

# Chapter 20

## Information and Communication Technology Ethics and Social Responsibility

**Tomas Cahlik**

*Charles University Prague, Czech Republic & University of Economics Prague, Czech Republic*

### ABSTRACT

*Information and communication technologies (ICTs) have penetrated during the last 20 years all human activities everywhere on the Earth. Humanity has entered into the information age, virtual reality and even virtual worlds have been created. The basic ethical questions stay as they have always been: How are we to live? What are we to be? Of course, we ought to live good lives and be good persons. The aim of this chapter is to specify what “living a good life” and “being a good person” could be in the information age and to identify challenges and opportunities ICTs offer in this context. It is impossible to predict if the positive impacts outweigh the negative ones. Anyway, it is impossible to stop the development of ICTs. The open question is if the society ought to try to increase the costs of ICTs activities that are negative from the ethical point of view and to increase benefits of activities that are positive from the ethical point of view, who ought to do it and how. All members of society have responsibility to participate in discourse of this question.*

### INTRODUCTION

Information and Communication Technologies (ICTs) have penetrated during the last 20 years all human activities everywhere on the Earth. Humanity has entered into the information age, virtual reality and even virtual worlds have been created.

The basic ethical questions stay as they have always been: How are we to live? What are we to be? Basic answers are, of course, that we ought to live good lives and be good persons.

The aim of this article is:

DOI: 10.4018/978-1-5225-7492-7.ch020

- To specify what “living a good life” and “being a good person” could be in the information age;
- To identify some challenges and opportunities ICTs offer in this context.

Having absolutely stabilized basic questions and basic answers makes the methodology of ethics quite different from the methodology in sciences. In sciences, one starts with a thorough review of previous research, specifies some new and interesting research question, makes hypotheses about possible answers and bases argumentation on data. In ethics, one reflects problems of the current age in a mirror that was created centuries ago and has been polished by many ethical reflections ever since. Forms of ethical texts are rich: dialogs, even poems, but the most used form is an essay.

## **BACKGROUND**

Literature review in research articles is used for showing that the research described in the article fits into research themes that are interesting for contemporary research community. Literature review in ethical reflections is used differently, just for illustration of ideas that have been published in the area of interest and for “opening the scene”.

Looking into the Web of Science database in September 2015 and using keywords “information technology”, “ethics” and “social responsibility” 60 entries are obtained (from that 55 articles or conference proceedings), 31 entries being published since 2010. This reveals not high but steady and increasing activity on the interdisciplinary border between ICTs and that part of ethics that is linked to social responsibility.

Looking closer into the content of those articles, following themes can be identified in the last decade:

- Ethical questions linked with the creation and use of “big data”, including creation of agreed standards of good practice - e.g. (Rizk&Choueiri, 2006), (Light,& McGrath, 2010), (Celen, & Seferoglu, 2013);
- Development of sustainable information society - e.g. (Tsai&Chen, 2013), (Busch, 2011), (Niemi la&Ikonen&Leikas&Kantola&Kulju&Tammela&Ylikauppila, 2014) in the sense of an inclusive and environmentally friendly society; application of precautionary principle in the development of ICTs (Som&Hilty& Kohler, 2009);
- Corporate social responsibility of both ICT suppliers and users – e.g. (Tsai&Chen, 2013), (Busch, 2011), (Vaccaro&Madsen, 2009), including suggestions for standards of good practice (Patrignani&Whitehouse, 2014) and how to enable consumers to push companies to behave ethically with the use of ICTs (Watts& Wyner, 2011);
- University social responsibility (Arntzen, 2010); new teaching and learning culture based on ICTs (Stepien, 2010).

This indicates research activity that is driven by applications and can be contrasted with the research activity from the years before, that was pushed by theoretical considerations. (Lianos, 2000) e.g. starts with sociological concepts and identifies the threat that ICTs can atomize society through making development of personal trust obsolete. Lianos uses credit card as an example: one does not need to be trusted by the provider of money, the only thing that is relevant is the validity of the card. Technical norms replace moral and social norms.

6 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/information-and-communication-technology-ethics-and-social-responsibility/213655](http://www.igi-global.com/chapter/information-and-communication-technology-ethics-and-social-responsibility/213655)

## Related Content

---

### A New Negative Selection Algorithm for Adaptive Network Intrusion Detection System

Chikh Ramdane and Salim Chikhi (2014). *International Journal of Information Security and Privacy* (pp. 1-25).

[www.irma-international.org/article/a-new-negative-selection-algorithm-for-adaptive-network-intrusion-detection-system/140670](http://www.irma-international.org/article/a-new-negative-selection-algorithm-for-adaptive-network-intrusion-detection-system/140670)

### Efficient and Secure Data Access Control in the Cloud Environment

Anilkumar Chunduru and Gowtham Mamidiseti (2020). *Impact of Digital Transformation on Security Policies and Standards* (pp. 183-194).

[www.irma-international.org/chapter/efficient-and-secure-data-access-control-in-the-cloud-environment/251955](http://www.irma-international.org/chapter/efficient-and-secure-data-access-control-in-the-cloud-environment/251955)

### IPHDBCM: Inspired Pseudo Hybrid DNA Based Cryptographic Mechanism to Prevent Against Collaborative Black Hole Attack in Wireless Ad hoc Networks

Erukala Suresh Babu, C. Nagaraju and M.H.M. Krishna Prasad (2016). *International Journal of Information Security and Privacy* (pp. 42-66).

[www.irma-international.org/article/iphdbcm/160774](http://www.irma-international.org/article/iphdbcm/160774)

### Secure Data Dissemination

Elisa Berino, Barbara Carminati and Elena Ferrari (2004). *Information Security Policies and Actions in Modern Integrated Systems* (pp. 198-229).

[www.irma-international.org/chapter/secure-data-dissemination/23373](http://www.irma-international.org/chapter/secure-data-dissemination/23373)

### An Approach for Intentional Modeling of Web Services Security Risk Assessment

C. Misra Subhas, Kumar Vinod and Kumar Uma (2010). *Web Services Security Development and Architecture: Theoretical and Practical Issues* (pp. 295-308).

[www.irma-international.org/chapter/approach-intentional-modeling-web-services/40598](http://www.irma-international.org/chapter/approach-intentional-modeling-web-services/40598)