

INFORMATION COMMERCIALIZATION IN VIEW OF INFORMATION ETHICS

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Annotation. The information and communication technology revolution has implied socio-economical changes and has led to information commercialization. As a result infobrokering services, professional services to provide information, have emerged. Therefore, the reflection on how to acquire, retrieve, and distribute information in the morally right manner in the information revolution era is crucial. Information ethics can be seen in micro and macro perspective, and an infobroker might be an active constructor of the info-world, improving its nature and shaping its development. However, the codes of ethics and the codes of good practice are fundamental to assist and support infobrokers.

Keywords: information services, infobrokers, information professionals, information ethics.

INTRODUCTION

The revolution in information and communication technologies (ICTs) has implied the revaluation of the classical paradigm of the industrial economy towards knowledge-based economy (KBE), where the informational mode, in which information processing together with knowledge generation and diffusion by means of multimodal, flexible, and networked communication, is the main source of productivity and competitive advantage (Castells, 2013, p. 103). Therefore, information is seen frequently as the most valuable asset providing a competitive advantage and its acquisition, retrieval, and distribution can inflict some ethical challenges to be faced.

The research goal of this paper is focused on reflections upon ethical dilemmas interdependent on information generation, acquisition and processing on commercial basis. The thought and careful consideration of this area is fundamental since the digital era sets novel and incipient challenges for information professionals, particularly those who provide information commercially. The article begins with a brief description of information ethics in the micro and macro perspective. Furthermore, the concept of information commercialization through contemporary professional information services, i.e. infobrokering services, is presented. Finally, some moral obligations for information professionals are discussed. The paper is based on English and Polish literature studies, available both in print and online, concerning information ethics, infobrokering services, and the codes of professional conduct for information professionals.

THE INFORMATION ETHICS AND ITS MICRO AND MACRO CONCEPTUALIZATION

At the end of the 20th century information ethics (IE) evolved from that of traditionally identified with library activities to the issues correlated with media, cyberspace, bio-information, cybernetics, ICTs business. The common point of this interdisciplinary discourse is the contemporary concern over free access to information, freedom of speech, and respect for the principles of democracy while preserving the right to privacy and copyright together with security, confidentiality, and integrity of services provided in global, multimodal, and virtual environment.

Among the IE research areas, there are three fields of ethical dilemmas corresponding to the production of information, its classification, and finally the access and dissemination of information (ICIE, 2019). Effortless information multiplication in the digital age implies the ethical issues associated with finding a balance between the concept of copyright protection and the concept of universal access to information and the possibility of its recombination. Yet another matter lies in personal data protection in the face of mass-scale information sharing in social networks. Ethical questions regarding the information classification can be reduced to information control and censorship. This applies equally to the traditional classification systems as well as search engines intentionally or unintentionally selecting and proceeding the search results (Sherman & Price, 2001). The third aspect of the IE pertains to the access to information and

its dissemination. Information as a product has an economic value that should be protected. Ethical problems here are interrelated to keeping the balance between the universal human right to information and communication and the issue of confidentiality, the access to strategic information and its unauthorized disclosure, or misinformation, particularly in view of Big Data analysis (Waligórska-Kotfas, 2016).

The micro perspective of IE considers information as (Floridi, 2006):

- a resource (input) – moral issues arising from the triple A: availability, accessibility, accuracy of informational resources, independently of their format and physical representation; additionally, from the information consumer's point of view the questions concerning reliability, trustworthiness, and relevance of information sources need to be raised here;
- a product (output) – ethical problems regarding pragmatic rules of communication such as: accountability, liability, libel, plagiarism, advertising, propaganda, misinformation;
- a target (environment) – the dilemmas over information security, its vandalism, piracy, and hacking, intellectual property rights, freedom of expression, and censorship, filtering, and contents control; the social dimension includes the digital divide and the ICTs illiteracy.

The IE model in the macro scale combines the elements given above with the overall information cycle including the information creation, elaboration, storage, protection, usage, and distribution to analyze the actions and interactions of informational entities within the info-environment. According to Floridi (2006, p. 32) IE determines what is morally right or wrong by means of four basic moral laws:

- entropy ought not to be caused in the infosphere (null law);
- entropy ought to be prevented in the infosphere;
- entropy ought to be removed from the infosphere;
- the flourishing of informational entities as well as of the whole infosphere ought to be promoted by preserving, cultivating and enriching their properties.

The ethical agent in the ICTs era is *homo poieticus*, who is a demiurge, an active constructor of the info-world, improving its nature and shaping its development, performing creative stewardship, generating info-artefacts and knowledge, together with creating concepts (Floridi & Sanders, 2003; Russo, 2012).

Generalizing, the contemporary IE focuses on various aspects of communication via the ICTs and attempts to adjust the general moral standards to the specific conditions created by digital, multimodal e-nvironment.

INFOBROKERING SERVICES AS AN EXAMPLE OF INFORMATION COMMERCIALIZATION

In the ICT era information overload is predominant and therefore the relevant information is difficult to obtain. Consequently, the importance of the infobrokers, professionals possessing adequate knowledge and skills to search for appropriate information, increases.

The need for the occupation was recognized in the 1990s together with the Internet expansion as well as diminishing costs of data storage. Vast amount of data started to be gathered, collected, analyzed, processed, stored and transferred and as a result public and private sources of information such as statistical data, census information, government records, social networking sites, and even web browsing histories can be searched.

Infobrokering services are a contemporary demonstration and an accurate exemplification of both information commercialization and professional services in KBE since there are five sine qua non conditions which should be met by a professional infobroker (Cisek, 2019, p. 2):

- being a mediator between information resources and organizations in need of information;
- self-employment or being employed by an infobrokering enterprise;
- providing commercial services which are available for a fee;
- selling the service not information as such; applying appropriate skills and knowledge and being guided by professional ethics.

Elaborating on infobrokers' professional skills and knowledge it needs to be stated that their responsibilities should include: the implementation of searching strategies and data processing; the evaluation of the results; the assurance of information efficiency; the analysis and interpretation; the introduction of the ultimate product to a client in an earlier established form (a presentation, a report, a database) (Grala & Kozakiewicz, 2007, p. 2).

The given above activities can lead to defining the infobrokering concept structure (Figure 1) where searching for the necessary information, locating and scanning it, is followed by processing and analyzing so that a final report can be presented to a client.

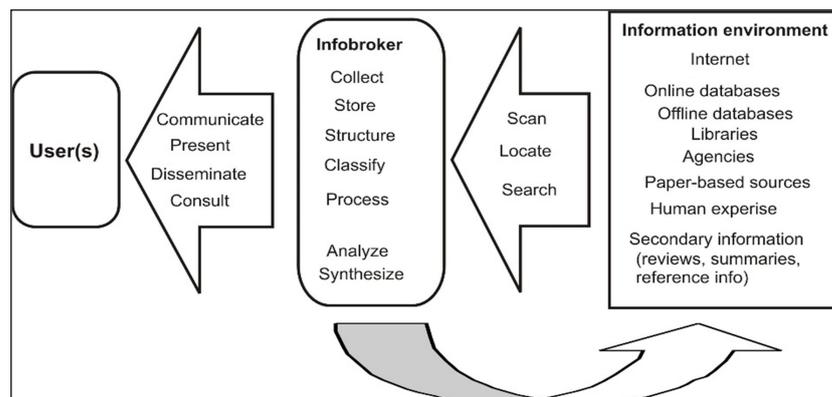


Figure 1. **Infobrokering: a concept structure** (Christozov, Nikolova, 2001, p. 138)

Special, professional knowledge about information and ICTs together with unique searching strategies needs to be applied in the infobrokering service providing process. An information broker is a mediator between information sources and the customer. Manson (1990, p. 125) states: “[an infobroker] should have one basic purpose in mind: to get the right information from the right source to the right client at the right time in the form most suitable for the use to which it is to be put and at a cost that is justified by its use”. Nowak (2006, p. 53) underlines the problem of information relevance, its assessment and accreditation in view of the digital forms of information dissemination via the Internet. Therefore, information intuition based on experience is crucial. Supplementary to possessing technical knowledge and searching skills, an infobroker must take a stance in unique, uncertain, ambiguous situations involving value conflict. Accordingly, knowledge, experience, and skills should be joined by professional ethics. Additional requirements for practicing the infobrokering profession are: foreign languages, speed reading, computer fluency, and interpersonal skills helping to identify customers information needs and facilitate positive relationships (Kowalska, 2015, p. 171).

Owing to the inseparability of a professional service from the service provider, the contractor must be regarded as a crucial factor. In the context of KBE, a 21st century professional should excel not only in the professional knowledge, but also should have remarkable mental and personality traits (empathy, integrity, ability to foresee the consequences of their own actions in the context of the service provided, constant self-development and long-life learning) and should be guided by ethical standards. Namely a person who respects the dignity of others and progresses in accordance with the code of professional ethics can be recognized as fully professional (Bartkowiak, 2001, p. 39; Śpiewak, 2014, p.34).

Under the International Standard Classification of Occupations (ISCO-08) (2019) the infobrokering profession is put in the major group 2: *Professionals*, the sub-major group 26: *Legal, social and cultural professionals*, the minor group 262: *Librarians, archivists and curators*, the unit group 2622: *Librarians and related information professionals*.

DEONTOLOGICAL OBLIGATIONS FOR INFORMATION PROFESSIONALS

The unique features of information brokerage together with its classifications, both for the profession and services, confirm that infobrokering is the exemplification of contemporary professional information services. Therefore, as well as for other professional services there are some deontological challenges facing infobrokering services. Theoretical issues discussed above in practice oblige an information professional to:

- the precise delineation of the information needs;
- the thorough assessment of information sources on account of their legality, transparency, accessibility, accuracy, relevance, and validity;
- the verification of the obtained information to the level of detail, timeliness, reliability, usability, and compatibility with respect to the information needs;
- the diligence and objectivity in the information selection and processing, which excludes manipulation, disinformation, contingency, and personal partiality.

An information professional must be aware that information, particularly economic and business information, which is ambiguous, unsubstantiated, incorrect, incomplete, distorted, or manipulated results in inaccurate strategic decisions affecting the competitive advantage or the financial position.

In the era of globalization and liberalization the straightforward formulation of deontological standards of a profession is a priority. The professional code, regarded as a systematized, consistent, and applicable guideline to mediating the conflicts that can occur both between the individuals, as well as the professionals as a group and the society, can be a significant support in overcoming morally vague circumstances (Martin, 2000). Existing until now codes, namely *Code of Ethical Business Practice*, *Code of Ethics for CI Professionals*, and *IFLA Code of Ethics for Librarians and other Information Workers* (AIP, 2019; IFLA, 2019, SCIP, 2019) exemplify the concise and declarative code of conduct for information professionals and define the following accountability points:

- the IE issues in terms of information as a resource, a product, and a target in the e-nvironment;
- the necessity of the compliance with the legal regulations including intellectual property rights;
- the concern regarding privacy, confidentiality, honesty, competence, and impartiality;
- the constant work for the information literacy promotion and the digital divide elimination;
- the continuous strive to uphold the highest standards of the profession leading to its recognition and respect.

CONCLUSIONS

Currently the paradigm shift is observed in the modern society and economy. Gathering, processing, retrieval, use, integration and manipulation of information have become crucial factors of social development and economic growth and have triggered socio-economic transformations. As a result the need for information services which would be professional and at the same time commercial has grown and in consequence a new profession, an infobroker, has emerged. Although information is a concept, it can be measured in economic terms, and as such is treated as an intangible asset influencing the civilization progress. On one hand the multimodal, networked, free, and global access to information, together with its acquisition, processing, retrieval, and distribution, enhances the diffusion of knowledge and fosters the social and economic development. On the other it contributes to information overload and chaos, lack of personal data protection, the violation of intellectual property rights, and the disclosure of strategically valuable information. Consequently, the ethical dilemmas and deontological obligations correlated with the new information profession, i.e. infobrokering profession, have appeared and the question how to handle information in the morally right manner in the digital era is crucial.

The goal of this paper was to reflect on ethical dilemmas interdependent on commercial and professional information provision exemplified by infobrokering services. The conclusion conducts to the thought that an information professional providing information commercially, i.e. an infobroker, in the modern social and economic environment arranges, unscrambles, and shapes infosphere by sorting out the e-nvironment according to the users' informational needs. Therefore, an infobroker might be recognized as a personification of homo poieticus, an active constructor of the info-world, who organizes and orders it. Additionally, an infobroker's conduct in accordance with deontological obligations of the profession should contribute to the information entropy decline and enhance infosphere sustainability that are desirable and appealed for (Floridi, 2018, p. 9). Despite existing codes of ethical conduct for various professions connected with information provision, there is a necessity to formulate and implement a code of ethics for infobrokering professionals, who provide information commercially. Such a code, where clear deontological obligations in the light of ICT era conditions would be stated in a systematic and consistent manner, is crucial. Additionally, a code of good practices regarding the infobrokering services provision should be established to assist, support, and guide infobrokers confronting and solving moral and ethical dilemmas they face on a daily basis while acquiring, processing, retrieving, and distributing information in the digital era.

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