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The Ethics of Information Systems – challenges and opportunities: a panel discussion

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ABSTRACT

Information integrity relies upon the development and operation of computer-based information systems. Those who undertake the planning, development and operation of these information systems have obligations to assure information integrity and overall to contribute to the public good This ethical dimension of information systems has attracted mixed attention in the IS academic discipline. The panel discussion aims to instill greater interest in this important IS perspective through considering the ethical issues surrounding IS practice.

Keywords

Ethics, information systems practice, body of knowledge.

INTRODUCTION

Each day society becomes more and more reliant upon information created and communicated using technology. We expect such information to be correct. Central to this evolution is the increasingly disparate array of application information systems. It seems that individuals, organisations and society as a whole have an insatiable appetite for information.

Some argue that as a consequence society becomes more and more vulnerable to catastrophe. With the world in current economic crisis the headlong drive for efficiency and effectiveness (and resulting profit) is the watchword. Such pressure might have resulted in real gains but has also led to unscrupulous or reckless actions. The tempering of such drive with ethical consideration is often neglected until there is a detrimental event causing public outcry. Such an event will usually attract both media interest and social media posting which in turn places more and more pressure on the actors to account for the reasons why the event had occurred. This cause and effect map is commonplace.

INDICATIVE EXAMPLE

On such example is the Volkswagen emissions scandal. On 11 January 2017, the US Justice Department announced that, "Volkswagen had agreed to plead guilty to three criminal felony counts, and pay a \$2.8 billion criminal penalty, as a result of the company's long-running scheme to sell approximately 590,000 diesel vehicles in the U.S. by using a defeat device to cheat on emissions tests mandated by the Environmental Protection Agency (EPA) and the California Air Resources Board (CARB), and lying and obstructing justice to further the scheme." (US Department of Justice (2017)) At the centre of the scandal is misinformation generated by onboard software - an information system. This information system was developed and implemented by professionals who must have been party to this illegal and unethical act.

In general the integrity of information relies upon the development and operation of computer-based information systems. Those who undertake the planning, development and operation of these information systems have obligations to assure information integrity and overall to contribute to the public good (Rogerson, 2011). The ethical practice of the information

systems practitioner is paramount. Practice comprises two distinct facets; process and product. Process concerns the activities of IS practitioners and whether their conduct is deemed virtuous, whereas product concerns the outcome of professional IS endeavour and whether systems are deemed to be ethically viable. The Volkswagen case appears to have failed on both counts.

ADDRESSING THE ETHICAL DIMENSION

The ethical dimension of information systems has attracted mixed attention in the IS academic discipline. There has been limited crossover between the computer ethics and information systems disciplines. Warren and Lucas (2016) found that there are very few researchers who are active in both fields and that there are very few papers from the computer ethics journals which are cited in the journals of the Association of Information Systems. Weiss (2017) found that there were few papers relating to ethics or corporate social responsibility in top-ranked IS journals although there was some evidence of an increase (see, for example, Abassi et al, 2016; and White & Ariyachandra, 2016). Furthermore, there is a tendency for these few papers to adopt a positivist approach which is contrary to the computer ethics body of knowledge. Hassan and Mathiassen (2017) address the growing interest in creating an Information Systems Development Body of Knowledge. Their proposals focus on traditional techniques cited in the IS literature and so the ethical dimension is side-lined.

It is possible to develop an agenda of ethical issues surrounding the development and use of information systems. The agenda could be subdivided into three parts:

- Application Areas: examples; Internet of Things, Cloud Computing, Social Media, Big Data
- Techniques: examples; Ethics Algorithms, Sentiment Analysis, Public Beta Testing
- Holistic Concerns: examples; Privacy, Cyber Security, Equality of Access, Data and Discrimination

PANEL DISCUSSION

From the argument laid out, it follows that there is a need to increase awareness, interest and action concerning the ethical dimension of information systems both as a discipline and as a practice. The proposed panel is an opportunity for multidisciplinary dialogue which will promote greater attention to these issues. The overall aim is to act as a catalyst for action within the IS community. As such there are four objectives:

- To encourage wider debate concerning the ethics of information systems.
- To explore current application areas and technological infrastructures in order to tease out some of the key ethical challenges.
- To consider how current management practices allow or hinder the addressing of such challenges.
- To suggest ways forward for practitioners which will increase the chance of ethically acceptable application systems.

The panel will comprise four experts with multidisciplinary backgrounds. Together panel members have a rich, diverse experience which includes professional and information ethics, management information systems, software engineering, data repositories and information systems development. Each panel member will deliver a position statement designed to provoke interest and debate. There will then follow a question and answer session involving panel members and the audience.

This is an initiative which is supported by the Journal of Information, Communication and Ethics in Society from Emerald Publishing. It is planned that panel members will co-author a viewpoint for the Journal after the conference.

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