



Institute of Economic Research Working Papers

No. 106/2015

**Application of modern information technologies in
prevention of corruptive practices in an
organisation**

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The paper submitted to

**VIIIth INTERNATIONAL CONFERENCE ON APPLIED
ECONOMICS
CONTEMPORARY ISSUES IN ECONOMY
under the title
MARKET OR GOVERNMENT?**

Institute of Economic Research and Polish Economic Society Branch
in Toruń

18-19 June 18-19, 2015, Toruń, Poland

Toruń, Poland 2015

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Application of modern information technologies in prevention of corruptive practices in an organisation

JEL Classification: A11, A13, M14

Keywords: corruption, corrupting practices, ethics, information technology

Abstract:

The issue of corruption has recently become one of the most significant problems raised on the international scene. The discussion, currently conducted in different environments, places the issue of corruption in the centre of particular interest. In the world of research on corruption and its various forms there are multiple studies conducted by the representatives of different science disciplines. The researchers of management studies investigate corruption at both the individual and organizational level. The aspects of application of different methods and techniques by means of modern technologies are an important area of research on various aspects of corruption. The aim of the article is to analyse the possibility of application of modern tools in prevention of corrupting practices in an organization, particularly at the universities.

Introduction

Corruption is an important and current issue, having a significant impact on the activity of organisations, enterprises on the domestic and international markets. It is deeply rooted phenomenon on the Polish market. The analysis of the subject literature focuses on the key problem: how to effectively prevent corruptive practices in organisations? This phenomenon is complex and it should be continuously analysed due to the dynamic changes and globalisation processes. These processes constitute important challenges for the organisations in dealing with the issue of corruption and they are becoming a force driving the proliferation of corruptive practices.

Information technologies play a significant role in counteracting corruptive behaviours. They are an effective tool in the fight against corruptive practices, both in the public and private segment. Information

technologies can effectively strengthen anti-corruption activities in organisations.

The objective of the article is the analysis of possibility to use modern information technologies in prevention of corruptive practices in the organisation, especially at the universities. Universities can play a significant role in education of current and future managers within the scope of ethical and anti-corruptive behaviours in the organisations. To achieve this goal, the article focuses on discussion of the essence of corruptive practices in organisations, presentation of applicable information technologies and tools supporting prevention of corruptive practices. It also presents the possibilities of use of various methods and information technologies in the anti-corruption education programmes.

The article is a result of the preliminary studies conducted within the scope of the research project entitled “Analysis of application of modern information technologies in the process of implementation of the education principles against corruption in higher schools”.

Methodology of the research.

The methodology of research presented in the article has been developed based on the assumptions adopted and objectives set within the scope of the research project entitled “Analysis of application of modern information technologies in the process of implementation of the education principles against corruption in higher schools” implemented by the team at the Faculty of Organisation and Management of the Silesian University of Technology. The results of preliminary studies presented in the article form a part of the planned comprehensive research process.

The objective of the studies presented in the article is:

- characteristics of corruptive practices in organisations,
- identification of types of information technologies and tools supporting prevention of corruptive practices in organisations,
- identification of possible applications of information technologies in the anti-corruption education programmes on the selected example.

In order to achieve the assumed goals, there were preliminary studies of qualitative nature carried out, based on:

- *desk research of literature and documents* - this method was applied to analyse data regarding the essence of corruptive practices in organisations as well as types of information technologies,

- *case study* - this method was applied for the purpose of preliminary description of one of the selected universities within the scope of methods and solutions used in the education process in relation to anti-corruptive and ethical practices.

Further studies within the scope of the implemented project will regard mainly the possibility of application of the modern information technologies in the didactic process for the purpose of development of moral competences of the students, performance of comparative analysis of universities as well as development of recommendations in this area.

Essence of corruptive practices in an organisation.

Definition of corruption gives rise to multiple difficulties for the researchers since this phenomenon covers many practices the ethical borders of which are not easy to determine. The great interest in corruption of various communities on the international scene results from multiple complex phenomena, including, but not limited to, new reports on corruptive practices in the business world that compromised the trust in entrepreneurs (especially corporations), previously perceived as an important element of democratic societies - an aspect of contemporary capitalism (Stachowicz-Stanusch, Sworowska, 2012, pp. 97-116).

Literature does not prove a clear definition for the notion of corruption, there is no uniform, cohesive and universal definition of the this phenomenon. "The very notion 'corruption' (Lat. *corruptio* = bribery, depravation, rottenness) has expressly pejorative connotations, indicating concealed deviations from the established legal order and ethical practices (Stachowicz-Stanusch, Sworowska, 2012, pp. 97-116). Corruption is usually associated with unethical practices, antisocial behaviours, dysfunctional deviation, poor organisational practices and unproductive conduct (Ashforth et al., 2008, pp. 670-684). Whereas, Cragg defines corruption as "effective or ineffective attempt to exert influence on a person responsible for a decision or an order, on bases other than objective premises, with intention to provide benefits or promotion of this person, a third party or group to whom the given person is related personally, due to obligations, officially or through own, professional or group loyalty" (Cragg, 1998, pp. 122-141). It seems significant to emphasise the awareness that corruption should be treated both as a condition as well as a process of open-ended and multi-aspect nature (Ashforth et al., 2008, pp. 670-684). Ashforth et al. suggest that the manner of definition of corruption depends on the context in which it is placed as well as the perspective assumed by the definer and the purpose of its definition.

A significant aspect in defining corruptive practices are cultural differences, reflecting the local cultural values. It is difficult to evaluate the behaviour of people from one culture with application of standards from another culture. The conduct patterns and business practices differ depending on culture, therefore corruption accusations can be culturally insensitive (Stachowicz-Stanusch, Sworowska, 2012, pp. 97-116).

Despite the vast number of definitions of corruption in literature and cultural differences, it is possible to indicate multiple universal tendencies underlying these phenomena, such as use of power, egoistic orientation of the entities participating in corruptive activities or negative results of corruptive activities for the society (Akindele, 1995, p. 55-69). We can also speak of several common forms of corruption, such as bribery that occurs most commonly in collectivistic countries and be of different significance for the societies (Johnson, 2008). Another form can be fraud, nepotism or falsification of information. The source of such practices in case of individuals is the tendency to use lies for the purpose of protection of privacy, and in case of groups - for the purpose of protection of the collective or family (Stachowicz-Stanusch, Sworowska, 2012, pp. 97-116).

Acceptance of corruptive practices, counteracting attempts or active use constitute the manifestations of activities of enterprises in relation to corruption (Mroczek et al., 2013, pp. 34-41).

Presence of corruptive practices has a negative impact on the perception of the particular organisations, countries. It is a common view that corruptive practices result in the decrease of effectiveness of the economies, for example: (Gupta, 1998), (Voyer & Beamish, 2004, pp. 211-224). The influx of direct foreign investments that constitute one of the key factors of economic growth can be limited. Based on the complex business relations between the entities, the enterprises might also deal with corruptive practices of their partners. Different practices in organisations in the particular countries in relation to corruption can result from the different nature and level of corruption depending on the country.

The enterprises should develop rules of conduct in relation to corruptive practices, thus influencing the institutional surrounding, for example: (Branco & Rodrigues, 2007, pp. 5-15).

The analysis of possibility of application of various instruments, tools and methods of prevention of such negative practices is an essential issue in terms of counteracting adverse corruptive practices in organisations. A crucial tool for limitation of corruption in organisations can be application of principles of social corporate responsibility (CSR). Currently, this concept is associated not only with care of the environment, justice and social order, but also with ethical practices of business entities. The notion of social responsibility means broadly understood responsibility of the

private, public and non-governmental segment. Implementation of this concept can have a tremendous impact on development of ethical stances and counteracting corruptive practices. The research conducted by A Simha and A. Stachowicz-Stanusch are worth mentioning here as they analyse the perception of the ethical climate and ethical practices on the sample of Polish organisations and relations between the ethical climate and practices connected with managerial efficiency. The studies showed a positive relation between success and ethical conduct (Simha, Stachowicz-Stanusch, 2012). Managers should try and promote principled cultures and behaviors, which would yield in positive and beneficial outcomes (Stachowicz-Stanusch, Simha, 2013, pp.433-446). Grudzewski et al. bring also attention to the development of trust management in the organisation as an essential element of corruption limitation (Grudzewski et al., 2008, pp.7-20). In order to improve the effectiveness of activities aimed at preventing corruptive practices, it is also advisable to consider the knowledge management systems as well as use the increasingly developing modern information technologies.

Information technologies supporting prevention of corruptive practices.

A significant challenge for the organisation is prevention of corruptive practices with the use of effective and efficient instruments, methods and IT tools. Many studies regarding the problem of corruption indicates the increasing meaning of application of modern information technologies. Information technologies, especially via the Internet, are used for the purpose of various manners of counteracting corruption (Trutkowski (Ed.), pp.7-22). They allow to increase the transparency of official procedures for the public opinion, enable use of a more effective system of reporting on the existing irregularities (*whistle-blowing*), facilitate the access to information for the society (Walecki, 2006). Development of technology allows for easier, faster and more effective communication. Implementation of IT solutions can facilitate the access to certain knowledge resources, e.g. through the Internet where various information resources necessary for the employees to perform the tasks entrusted to them are collected, or the internal electronic circulation of documents allowing to monitor the course of affairs dealt with by the particular employees

Information technologies and social media can effectively strengthen anti-corruption activities in organisations through, including, but not limited to:

- improved transparency of activities,

- facilitation of access to information,
- increased disclosure of information through publication of information on the undertaken actions and decisions,
- simplification of communication between the organisation and society,
- elimination of potentially corruptogenic interactions between the employees and clients,
- improvement of procedures connected with public procurements, tenders.

Educational and information campaigns addressed to the certain groups are also very important, on the one hand forming proper social attitudes and, on the other, directed at information of the society on the cases of corruption. It must be remembered that building of social relations with the stakeholders must be treatment as a long-term strategic objective that should contribute to building of a long-term and trust-based relation (Machnik-Słomka & Bojar, 2013, pp.57-72). An important role in social education is fulfilled by mass education campaigns, employing modern information technologies, social marketing tools, social media.

The term *social media* refers to a broad set of communication tools using the Internet technology going beyond the previous social communication, including: blogs, microblogs, social media websites, i.e. Facebook, nk.pl, YouTube and other, tools for on-line conversations, on-line social games. Thematic social media portals, trade communities, professional communities, discussions forums, opinion websites, etc. are gaining increasing importance. Currently, due to the broad availability of the Internet technologies, the social media have become an important place of information exchange, changing in a significant manner the methods of communication of organisations, communities as well as individuals. Kaplan et al. define the social media as a “group of applications based on Internet solutions, founded on ideological and technological bases Web 2.0, allowing for creation and exchange of contents generated by the users” (Kaplan et al., 2010, pp. 59-68). Web 2.0 technology is a specific approach to the construction of Internet websites where the users fulfil at least an equivalent function as the designers and owners of the websites in terms of their creation (Koszembar-Wiklik, 2013, pp. 361-370). Social media fulfil an essential function in the anti-corruption education, both due to their range as well as force of impact. To a great extent, they allow to promote information on corruption as well as develop social awareness.

The activities preventing corruptive practices can involve, among other things, the following information technologies, social media:

- websites containing valid and full information, e.g. within the scope of tender proceedings, publication of financial data, reports, etc.
- information platforms with electronic data bases,
- virtual surveys and *on-line* forms used for the purpose of obtaining fast and necessary information as well as facilitation of transfer of information and communication. On-line applications facilitate dealing with and tracking the course of matters,
- electronic mail, facilitating communication with the clients. E-mail is a fast form of communication, leaving a permanent trace and easy for archiving,
- discussion forums kept on Internet portals,
- blogs and microblogs used for exchange of information as well as increasingly frequently used by the organisation for image and marketing purposes,
- social media websites.

Possibility of application of information technologies in the anti-corruption education programmes.

The problem of corruption in the recent years is also broadly referred to the issue of education, especially in terms of education of future managers. In the subject literature one can observe a great interest in the ethical aspects in the activities of schools, universities, for example: (Chapfika, 2008, pp. 43-49), (Evans & Weiss, 2008, pp.43-66), (Wankel et al., 2011, pp. 19-45).

The priority within the scope of education should sensitisation to the issue of corruption, limitation of social tolerance for corruption as well as promoting of ethical patterns of conduct. In the process of implementation of principles of education against corruption it can be helpful to use contemporary technologies, IT tools and communication techniques that can be employed by universities. These include, among other things, websites, social media portals, modern e-learning platforms, network and Internet technologies, e-teaching. An example of application of an IT tool at multiple Polish universities is the Internet anti-plagiarism system (plagiat.pl.), allowing the universities to counteract illegal copying of theses by means of the implemented anti-plagiarism procedures.

The results of the studies conducted within the scope of the project “Analysis of the state of knowledge within the scope of methods and

techniques employed in the education process at the levee of technical higher schools, taking into account the social principles of responsible teaching” implemented at the Silesian University of Technology indicated, however, that the most commonly applied methods and modes of teaching at the universities within the scope of corruption are: lectures, case studies, research projects, round table discussions with multiple interested parties. Whereas, the most commonly used methods and tools include modern Internet and IT tools, modern communication methods, i.e. e-learning, blogs and Internet communities (e.g. facebook) and other.

The proper education programmes play a crucial role in the anti-corruption education. Participation of universities from various countries in the international initiatives regarding ethics and counteracting corruption as well as development common education programmes in this matter is of great importance. These include, among other things, the initiative “United Nations Global Compact” of the United Nations within the scope of which the principles of responsible management education have been developed (PRME). The PRME principles are guidelines for the academic institutions in terms of introduction in the manager education programmes and research topics of the social issue of corporate responsibility and they are to function based on the global idea and good practice exchange platform (<http://www.unprme.org/about-prme/the-six-principles.php>). The PRME initiative serves as a framework for gradual, systemic change in business schools and management-related institutions, based on three distinctive characteristics of the initiative: continuing improvement, a learning network, and reporting progress to stakeholders (<http://www.unprme.org/about-prme/index.php>). Within the scope of the UN Global Impact initiative, there was a project implemented entitled “Sensitizing Future Business Leaders: Developing Anti-Corruption Guidelines for Curriculum Change”, aiming at development of common anti-corruption guidelines (“Toolkit”) to change the education programmes. This project was developed by the Working Group (Academic Anti-corruption Working Group). The effect of the undertaken actions was to develop a uniform tool of implementation of the PRME principles. The guidelines have been integrated in single Anti-corruption Guidelines (“Toolkit”), containing comprehensive instructions for education at the level of higher schools - anti-corruption practices, making ethical decisions. Development and implementation of such education programmes constitute an important tool changing the attitude of the managers, entrepreneurs who, in the course of their work, should make all effort to observe ethical principles of conduct.

An example of a university in Poland that conducts activities for the benefit of education against corruption is the Silesian University of

Technology, in particular the Faculty of Organisation and Management that is engaged in implementation of multiple international initiatives within this scope. The Faculty of Organisation and Management of the Silesian University of Technology was (from the initiative of prof. dr hab. Agata Stachowicz-Stanusch, as the head of the international research team (Academic Anti-corruption Working Group) within the scope of the project entitled “Sensitizing Future Business Leaders: “Developing Anti-Corruption Guidelines for Curriculum Change” implemented by UN Global Compact PRM) one of twelve facilities around the world participating in the pilot project of implementation of Responsible Management Education (PRME) in higher education. The result of this project was, among other things, development and implementation, according to the “Toolkit”, at the Faculty of Organisation and Management of the Silesian University of Technology, of the monographic lecture entitled “The essence of and preventing corruption in an organisation”. The university is engaged in and conducts research works connected with sustainable development, CSR, anti-corruption practices. Within this scope it also conducts activities for the purpose of partnership and dialogue with stakeholders, it organises conferences, publishes articles, textbooks, books. The Silesian University of Technology is also the founder of the Association “Śląskie Centrum Etyki Biznesu i Zrównoważonego Rozwoju” (Silesian Centre of Business Ethics and Sustainable Development) established in 2014 from the initiative of the staff of the Faculty of Organisation and Management. The idea to establish the Association is connected with the global postulate of ethical consideration in the business activity as well as the conviction that it is possible to combine economic objectives and ethical standards. The main objectives of the statutory activity of the Association is: creation of ethical business by means of integration and support of business environments, interdisciplinary scientific and ethical advising, support for enterprises in development of organisational culture based on ethical values, development and popularisation of notions of sustainable development and corporate social responsibility, advising within the scope of implementation of the assumptions of standard ISO 26 000, support in development of CSR strategies, development of applied ethics, promotion of principles of rational and sustainable management based on the modern management methods as well as use of environmentally friendly technologies, cooperation with governmental and self-governmental administration bodies for the purpose of promotion and support of ethical business and sustainable development (<http://www.polsl.pl/Wydzialy/ROZ>). The Silesian University of Technology is also one of the Polish universities with implemented anti-plagiarism system.

There is an increasing number of universities in Poland that join the actions aiming at anti-corruption education and ethics, addressed to the current and future managers responsible for development and implementation of ethical principles of conduct in business.

Conclusions.

Activities preventing corruptive practices in organisations must be undertaken in several dimensions, including, but not limited to, establishment of appropriate legal and institutional standards and solutions, controls, detection of corruption and penalising as well as through education of the society. In recent years one can notice multiple anti-corruption undertakings in each of these dimensions implemented by various organisations, national and self-governmental institutions, non-governmental organisations, media, universities. The issue of corruption is dealt with by multiple international organisations on a global scale. This is specifically shown by the initiatives of the United Nations presented in the article.

Information technologies and social media should be perceived as means improving anti-corruption activities and treated as an element of implementation of broader programmes, anti-corruption campaigns, taking into account long-term activities. They should be used mostly for the purpose of increasing responsibility of the managers, reduction of possibilities of corruptive practices, ensuring transparency of activities, facilitation and communication and social consultations, increasing access to information and facilitation of control and supervision.

One must, however, remember about certain hazards entailed by the new technologies that can, simultaneously, create new corruption possibilities. The use of modern information technologies should be integrated with deeper changes in the manner of functioning of the organisation, implemented systems and processes as well as increase of trust, ethical practices in organisations, implementation, for instance, of principles of social responsibility.

A significant role within the scope of anti-corruption education can be fulfilled by the universities that should adjust their education programmes to the changing requirements of the business environment, applying effective methods of communication by means of modern Internet and IT tools.

The preliminary research results presented in the article inspire to supplementation and improvement of the current state of knowledge. Further studies could contribute to development and implementation of

these methods and techniques, in particular in the anti-corruption education programmes.

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Wykorzystanie współczesnych technologii informatycznych dla zapobiegania zachowaniom korupcyjnym w organizacji

Keywords: korupcja, zachowania korupcyjne, etyka, technologie informatyczne

Abstract: Kwestia korupcji stała się w ostatnim czasie jednym z bardziej znaczących problemów poruszanych na arenie międzynarodowej. Dyskusja, prowadzona aktualnie w różnych środowiskach, postawiła zagadnienie korupcji w kręgu szczególnego zainteresowania. W świecie nauki badania nad korupcją i jej różnymi formami prowadzone są przez przedstawicieli wielu dyscyplin naukowych. Uczeni nauk o zarządzaniu badają korupcję zarówno na poziomie jednostkowym, jak i organizacyjnym. Istotnym obszarem badawczym dotyczącym korupcji są aspekty związane z wykorzystaniem różnych metod i technik przy zastosowaniu nowoczesnych technologii. Celem artykułu jest analiza możliwości zastosowania współczesnych narzędzi informatycznych dla zapobiegania zachowaniom korupcyjnym w organizacji, w szczególności na uczelniach wyższych.