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David Paradice

Auburn University, USA

David Freeman

Auburn University, USA

Jianliang Hao

Auburn University, USA

Joonghee Lee

Auburn University, USA

Dianne Hall

Auburn University, USA

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A Review of Ethical Issue Considerations in the Information Systems Research Literature

David Paradice¹, David Freeman², Jianliang Hao³, Joonghee Lee⁴
and Dianne Hall⁵

¹*Auburn University, USA; dparadice@auburn.edu*

²*Auburn University, USA; dzf0015@tigermail.auburn.edu*

³*Auburn University, USA; jzh0064@tigermail.auburn.edu*

⁴*Auburn University, USA; jzl0165@tigermail.auburn.edu*

⁵*Auburn University, USA; halldia@auburn.edu*

ABSTRACT

This monograph summarizes the treatment of ethical considerations that have been made by information systems researchers as reported in papers published in the Association of Information Systems Senior Scholars Basket of Journals. These eight journals, the first of which was published in 1977, contain 145 papers that are summarized in sixteen categories. When examined in this fashion, we find that information systems research over the years that incorporates an ethical perspective has transitioned from a focus on codes of ethics and general notions of behavior to more sophisticated models of piracy, privacy, and security. There has been a steady focus on theory development over the last ten years, as well as constant scrutiny on the obligations of information system researchers to both the subjects of studies and the consumers of the research results.

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The monograph begins with a brief introduction and review of major ethical theories. This is followed by the category summaries, which are listed in alphabetical order to enable a reader to jump to a specific topic. The last sections of the monograph address future research opportunities and the conclusions we draw. These sections include topics from the papers published as well as our own suggestions for research that examines ethical concerns in the increasingly networked world in which we live.

1

Introduction

The idea that ethical issues need to be incorporated into technology-based research pre-dates the emergence of the modern information systems research discipline. C. West Churchman, the first editor of *Management Science*, maintained an enduring sense that ethics and technology should be combined for improvement of the human condition. For Churchman, a science of management should include all aspects of improving how the world functions, including management of resources and using the systems approach to solve the most complex problems (e.g., poverty, illness, and injustice, see Porra (2001)). According to the Encyclopedia of History of American Management (Witzel, 2005), Churchman believed systems thinking and ethical alertness were entwined. He believed that a moral and ethical stance should be integrated into management practice and thinking; it should not be an afterthought. Churchman believed improving a system involved the ethics of the whole system (Churchman, 1968).

One of Churchman's students, Richard Mason, observed in the mid-1980's that society was truly an information society and that "our time (is) an information age" (Mason, 1986). He noted that "information forms the intellectual capital from which human beings craft their lives

and secure dignity” and that the management information systems (MIS) community should be concerned for the type of society that was being created, given that MIS professionals are at the forefront of this creation.

Mason recognized that many issues would need to be addressed, but he identified four issues of particular concern: privacy, accuracy, property, and accessibility (which he referred to by the acronym PAPA). Through a series of anecdotes and vignettes, Mason gave life to the significant problems that can occur for individuals when each of these aspects of information is mishandled. He summarized this opinion piece with the following moral imperatives:

1. Information systems should not unduly invade a person’s privacy.
2. Information systems must be accurate.
3. Information systems should protect the intellectual property of individuals as well as the infrastructure through which the information flows.
4. Information systems must be accessible by all to ensure ability to participate in society.

Mason noted that fulfilling these moral imperatives is a “tall order”, but one that the MIS community needed to address.

Mason’s work was purely anecdotal, but a number of quantitative and qualitative studies have since been published. This review examines how the information systems research community has responded to Mason’s vision. We review how information systems researchers have integrated ethics and ethical considerations into the knowledge they have created.

Following brief sections that define the most common ethical theories and the methodology employed, the rest of this work is organized in alphabetical order by research topic. The reader who chooses to jump to a particular topic of interest is cautioned, however, that the nature of examining ethical issues is complex and thus placing a paper in a single topic category can occasionally be challenging. For example, Wall *et al.* (2016) states that “Privacy and security concerns are pervasive . . . ”

which begs the question: should the paper be categorized under “privacy” or “security”? Similarly, Siponen *et al.* (2006) describe a design theory framework for secure information systems. Should this be in the “design” section or the “security” section? Thus, the reader who is not inclined to read the entire review is encouraged to think broadly if searching for coverage of a particular ethical issue context.

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