

A comparative investigation of ethical decision-making information systems professionals versus students in UAE

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Abstract : Abstract: Technological advancements have seen information technology develop and establish itself as a dominant field. This is owing to the fact that UAE has become a leading business hub, tourist destination as well as education. Information technology systems have been put in place in almost every sector of the economy. Information Systems (IS) professionals have to make ethical decisions every day. The current technological environment marred with rapid technological advancements has only made things worse. It has led to more ethical problems that need to be resolved. This study explores the perception information system professionals have about ethical issues and how their perception and attitude differs from students. It investigates what role ethical considerations play in the decision making process of information systems professionals and how different it is from students.

Keyword: IT Ethics, Ethical Decision Making, Information Systems

Introduction

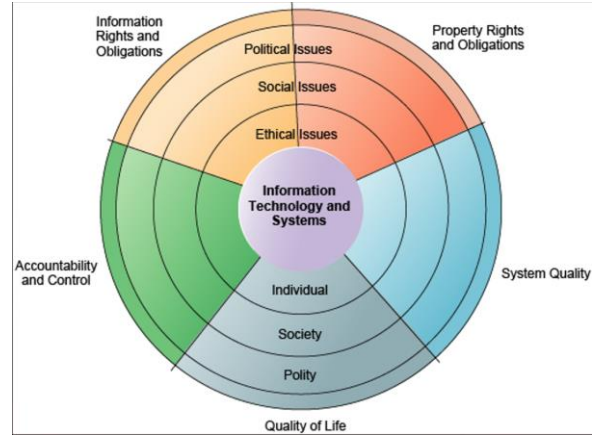
Technological advancements have seen information technology develop and establish itself as a dominant field. It continues to rapidly grow in every country across the globe. The United Arab Emirates is one of the countries that information technology has experienced massive growth. This is owing to

the fact that UAE has become a leading business hub, tourist destination as well as education. Information technology systems have been put in place in almost every sector of the economy.

However, this sustained growth has raised new challenges notably ethical challenges. To address these challenges, more focus has

been directed towards raising awareness of ethics and promoting ethical standards. As a result, the Telecommunications Regulatory Authority and other professional and regulatory bodies in the United Arab Emirates have formulated ethical principles to guide information systems professionals (Antiado et al, 2020). These principles serve as codes of ethics to help information technology professionals make informed decisions when faced with ethical dilemmas. The essence of these principles and ethical standards is to enhance decision making and promote professional excellence.

Information Systems (IS) professionals have to make ethical decisions every day. The current technological environment marred with rapid technological advancements has only made things worse. It has led to more ethical problems that need to be resolved. This study explores the perception information system professionals have about ethical issues and how their perception and attitude differs from students (Musbah et al, 2016). It investigates what role ethical considerations play in the decision making process of information systems professionals and how different it is from students.



Source :

<https://paginas.fe.up.pt/~als/mis10e/ch4/chpt4-1bullettext.htm>

All this will be done comparatively and with the United Arab Emirate as the context. In this context, the guiding question used for the study was ‘what are the key elements that contribute to ethical decision making in information system professionals and what facilitates their ethical decision making. Similarly, the study sought to find out how ethical issues are perceived by students. The findings of the study showed that there is a great variance in terms of how information systems professionals and students approach ethical situations and make decisions.

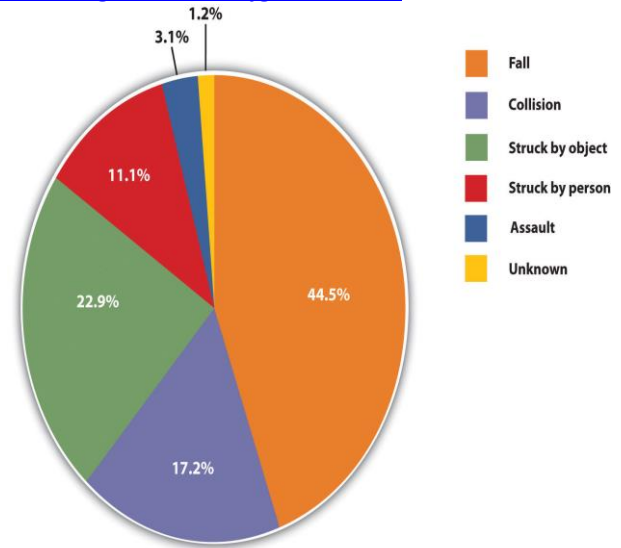
Literature Review

Definition of Ethics

According to Johnson (1985), ethics refers to guiding principles and rules that inform and direct one's decisions. Ethics have a direct influence on our decision-making process and personal conduct. It is concerned with what is right and wrong and what should be discouraged or promoted. Ethics dictate that one conducts themselves in an acceptable manner and shun what is deemed unacceptable.

Ethics in Information Technology

Information Systems (IS) is a subset of information technology. Information technology advancements have contributed to major risks. They have presented new ethical issues and led to numerous ethical situations. According to Marshall (1999), information technology has massively helped promote businesses and organizations. However, the misuse of information technology systems has eroded the great value IT has brought to businesses and organizations leading to major losses.



Source : <https://c3conclusion.com/about-us/>

Outsiders have been able to gain access to business and organization systems and committing fraud and other acts of sabotage such as leaking data. According to CSI Survey 2008, individual businesses that reported computer fraud and data abuse recorded losses of \$300,000 on average. It is this intrusion among other threats that has led to the development of information systems to protect companies, businesses, organizations, and even governments from these threats.

Information Technology ethics have been necessitated by the rapidly changing technological landscape. The rise and expansion of IT has resulted in new moral issues that have further widened the moral framework already in existence. It has also introduced more complexities to the moral

principles observed (Leong et al, 2017). Today, there are numerous concerns in information systems with the areas of concerns constantly changing.

Ethical problems in Information Systems refer to unsettling scenarios. These situations bother the conscience of the IS professionals. Ethical problems pose a unique challenge since they have more than one solution. To come up with an ideal solution, professionals need to examine the ethical considerations and deliberate ethically. The solution arrived at needs to be conclusive and far-reaching. On the other hand, ethical dilemmas refer to situations that present two opposing solutions. The situations are usually conflicting and the answer to the problem is restricted to two extremes. The course of action to an ethical dilemma is restricted to two incompatible choices.

Information Systems professionals are tasked with the responsibility of solving these ethical problems and dilemmas. For this reason, they need to assume their professional mandate and apply moral judgment to resolve the situation. In the end, they need to come up with ethically acceptable decisions. Ethical problems and dilemmas are caused by the uncertainty to

act. This uncertainty leads to a sense of doubt and generates confusion.

To make ethically prudent decisions, information systems professionals are trained and equipped with the relevant skills to aid their decision-making process. Their knowledge along with other elements such as legal considerations, cultural and social factors all impact decision making. Simply put, formal and informal factors play a role in the decision-making process. Formal factors include existing laws such as codes of ethics while informal factors comprise moral standing and personal beliefs.

According to Pierce and Henry (1996), the ethical decision-making process of an individual is influenced by two sets of codes of ethics: formal and informal. The professional/formal code of ethics refers to the published code of ethics adopted by an entity for instance a government agency. Every stakeholder of that entity is mandated to adhere to the laid out code of ethics. For instance, an employee of Thuraya Telecommunications Company is influenced by Thuraya's code of ethics since his employment contract obliges him to follow the laid out rules and procedures. The informal code of ethics refers to generally accepted norms in a specific group of people.

For instance, employees of a bank remain quiet and polite during working hours. Refraining from making noise or speaking in a low tone is an informal code of conduct.

Methodology

Qualitative research methods were adopted for this study. According to Klenke (2008), a qualitative research method yields more insightful data. This is because the researcher can focus on a small and specific number of respondents and collect detailed information as a result of meaningful interactions and better observation and description of a scenario. Denzin and Lincoln (2008) add that qualitative data methods concentrate on the viewpoint of others leading to the collection of credible and meaningful data.

The study involved a total of 12 respondents. 6 of the respondents were information systems professionals drawn from different companies and organizations. The other 6 participants were students from specific universities and colleges. This sample population was deemed sufficient for the study. The researcher chose the multiple case study design and focused on the 6 companies and organizations from which the information systems professionals were drawn from. This allowed the analysis of the

ethical standards and considerations of the various entities hence offering a better understanding of the respondents (Vinson et al, 2015). The universities and colleges the students were drawn from were also analyzed.

The study followed the qualitative case study method. According to Yin (2009), a qualitative case study is ideal because it prevents the researcher from taking over the events in a study and helps him/her focus on a phenomenon from a neutral point of view. Moreover, it is ideal for a research study dealing with a 'why' or 'how' question. According to Stake (2006), a qualitative case study help simplify complex issues and problematic relationships that intertwine with various disciplines. It gives the researcher the freedom to explore the different cases, establish differences and make comparisons. By choosing participants from different organizations and institutions, the researcher was able to identify the differences and make relevant comparisons. This made the multiple case study method ideal for the study.

The type of sampling method used for the study was purposeful sampling. According to Patton (2002), this sampling method allows the researcher to choose the respondents who will effectively help tackle the research

question. It allows the researcher to avoid randomly selecting participants who are not well versed in the research questions. It, therefore, increases the probability of collecting insightful and useful data for the study (Vinson et al, 2015). Purposeful sampling aims to deliberately maximize the input the researcher gets from the respondents.

All the participants involved in the study were ongoing students and currently employed in their respective institutions. 12 separate institutions were visited for the research. According to Stake (1995), the effectiveness of the multiple case study is dependent on the number of cases examined. The effectiveness of this method is limited if less than four cases are chosen. However, Patton (2002) asserts that there are no specific rules of sampling. Sampling largely depends on what the researcher is researching and the objective. What should be stressed is the usefulness of the selected sample and the credibility value. Yin (2009) claimed that if 6-10 cases provide expected results, then it shows that the sample size is effective and compelling.

Results and Discussion

Most of the issues in the research were complex and required ample time to discuss and analyze. Most respondents were detailed in their responses. Some of the information presented included the written code of ethics, policy documents, and student and employee handbooks. All the 13 respondents believed that their personal beliefs and cognitive capacity influence their ability to make ethical decisions.

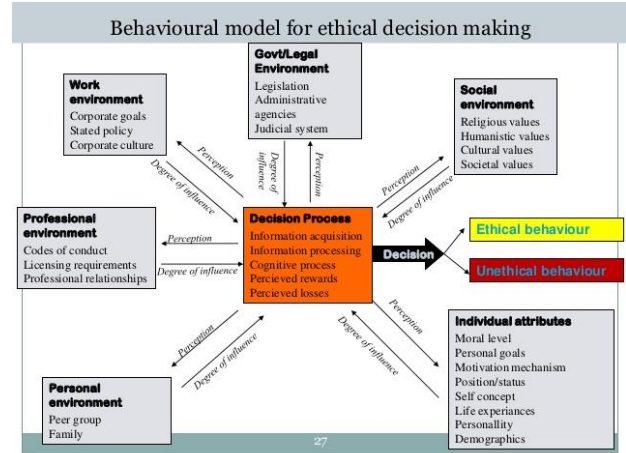
The preliminary focus area of the study was to establish the respondents' awareness of ethics. The goal here was to establish if the respondents knew the meaning of ethics, the importance of ethical standards and whether they agree or not to the code of conduct set by their respective institutions (Musbah et al, 2016). The majority of the respondents cited that they were in the know what ethics are and approved of most of the code of ethics/conduct set by their respective institutions.

However, some cited frustrations over the rules but agreed that they have to follow them for their own good. Participant 5 on the students stated that he was not completely aware of the meaning of ethics and could not identify with the ethical standards set by his

institution. This either demonstrates a lack of communication from the institution or apparent ignorance from the students on the laid out guidelines.

This means that professionals have an eye for ethical problems and it is this recognition that pushes them to ethically make decisions.

The majority of the students voiced their dissatisfaction with the formal code of ethics/conduct. They view them as a way to manipulate them and ensure that they stay in line with the set standard of behavior. Participant 2 and 4 stated that some ethical standards are too rigid and only serve to stifle one's freedom. Participant 2 argued that codes of ethics should be structured as a way of helping someone arrive at the desired decision rather than enforce the decision one should make.



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From the study, it is evident that individual factors play a great role in the ethical decision-making process. All of the 6 information system professionals reported that they relied on their experience and their workmates to solve their ethical problems. The majority of the students, on the other hand, cited that they relied more on scientific literature and other sources to address their ethical issues (Antiado et al, 2019).

All the respondents reported that they have faced ethical problems at one point in their lives. However, the results show that information systems professionals face more ethical problems than students. This is because IS professionals are actively engaged in the field as opposed to students who tend to be passive and are faced with a less number of ethical situations. Furthermore, Information System professionals have more moral sensitivity than students. This high moral sensitivity causes IS professionals to be more aware of ethical problems contrary to the students (Shamsudheen et al, 2020).

This clearly highlights the importance of experience in the ethical decision-making process. The ability to make prudent ethical decisions lies in possessing the required knowledge and experience. For this reason, professionals hone their ethical competencies

by developing their skills hands-on to better handle ethical distresses. However, students have little experience and their capacity to develop their skills is still low.

The study also found out that external factors impact ethical decision-making.

Survey on Ethics and Workplace
Findings of Deloitte&Touche 2007



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Information systems professionals are affected differently by these factors in comparison to students. Professionals have quality education on ethics. Because they are educated on ethics, they have different viewpoints on issues. Ethical education gives them a fresh perspective on issues and also provides them with a path towards professionalism. Ethics education gives them a way to transform their belief and values and steer clear of unethical decisions (Jeong et al, 2020). Most students are yet to go through

ethics education and hence their ability to make ethical decisions is lower.

Despite the glaring differences, the study found one similarity. All respondents reported that they needed support in the face of ethical problems and dilemmas. This shows the importance of cooperation and collaboration during the ethical decision-making process. Collaboration leads to increased self-confidence, increases the capacity to assume responsibility, and general enhancement of one's skills. It exposes someone to other ideas which increases their knowledge. Hearing divergent opinions bolsters one's tolerance and helps you understand others. This can ultimately lead to a change in values.

From the results, it is clear that there are huge differences between Information System professionals and students in terms of ethical decision making. The results also indicate that varied elements influence ethical decision making. These include intermediate elements such as organizational codes of ethics and social factors such as family.

Conclusion and Future Recommendations

The results of the study are essential because they clearly demonstrate the variance in the approach of the ethical decision-making process between professionals and students. It brings to light the elements that either group considers before arriving at an ethical decision. It emphasizes the need of both groups to develop healthy habits, bolster their abilities and enhance ethical competencies for effective ethical decision making (Leong et al, 2017). Students need more knowledge and training on ethics in their respective fields to ensure that they effectively handle their roles and responsibilities. This will equip them with the ability to competently tackle ethical issues and make ethical decisions.

Companies, organizations, and other entities should ensure that they are committed to the laid out code of ethics. They should make sure that the set codes are rationally developed and communicated. The logic behind every guideline should be acceptable and properly communicated to the employees. The organizations should also take charge of making changes to the codes to keep up with the changing trends. The codes should not be discriminative in any manner.

They should be all-inclusive to the extent that they can be acceptably incorporated into an organization's policy. Moreover, the relevant organization should take the necessary measure to enforce and apply the guidelines albeit unselectively (Antiado et al, 2019). There is a need to come up with different codes of ethical considerations to address the specific needs of particular aspects of the information systems. Most information systems today adopt the general ethical standards of Information Computer Technology.

Finally, there is a need to conduct more studies on the research topic. This will provide a better understanding and more insights into the decision-making process of both students and information systems professionals. This will serve as the foundation to building more effective ethical decision making models and strategies. These new models and strategies will help tackle the existing and future ethical dilemmas and problems. This will ultimately help enhance information systems as a professional practice.

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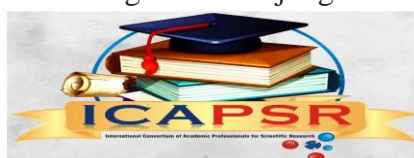
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