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Ethics and Research Methods

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Abstract

In Information Systems (IS), the ethical conduct of research may be something which we take for granted - or perhaps simply ignore. Given the seriousness of ethical dilemmas that can arise, however, it is important to pay attention to ethical issues. In this essay, a personal perspective is given on the nature of ethics in Information Systems research. The philosophical theories of teleology and deontology are reviewed and then applied in the IS context. Three fictitious scenarios are employed to illustrate the existence of ethical issues in IS research and suggestions are made for improving the quality of IS research - from an ethical perspective.

1. Introduction

The purpose of this article is to inform and encourage the research community to debate and reflect on the ethical standards to which we voluntarily adhere with respect to the conduct of Information Systems (IS) research. At the same time, the purpose is not to identify published examples of research as being unethical, nor indeed to admonish researchers for any particular practices. Nevertheless, attention will be drawn to examples of research practices that may involve ethical dilemmas, and a variety of perspectives will be presented. Fundamentally, the author does not believe that any specific research method is inherently better or worse than any other - each should be applied appropriately according to the infinite variety of circumstances with which we are faced in researching IS in contemporary society - and so it is intended that a spirit of methodological pluralism, as well as ethical consideration, should permeate and inform this debate.

This article has several readily identifiable forebears, viz.: the ISWORLD pages on [Professional Ethics](#), a panel session on [Research Ethics](#) at the 21st International Conference on Information Systems (ICIS)[6], and an article [2] that discusses professional ethics more generally.

This article will proceed as follows. Firstly, the general ethical theory and background will be introduced, with specific reference to teleology and deontology. These two philosophical perspectives will then be applied to IS research methods in the context of three case scenarios. Each scenario is constructed so as to highlight a number of ethical dilemmas which may be encountered in the conduct of IS research. Inevitably, these scenarios have elements of the real world in their make-up, yet they are not knowingly lifted from any published materials. The ethical concerns in each scenario are identified and analysed with a view to providing recommendations for the practice of research. Finally, conclusions are drawn on the importance of ethics in contemporary IS research, and work that remains to be done.

2. Background

Ethics is an ancient discipline, its historical antecedents being found in the writings of Confucius and Aristotle, among others. Its application to the IS domain is naturally more recent, Wiener [15] first applying it to computing, and much greater attention being paid since 1980, seminal contributions coming from Mason [8], Couger [1], Oz [10] and Walsham [14]. It is thus both ancient and modern - a discipline that is very much relevant to the activities in which we engage in the 21st century. Ethics can be defined as involving the systematic application of moral rules, standards, or principles to concrete problems, though some authorities, e.g. Snell [11], object to the utilitarian nature of this definition, considering that the characters and obligations of the key actors should also be scrutinised. Generally speaking, an ethical dilemma can be

said to emerge "whenever a decision or an action has the potential to impair or enhance the well-being of an individual or a group of people" [7]. Not surprisingly, such decisions and actions are frequently undertaken given the enormous scope of competing values and conflicts of interest present in the information society. In considering ethical dilemmas, two philosophical perspectives are commonly employed: teleology and deontology.

2.1 Teleology

Teleology, (derived from the Greek '*telos*' meaning 'end' or 'goal' and '*logos*' meaning 'reason'), involves explaining circumstances "by reference to some purpose or end, also described as final causality... Human conduct, insofar as it is rational, is generally explained with reference to ends pursued or alleged to be pursued, and human thought tends to explain the behaviour of other things in nature on this analogy... The most celebrated account of teleology was given by Aristotle when he declared that a full explanation of anything must consider not only the material, the formal and the efficient causes, but also the final cause - the purpose for which the thing exists or was produced" [3]. In the context of this essay, I have adapted the meaning slightly so as to suggest not only that ends or goals be used to explain a situation or set of circumstances, but in addition the 'goodness' of those goals or ends be considered. Utilitarianism is one example of a teleological theory, focusing on the goodness of consequences for a majority of stakeholders. It is important to stress that stakeholders include not only the person who is instigating an action or making a decision, but also any other people who may be affected by the action or decision. This has particular significance for the practice of IS research, where a wide variety of stakeholders may readily be identified. Ideally, in order to assess which decision or action will accrue most benefit to most people, it is necessary to be able to add up all the benefits and subtract all the costs and detriments of an action on a common numerical scale [13].

This may be quite impractical, yet some form of cost-benefit analysis applies to most theories rooted in teleology. Evidently one can never be absolutely certain of all the possible consequences of an action, but this uncertainty can be moderated by employing "the best possible knowledge of the consequences available at the time" [14] when decision making. Given the fact that teleology focuses on consequences rather than means, it is certainly possible to employ means that most people would find utterly evil or repugnant if the end result can be justified as beneficial for the majority. Such a weakness was instrumental in the development of human ethics committees in universities in the 1960s in response to psychological experiments that purported to involve the application of electric shocks to research subjects (see e.g. [9]).

2.2 Deontology

By way of contrast with teleology, deontology (derived from the Greek '*deon*' meaning 'obligation' or 'duty') focuses on the duties that are applicable in particular situations. The correct action or decision thus does not depend on an outcome or consequence, but on a set of fundamental duties, for example the code of practice of a professional association. Walsham [14] observes that deontological theories "are based on the view that there are certain sorts of acts that are wrong in themselves, and thus they are morally unacceptable, even if the ends which are being pursued are morally admirable". Kant (1724-1804) focused on the notion of duty to the exclusion of any sense of joy or pleasure, and indeed irrespective of the possible consequences. This manifestation of duty is often referred to as Kant's 'categorical imperative', a form of ultimate test as to whether an action is right or wrong. This principle incorporates a strong element of universalism, in that only those actions that can be performed by everyone without harming anyone are morally acceptable. The categorical imperative "can be reduced to the absolute principle of respect for other human beings, who deserve respect because of their rationality and freedom, the hallmark of personhood for Kant" [12].

As a principle, the categorical imperative is admirable, but many researchers would find it impractical to apply. In many situations there are conflicting duties and so it is necessary to consider, in addition, the consequences of an action in order to reach an optimal (or least worst) decision. Indeed, some authorities recommend that a combined teleological-deontological practice of ethics be adopted [4].

The duties of deontology need to be matched by rights - and people are usually more concerned with protecting, enforcing and defending their rights than upholding and adhering to their duties. Rights, however, "are not universally accepted, and can be held to be strongly conditioned by particular cultures" [14]. Such conditioning leads to conflicts, for instance between those who advocate universal human rights (as codified in the UN [Declaration of Human Rights](#)), and those who contend that human rights must be relevant to and respectful of the societal context in which they are interpreted and practiced.

Whether or not an action is universally employable can usefully be measured by a principle commonly known as the Golden Rule, broadly: 'treat other people in the same way that you would like them to treat you'. A Confucian version of the Golden Rule can also be considered, characterised by Martinsons and So [7] as "do *not* do unto others that which you would *not* want done to you". By turning the tables and making oneself the target of an action, one can then use this new perspective to evaluate whether an action is acceptable or not. Less formal principles have been devised for similar testing of the universal application of actions, for example the TV, Market and Mum tests [5]. Could you broadcast your action on TV? What would your Mum say? These tests tend to have the effect of propelling people towards a relativist

perspective of ethics - presumably not all mothers in all societies will think similarly nor indeed respect the same goals or duties. Likewise, TV audiences will apply ethical principles that are valid in their own cultural context when deciding if an action or decision is good or correct.

2.3 Application of deontology and teleology to research methods

In IS research, a number of methods have gained respectability and are commonly employed. These include positivist methods such as experiments, surveys and the like, interpretivist methods such as action research, hermeneutics and ethnographic studies, and those methods that may fall in either category depending on the epistemological assumptions made by the researchers, e.g. case studies. Unfortunately, authoritative descriptions of these research methods seldom, if ever, undertake to inform their readers (and users) of ethical concerns that may arise through their use. Although this omission may be deliberate, it should not be taken as meaning that authors are negligent; on the contrary, they may believe that research ethics are very important, yet nevertheless fall outside the specific instantiation of the method. Indeed, a strong case can be made for the notion that ethical principles should not be developed independently for each and every research method, but that a more or less common set of principles should apply across all methods. In the following paragraphs, we examine how teleological and deontological perspectives of ethics can be applied to an analysis of IS research. The following section then illustrates these perspectives through the analysis of three fictitious scenarios.

From a teleological perspective, it is not unreasonable to assume that researchers typically do have a goal or end in mind when they start their research - it may be a research question that they hope to answer, and/or may involve the solution of a problem, as in the more organisationally dependent studies. However, for our purposes, a teleological perspective must also involve an analysis of the goodness of the goal, end or consequence - for the researcher, the research subjects and any other people or entities involved or affected. An analysis of goodness may not be easy to undertake, since some consequences may be hard to foresee. This is particularly true for research subjects, even in the most seemingly innocent of research designs, since if subjects are being controlled or manipulated in some fashion, there must exist a chance that this manipulation will affect their behaviour outside the context of the research.

A second issue concerns the way in which students are often coerced, compelled, lured or enticed into becoming research subjects, whether by means of incentives such as course credits, competitive prizes or lack of choice, participation being part of their prescribed course of study. Whilst the goals of the research may be admirable, the means employed to achieve the goals may not always be blameless.

Where the goodness or relevance to organisational practice is concerned, researchers often point out in a 'Limitations' section that the results should be interpreted with caution, since they are, for instance, obtained from an analysis based on student subjects, in a single culture, and the research design constrained the realism of the scenarios employed. Such limitations have become *de rigeur* in published research, though excessive reliance on them is bound to erode the goodness of the research itself - a further ethical consideration.

Where deontology is concerned, we must focus on the duties (and also rights) of the people involved in and affected by the research. Deontology is more complex because of the interacting and conflicting nature of rights and duties. Generally speaking, when a person has rights, s/he will necessarily have corresponding duties. Thus, the researcher may have a right or a duty to conduct and publish research (imposed by the employing institution), but will also have a duty to respect the rights of other people who may be affected by the research - research subjects for instance, or a duty to adhere to conditions imposed by a grant funding institution. The researcher may in addition have both the right to select a research method that is appropriate to the topic under investigation, and also the duty to follow one or more codes of conduct that formally govern his/her activities - these could be at the institutional or professional society levels, or might involve a religious (personal) undertaking.

A grant funding agency may also have rights and duties by virtue of the contract it establishes between itself and the researcher. These rights and duties will inevitably vary, but for instance could include a duty not to interfere in the research process, nor restrict the research methods employed nor circumscribe the academic freedom of the researcher, yet at the same time include the right to exclusive use of the results obtained for a specified period of time.

The rights and duties of research subjects are more tricky to analyse, since such subjects are seldom party to formal contracts or agreements. Indeed, on occasion they may not even be aware that they are involved in a research project, permission having been given for their involvement by their superiors (management), or not even explicitly sought at all, though nevertheless implicitly assumed.

One might suppose that research subjects have a duty to follow any instructions that they are given in performing prescribed activities, but if they find these instructions morally reprehensible, offensive or just plain wrong, then do they have the right to object, withdraw, or warn the researcher (or communicate their concern to the researcher's institution or appropriate law enforcement agencies)? Furthermore, if the instructions involve a measure of deceit (as a means to achieve a research purpose), and subjects are known to have seen through this deceit, or subjects perform in a fashion deemed "extreme" or "outlying", then does the researcher have the right (or duty) to exclude this "data" from the research analysis? In the context of ethical analysis, definitive answers to these questions are elusive, if only for the reason that any

individual may apply a different set of values, principles and standards in the analysis.

3 Scenarios

In this section, three IS research scenarios are introduced, each involving a different research methodology. Each scenario is complemented by an identification and analysis of some of its major ethical issues, as well as suggestions as to how the key protagonists could act in an ethically sensitive fashion. It must be reiterated that this identification and analysis is necessarily biased by the values and principles of the author, and so the purpose here is primarily illustrative rather than prescriptive.

3.1 A controlled field experiment

Becky is a recently appointed Assistant Professor in Information Systems in a large government-funded university in Australia. Both her Head of Department and her Dean have made it clear that academics need to ensure that their classes are web-enabled, since in the Information Age, this is what students expect. No specific guidance is given as to how web-enabling should be done - indeed neither her colleagues nor her superiors seem to think that the issue is of any importance - so long as it is done. Becky is troubled by this lack of pedagogical awareness - it seems that it is web-enabling for the sake of web-enabling, and not for any added value. Therefore she decides that while she will indeed web-enable her courses, she will in parallel conduct an investigation as to which type of web-enabling is most effective. She successfully applies for a small-scale research grant from her Dean to pay for a part-time research assistant (RA), Olivia, to help her with web page development, data gathering and analysis. Becky's research question involves identifying whether providing a more sophisticated web page with more detailed information and the opportunity for on-line sharing and discussion of material will result in better student grades at the end of the course.

Given her limited resources and access to parallel groups of students, Becky decides to compare only two types of web-enablement: a simple version that only permits the dissemination of lecture and tutorial materials via hyperlinks on her course web page; and a more sophisticated version that in addition provides students with chat fora, on-line quizzes, hyperlinks to external web sites and documents that are relevant to the course she is teaching, and so on. Each class is entirely separate - no student participates in both, and as the web sites are password controlled, only students registered for a particular course can access materials maintained there. Nevertheless, the two courses are essentially the same, both being introductions to Information Systems for two different sections of the same programme.

3.1.1 Ethical issues. Ethical issues here can be divided into several perspectives. Firstly, we can identify both goals and rights & duties appropriate to a) the university and its senior office bearers; b) Becky herself; c) Becky's students, and d) Becky's RA. Thus, one might assume that the institution should have both a goal of ensuring that its practice of education is pedagogically sound, and hence a duty of promoting such an approach. However, since the focus of this essay is on research methods, rather than institutional policies, the analysis below will primarily involve Becky, her RA and her students.

Becky's goal of improving her own pedagogical awareness about web supported teaching is surely a laudable one, as indeed is her intention to provide a better quality of web support to future students. However, the means she employs to achieve these twin goals could be criticised since her students may feel that they are being used as means to Becky's research goals and thus have been reduced to the status of involuntary experimental research subjects. It does not appear that they are given choice in the matter. A utilitarian perspective would enable Becky to justify her method - on the basis that future generations of students will benefit from this study. Whether she can argue that none of the current students will be harmed is another matter. Becky could further argue that she is fulfilling her duty in adhering to the institutional policy that mandates the web enabling of classes, merely varying the characteristics of this environment.

Certainly it appears to be true that Becky did not ask students for their opinion on potentially valuable characteristics of the web supported environment that they would like to see provided. Given institutional policy, one would expect students to have had previous experience of web-supported instruction, and hence to have formed some opinions about the usefulness of various features of similar environments. Some scholars might argue that Becky has a duty to incorporate prior experience and lessons learned into her research design, helping the IS field develop a cumulative tradition rather than engage in the perpetual reinvention of wheels.

The students themselves might argue that they have the right not only to know what the research entails, but also the right to receive as good an education as other students. Furthermore, they might also claim that the instances of their behaviour that are being collected and analysed, perhaps including any specific qualitative comments they choose to make in subsequent 'student evaluations' of the courses, are protected by data privacy legislation - and hence should not be used without their explicit permission. The veracity of such an argument would depend in part on the legal provisions available in the jurisdiction where the study was conducted, but the absence of legal guidance does not necessarily make an action ethical or unethical. The viability of both informing students and obtaining their affirmative consent to data use could prove a costly exercise, but one suspects that ignoring student claims altogether could prove more costly still. Nevertheless, the researcher might be advised to conduct a

cost/benefit analysis so as to gauge the relative importance of a number of competing activities and processes, viz.: the duty to provide quality education for current students; the right of students to know; the goodness innate to transparency of research activities; an improved educational context for future students.

Olivia, Becky's research assistant, is also the subject of analysis, primarily with respect to her right to receive appropriate credit for work performed, for example in any publications that may result from the project.

3.2 An action research investigation

Sea-Ling, an action researcher, is working with a Singapore-based management consultancy in the analysis of the quality of their in-house training programmes. She has been contacted by senior partners in the firm who believe that her rigorous, qualitative, investigative techniques will shed light on some of the problems that they have been encountering in motivating staff to attend training programmes. Having obtained management *carte blanche* to talk to whomever she likes, to observe the current situation, to diagnose problems and suggest actions to remedy the situation, as well as access to relevant internal documents, Sea-Ling sets off on her investigation. She undertakes extensive background investigations, talking to trainers, trainees, and clients, presenting herself as an action researcher. She has an ID card that verifies her status as a contract (temporary) employee, with the status of a senior partner (somewhat akin to a Visiting Professor). She receives full co-operation in her investigation, unearths a number of critical problems that have implications both for the attitude and motivation of the trainees and for the methods and approaches taken by the trainers. She summarises her diagnosis of the situation in a report for management, with suggestions as to possible actions that can be taken to improve the current situation. These include: changing the organisational culture so that trainees are intrinsically rewarded and motivated to participate in training programmes; increasing the accountability of the trainers, with a set of sticks and carrots that remove their current untouchable status; and challenging senior partners to pay more attention to the grievances of junior staff in the firm.

3.2.1 Ethical issues. Ethical issues here can be analysed from the perspectives of employer, employee and researcher. Each of these will have a bearing on the research methods employed by Sea-Ling in her investigation.

While management of the firm have the right to employ anyone they deem competent to perform duties they assign, do they have any duty to inform other employees about someone like Sea-Ling, whose duties are rather different inasmuch as they involve observation and analysis of the behaviour of the employees at large? Furthermore, does Sea-Ling have a professional duty to inform employees about exactly who she is, why she is involved, who has approved

her appointment, what she is collecting data for - before becoming involved? Both of these issues could be addressed through the agreement or contract that should exist to govern Sea-Ling's involvement with the firm. In action research, this agreement would normally form a part of the larger 'researcher-client infrastructure' (RCI), which in addition includes ethical guarantees and explicit protocols and obligations to which both researcher and firm are expected to adhere. Such protocols would normally encompass: the nature of Sea-Ling's involvement; procedures for reporting; responsibilities; circumstances under which the involvement should be terminated; actions to perform in the case of conflict, e.g. employee non-cooperation, etc. All of these protocols and agreements are important components of the research method.

Quite apart from the assurances that the RCI should provide, Sea-Ling might, in addition, consider that she has a duty, prior to accepting the terms of any agreement with the firm and so the initiation of the project, to assess management's intentions, i.e. what they plan to do with her recommendations. For example, depending on her personal views of the relationship between management and the workforce, Sea-Ling might want to reassure herself that employees would not lose their jobs or be demoted as a consequence of her own reports or recommendations.

3.3 An exploratory cross-cultural field study

Taras, a Ukrainian academic working at a large university in Kiev, has been attracted by accounts of virtual teams that he has seen in some prominent IS e-journals. He would like to meet foreign researchers working in this area, and may even be able to secure the funds to attend an appropriate conference. Unfortunately, there are no people at his university working on or interested in such projects. Therefore he resorts to the web to identify and make contact with potential co-researchers from other countries. In this way, he forms a research partnership with three colleagues, Roberto in Mexico, Esselina in Botswana and Terrence in Canada.

Terrence is the most experienced of the four, with several relevant publications in prestigious journals and conferences. Terrence suggests that they establish a virtual consulting consortium, with graduate students from each of their respective universities. He contacts a dot.com start-up in Vancouver that is willing to pay for consulting advice on how it should expand its operations in the next five years. The students are universally enthusiastic about engaging in this project, which will supplement their income and simultaneously enable them to gain useful work experience. Terrence suggests that they can make use of an instrument he has validated and published previously in his study of virtual teams based in Canada and South Korea, an instrument he co-developed with his colleagues. Taras expresses some reservations about this instrument, considering that some of the items seem inappropriate for the present study, and other

important items are missing, but finally defers to Terrence's authority.

In due course, the project is initiated. Ten virtual teams are formed, each with one student from each country. The negotiations in which they engage are complex and fraught with disagreement, all of which the researchers consider to be part of the project - learning how to negotiate with people from different cultures and with different communication styles. The problems are exacerbated when the dot.com is liquidated and salaries dry up. The students continue to work as the project will count towards their degrees, despite their disenchantment with the entire process and the fact that they are hardly on speaking terms with one another by the deadline. Indeed, they cannot agree on a single recommendation to the now defunct dot.com.

3.3.1 Ethical issues. Ethical issues here involve the graduate students and the four co-researchers, with special consideration for the roles played by Taras in starting the project and Terrence in leading it. Several of the issues involve an apparent conflict of interest between the researchers in their role as both teachers/supervisors and as researchers.

Fundamentally, we could argue that the four co-researchers have a duty to look after the best interests of their graduate students. Providing them with the opportunity to engage in a virtual team project on a live case can certainly be valuable, but leaving them to their own devices when they run into difficulties to see how they cope with cultural differences and negotiation styles might not be seen as professional behaviour given their role as university professors. Indeed, there is the basic conflict of interest inherent in a situation where the teaching/supervising of students is inextricably coupled with the collection of research data. As in the web-based teaching scenario, described above, there are issues of student privacy rights with respect to their data, their contributions and their comments in and on the virtual team process.

Terrence, as an experienced researcher in the area who has conducted similar work in the past, comes in for special attention. Presumably he should be in a good position to communicate lessons learned from previous studies in the form of guidelines that the students can act upon, and that the co-researchers can employ directly when planning the task itself. Terrence's identification of a dot.com that is willing to pay the students for their time is certainly fortuitous, but it is unfortunate that the other three researchers cannot independently assess the suitability of the dot.com. Similarly, Terrence's covert insistence that an instrument he has developed previously on another study should be used, seems ethically dubious. One might expect that Terrence has a duty of both professionalism and respect to the other researchers to permit them to critique the instrument and assess whether it really does measure the constructs that all four believe to be appropriate in the study. Uncritical adoption of an instrument

is unlikely to be appreciated by reviewers of manuscripts for conferences/journals.

4. Discussion

The three scenarios presented and analysed above were created specifically in order to illustrate a selection of the ethical dilemmas that may arise during the conduct of IS research. Some suggestions have already been made about possible courses of action that could have been taken so as to prevent the occurrence of the ethical dilemmas described in each scenario. However, it is in addition useful to go beyond these immediate suggestions and elicit some fundamental guidelines that can help us plan and conduct IS research more generally, i.e. independent of the methodology adopted.

Fundamentally, IS research ethics is concerned with people and the way they behave or are treated by others. Very often, various forms of technology may be present in any situation but evidently the technology cannot be made a scapegoat for human failings. Given that we are dealing with people, it is therefore essential to identify all relevant stakeholders in any particular situation. These stakeholders would normally include: the researcher(s) (and their assistants); the research subjects; grant funding agencies or institutions; the host organisation where the research subjects work/study; any indirectly affected internal or external parties such as clients, consultants, affiliate employees. External stakeholders might also be taken to include developers of technology (including software) who may restrict the way it can be used through licensing agreements.

On the deontological side, we then need to assume that each stakeholder, whether individually or as a group, has identifiable rights and duties with respect to the research context. These rights and duties should be stated explicitly. The researcher may choose to be responsible for the identification of these rights and duties, but the relevant stakeholders need to agree with them. A fundamental right to which research subjects should be entitled is the right to be informed what they are doing (or what is being done to them), how information collected from them will be used, and consequently to remove themselves from the research situation if they feel uncomfortable with its circumstances. This right must be paralleled by a duty on the part of the researcher to inform research subjects of these issues - so as to fulfil their right to be informed. Having informed research subjects about research procedures, including data collection and use practices, it is additionally preferable that research subjects give their affirmative (not informed) consent to their continued involvement. Affirmative consent requires each research subject to state their understanding, agreement, etc. explicitly. Informed consent merely requires that they be informed of a situation, procedure, etc., their consent being assumed, **unless** they explicitly communicate to the contrary. Consent that is given by a third party, such as a superior, may appear authoritative yet may also prove problematic when

research subjects claim, with some justification, that neither have they been informed, nor has their consent been obtained.

Considering the teleological perspective, the most cogently expressed goals are likely to be those of the researcher and the client organisation (if any), rather than the research subjects. It is therefore these goals that need to be critically examined in order to establish whether they may harm the stakeholders. Ethics committees are often set up expressly for this purpose, yet not all research is subject to the critical analysis of these committees. Researchers themselves therefore need to develop the personal capability of analysing their own goals. An effective means of conducting this examination lies in the mediating influence of the stakeholders' rights and duties, i.e. are the goals of the research compatible with respecting the rights of the research subjects?

5. Conclusions

Ethics is an important facet of any research methodology in any discipline. Wherever there are researchers, stakeholders, affected parties... there will exist the potential for an action or decision to impair or enhance the well-being of one or more persons. The scenarios developed and analysed in this paper begin to unravel some of the ethical issues that may be found in IS research - issues that are more or less directly associated with the research methodology. In most instances, the ethical dilemmas are fairly simple, even though they may have far reaching implications. The intention of this essay is to encourage preventative ethical practice. To this end, researchers need to pay special attention to ethical issues in the initial stages of a research design. In many cases, ensuring that both the goal and the means used to achieve it are admirable will obviate many of the subsequent ethical concerns that could otherwise arise. It is therefore essential to be sensitive in setting goals and planning means, since the rights of all relevant stakeholders need to be taken into consideration. It will be helpful, at the same time, to consider the duties of researchers with respect to those stakeholders, whether they be students, organisational employees, or anyone else.

In essence, the ethical guarantees need to balance teleological and deontological perspectives, and have to be agreed upon, preferably explicitly, by all researchers and research subjects. In considering how to ensure that research methods are operationalised in an ethically appropriate fashion, researchers are encouraged to demonstrate respect for their research subjects by informing them explicitly about, and obtaining their explicit consent to their involvement in all research project activities. Ultimately, ethics is a matter of individual values, judgement and conscience. Nevertheless, research (and the ethical values that inform it) will be judged by the collective values, judgements and consciences of many other researchers. The ethics of the review process lies

outside the scope of this essay, but it represents a clear way forward for the ethically concerned researcher-reviewer.

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