nothing is secret, that shall not be made manifest" [¹¹]. And this is today an extremely relevant area for research not only by scientists but also by law enforcement agencies and the cyber police. Scientists have to study deeply the information society and all the uncontrolled processes that arise at the interdisciplinary intersection of the rapid emergence of innovative technologies, human psychology, processes of corruption and degradation of its behavior under the influence of innovative technologies. More and more urgent is the transition of the information society from a completely free and uncontrolled global format to a format regulated by providers and governments of states [¹²].

¹⁰ Watching while you surf. *The Economist*. Jun 5th 2008. URL : <https://www.economist.com/node/11482452>.

¹¹ Luke 8:17, Bible New Testament.

¹² Yudina N.V. Futurologija internet-prostranstva. *Marketing uslug*. M : Izd. Dom Grebennikova, 2014. № 4. S.164–175.

This is evidenced by a series of noisy events surrounding the leakage of personal data through the social media Facebook, blocking various online resources in different countries. It is extremely important for the controlling authorities to develop a legislative framework for human behavior in the information society, as well as a system of punishments, which are also in the interdisciplinary intersection of issues of law, information and telecommunications technology, forensics, psychology and medicine. However, it is possible that all these processes will take a long time and not always effectively, because the researchers and developers will remain ordinary people, who at any moment can become very vulnerable due to their own actions in the past or in the future. Today the absence of rules, laws, and controllability in the information society will continue to provoke chaos in which all the previous tools will lose their effectiveness. This is the main paradox of the information society: we have created the enemy, and this enemy is us.

It corresponds to the model principles of evolution of economic relation (Fig. 1) [¹³; ¹⁴]. This model assumes that in every type of societies economic power moves from makers to mediators and then to some innovative technology that is able to break the previous type of society and create the next type of society. For example, in the Middle Ages lands were the criteria of economic power. Therefore in the Medieval society economic power had belonged to peasants because they had owned lands. Then lands and economic power with them moved from peasants to feudal lords and the church. But a new technology appeared and destroyed this type of society. It was an appearance of

¹³ Yudina N.V. Istorychni aspekty formuvannia postinformatsijnoho marketynhu. *Ekonomichnyj Visnyk NTUU «KPI»*. №16(2019). DOI: <https://doi.org/10.20535/2307-5651.16.2019.182733>. URL : <http://ev.fmm.kpi.ua/article/view/182733>

¹⁴ Shul'c D. Strategicheskie brend-kommunikacionnye kampanii / Don E. Shul'c, Bet E. Brans. – M. : Izdate'lskij Dom Grebennikova, 2003. – 512 c.

corporations. Corporations were different communities which reflected interests of different social classes, population groups and so on. They accumulated much social power that was different from economic power on the basis of lands. Later the corporations started to develop innovations, particularly shipping. Shipping made it possible for corporations to reach faraway lands and founded a new type of society by this fact. This society meant the new era of colonization.

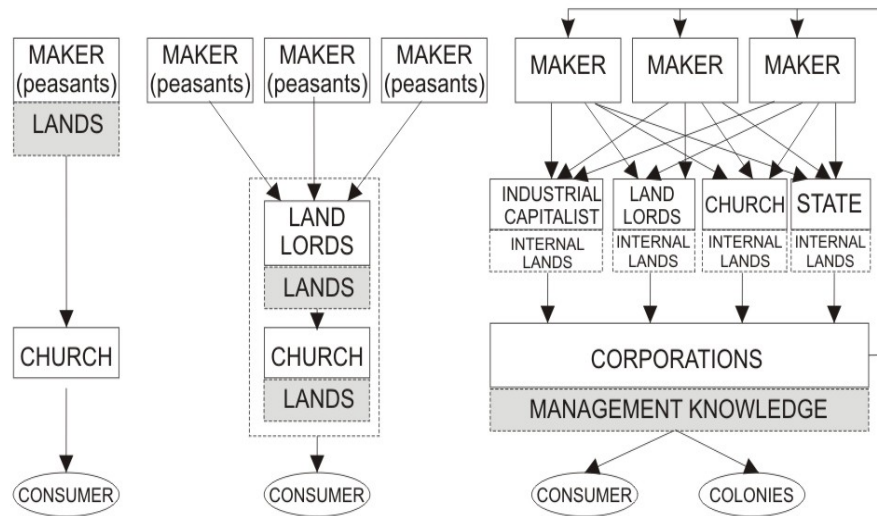


Fig 1 - Model of evolution and revolution of economic relations under the conditions of feudal mode of production.

Contemporary hidden societies can follow the same way and received the same economic power in the information society. The same corporations can be also created by contemporary makers too. And we can watch these similar processes now. For example, bloggers lead their followers, there are large communities of freelancers, including hidden communities too.

What can employees, professionals and other ordinary people do in such chaos of new technologies that provoke chaos of "parallel worlds"?

Probably, they have to apply the same tools that have helped people to survive in industrial society. It is about following traditional universal human values [¹⁵; ¹⁶]. In the past the power of a corporation grounded on the basis of number of corporation members. But in contrast to all previous societies the information society proposes easier way to reach numerous supporting from society. It is not about hidden activity but open publishing information on internet.

But there is also a very important thing. To reach professional and social supporting and create a 'corporation' is possible if a person that needs help from society is sincerely with society on the basis of traditional universal human values which are similar to most people.

According to many bloggers, today's leading representatives of the information society, a new era of human development, sincerity is the basis of target audiences' trust and, as a consequence, the key to commercial success [¹⁷]. Persons and brands should take this into account in their activities that are inevitably integrated into the information age. For example, if the brand is not accepted by its target audience from the very beginning, there will always be a risk of losing sincerity in communication with it in the long term and, as a consequence, the destruction of relationships (first psychological, then economic). The reason for this can be any moment from the past brand - a loyal audience usually delves into the history of their brand and studies their brand "backwards", from the present into the past. And if there is something that can cause controversy in the audience with the image already formed in audience's

¹⁵ Yudina N. V. Novoe konkurentnoe preimushhestvo – obshchechelovecheskie cennosti. *Marketing Uslug*. M. : Izd. Dom Grebennikova, 2005. № 4. S. 69–78.

¹⁶ Natalija V. Yudina Multi-Layering Management Concept on the Basis of the Innovative Development. *International Marketing and Management of Innovations*, №4, 2019, Bielsko-Biala (Poland) E-ISSN 2451-1668. DOI 10.5281/zenodo.3252973. URL : http://immi.ath.bielsko.pl/wp-content/uploads/2019/07/IMMI_11_2019.pdf.

¹⁷ Yudina N. V. Dylema schyrosti u stratehichnomu modeliuvanni. *Modeliuvannia pokolinnia F* : zb. materialiv mizhdystsyplin. nauk.-prakt. konf., Kyiv, 05 zhovtnia 2018 r. / [uklad. L. I. Yudina]. Kyiv, 2018. C. 51 – 54. URL : <http://futuolog.com.ua/publish/12/zbirnyk.pdf#page=51>.

mind, there is a risk of ruined relationships. The similar risk also applies to all brand communications with the audience in the future.

Middle Ages corporations were destroyed by appearance of a very strong outside competitor that proposed global competition on the basis of free market economy laws. The same economic scenario can be implemented in the information society too.

Conclusions and perspectives of further developments

On the one hand the solution to this problem may seem to be the development of artificial intelligence technologies, for which there is no "human factor" phenomenon. Models of behavior, which are nowadays adhered to by artificial intelligence technologies, in the information society, in which the laws do not work, are aimed at learning. However, in the information society, the technology of the "collective mind" generated by hidden human communities is still more agile sometimes.

On the other hand professionals and ordinary people can also create their own professional communities. But in contrast to hidden communities they have to be open, sincerely and follow traditional universal human values because of this way makes it possible reach safety by supporting of the information society.

The article hypothesis of the future of hidden communities' influence to economics in the information society needs to be tested under the conditions of the period of economics after the coronavirus quarantine.

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