

Ethical Issues in Designing and Managing IT Applications in Business in Oman Under the Fourth Industrial Revolution

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Abstract:- Business firm promotes organizational excellence, promotes discipline, demonstrate good behavior, good conduct and commitment to the values, ethics and basic principles of the business administration especially while designing and managing business applications. Business firm is committed to integrity in performing and caring for partners by dealing with all clients fairly and impartially. This includes users, who are using the system, the employees who work for the firm and the communities they serve, as well as competitors and suppliers. Hence, the firm is committed to the integrity of the business's commitment to comply with all laws, regulations and regulations governing the work of the application development company, whether legal or commercial, and programs, plans and projects of the Board of Directors. Each employee working for IT Company shall be responsible for acting ethically and following the rules of conduct set out in their conduct. All work done by the company is organized and described in the work processes, policies, rules and human resources, business law of that company. The distinction of the firm is to act ethically and responsibly based on every decision taken by every individual working at that firm at any time and in any day. The behavior policy provides the information that an employee needs to do his work. In addition, the firm is committed to comply with the laws governing its work in Oman.

As per article 30 of Omani State Statute, The freedom of postal, telegraphic, telephone and other communications is safeguarded, and its confidentiality is guaranteed. It may not be monitored, searched, disclosed, delayed or confiscated except in cases specified by law and the procedures stipulated therein. This article indicates the protection through the security and the privacy of the information and the usage applications in any organization in Oman.

This paper explains some of the standards that enable workers and the management in the IT companies to maintain and build the best applications practices that help the users to access and use those applications in friendly and safe manner. The Business firms require that each of its employees, designers or users take ethical action decisions, avoid conflicts of interest or allow corruption in its business activities to run counter its focus on doing business properly.

As most of the business owners are committed to the integrity which extends to all business relations and transactions with all stakeholders.

INTRODUCTION

Graham Curtis and David Cobham (2005, pp24) have mentioned in their book that any system has business objectives and in order to achieve those objectives many controls have to be applied from the design phase up to the

operations phase and future enlargement. Carol and Jill (2003, pp93) also, insist to use the data modeling that capture all data and transactions and store them in safe and secure manner especially in the fourth generations of the industrial revolutions which uses the internet in daily transactions.

Walker (1994, pp. 11) has stated while discusses designing any software to avoid any risk and advice to have user-friendly and well established application considering the ethical issues when it is coming to the end user information.

Very few people have written in this matter especially in the Middle East. Alan, Daniel has explored in their paper named Ethics in computer software design and development some of the key ethical issues while developing any software or business applications. In this paper I will discuss some of Business code of conduct and software Ethical design policy that I have experienced while working for some of the matured companies and government units.

This paper examines current ethical issues of software system design and development in relation to privacy, accuracy, property, accessibility, and effects on quality of life.

In summary all those who work in designing and managing normal, web or mobile applications are responsible to protect the value of partners and owners. Each party creates value for the stakeholders by placing the other parties' interest in the first place, maintaining accurate records, protecting the resources, information and property and using it appropriately.

ETHICAL APPROACHES TO SYSTEM DESIGN

The IT Companies recognize the importance of preserving and strengthening fundamental best designing approaches and practices in all its projects and in the business chain in all its aspects. On the other hand, the IT Company's values, user sustainability, usability and accessibility strategies.

While designing and developing phase of any application, diversity shall be considered and defined as all the unique features that make up the identity of every user:

personalities, lifestyles, thinking processes, work experience, ethnicity, race, color, religion, gender, gender identity, marital status, National origin, disability, or other differences. For this reason, the business and applications owners or the designers should play an important role in creating a business environment in which the rest of the end users and business partners will appreciate and respect their contributions (Issa, 2010). The owner of the applications supports diversity and inclusiveness when:

- a. Respects the diversity of others' talents, abilities and experiences
- b. Assess the views of others
- c. Supports an atmosphere of trust, openness and openness

In the Code of Conduct of Expert Corner, the term "corruption" refers to the acquisition or attempt to obtain personal benefit or commercial advantage through the use of illegal and illegal means. Corruption may include money or exchange anything of value, including the following activities:

- Bribery (bribery of a government official or commercial bribery)
- Extortion
- Commissions

CONTENT MANAGEMENT: QUALITY OF SERVICES AND INSTITUTIONAL EXCELLENCE

The owner or the designer is committed to provide a high quality service in all its applications, brands, programs, projects, plans and objectives, which will maintain the trust of the beneficiaries through excellence in performance and provide high quality services, from the service of our end users until the technical partners and the company staff. The owner should never give up the quality of the product or services that are provided by him while designing or using any applications that deals with end uses. The owner has the obligation to develop new products and services in a responsible and ethical manner and following the applicable standards and guidelines regarding research, development, improvement and institutional excellence. (Carol & Jill, 2003)

In case the designer participates in any aspect of the development, delivery or delivery of the owner's products and services, they are expected to:

- Be familiar with the standards, policies, and procedures for the quality of products and services applicable to products and services offered at the owner.
- Follow good higher education practices and test protocols
- Adhere to all applicable application usage laws and regulations if any

Owner should always pay attention to situations that may adversely affect quality products in the respected work sector. If the designer sees something that may adversely

affect the quality of a product or services, the speed of reporting and disclosure.

ACCESSIBILITY: EMAIL, INTERNET AND INFORMATION SYSTEMS

The owner must use the end user's e-mail and Internet accounts responsibly and respect the security of information systems. IT systems are an essential component of the business process and are provided for business purposes only.

The owner shall be committed to use these systems with the information security policy and acceptable usage standards. May participate in reasonable personal use of the telephone, e-mail and the Internet as long as such use:

- Do not consume a large amount of time or resources
- Do not interfere with your performance of work or performance of others
- Does not include illegal substances, sexually explicit content, discriminatory material or other inappropriate material
- Not related to external business interests
- Do not violate the policy of behavior and institutional excellence or any policy.

As the owner does not monitor the use of information systems by the staff in general, the owner reserves the right to monitor, record, disclose, review and delete any end user activity without prior notice by using e-mail, telephone, voice mail, Internet and other owner systems to the extent Permitted under domestic law. The owner can review the information security policy, acceptable Internet usage standards, and acceptable email usage standards. (Carol & Jill, 2003)

Therefore, application of information security on the ground to protect information systems, the owner should not (Walker, 1994):

- Shared password system with any one
- Leaves laptops or other portable devices unattended while traveling or in an open location that can be stolen.
- Downloads unauthorized user information,

If an employee doubts that a data violation has occurred or is aware of any situation in which the data has been violated, including the loss or theft of a laptop or mobile device, inform your local technical support team or help desk immediately.

Publicity

If the owner is contacted and asked to discuss the work of the end user with any member of the press, investors or market analysts, he is not entitled to disclose any information. Instead, they should inform the outside party in a polite manner that they are not authorized to discuss that subject, and refer them to the end user spokesperson

appointed in the media policy, public letters and publications, and the owner's disclosure policy (Issa, 2010). Similarly, when using social media and social networking, the owner should realize that they do not speak on behalf of the end user. The owner should:

- Indicates that the material and opinions published by the owner and does not have to do with the end user
- Take all possible precautions to ensure that no confidential information about the end user is disclosed
- Refrain from using any logos or trademarks of the end user or any other parties without obtaining express permission.
- The owner should consider the information policy, public letters, publishing, disclosure policy and the social media policy.

Accuracy

The "End User Record" includes paper or electronic document or means of communication saved in the framework of the owner. This includes a wide variety of information, including presentations, worksheets, payroll documents, time cards, attendance and departure records, legal agreements, file information for government agencies, inventory records, invoices, purchase orders, market research tests, laboratory tests, quality control tests, expense and travel reports, Transport, hazardous material records, accident reports and action plans. (Issa, 2010)

The owner records should be accurate and complete. Speaking honestly and frankly demonstrates the end user's commitment to accuracy in the owner's books and records. Business records, including financial statements, contracts and conventions, should always be accurate and reflect the honest presentation of the facts. The information contained in any business record should be true and complete regardless of the type or extent of the documents. Financial records should disclose all components of transactions and financial events. Similarly, all your transactions should be authorized, executed and properly recorded, regardless of the amount.

The owner shall be responsible for the accuracy of the records of the work to be carried out within the ordinary framework of the work. It should not:

- Visit, delete, manipulate, alter, conceal or misrepresent any information in end user records
- Encourages violation of the accuracy and integrity of records or allows anyone else to do so

In the event that the end user notices inaccuracies in any owner records or failure to follow internal controls, he / she should declare and report immediately.

Privacy

In the event that the software designers or companies have knowledge of the personal data of the employees, users, suppliers, contractors, clients or systems that they maintain,

the designers or the user shall comply with all applicable policies and laws regarding the collection, use and disclosure of personally identifiable data. If the designer has access to personal information, they should maintain and protect its privacy. Examples of personal information to be protected include but not limited to the housing addresses, non-employment telephone numbers, government identification numbers, salary and compensation information, access information, performance records, bank information, bonuses, leave, and medical record. (Issa, 2010)

The software companies should:

- Access to personal information only for legitimate business purposes
- Storage and disposal of personal information in a safe manner
- Transferring personal information in a secure manner by encrypting it only to authorized parties who have an obligation to protect its confidentiality

In the last decade, the usage of the social media became the most critical network and application that violated normal policies where there was no much control in the information that dumped and used in those applications. In the use of media or social networks, the Software companies should not allow to publish photographs, photographs, video files or audio clips that might be considered non-ethical materials. Also, they should not use logos, trademarks, or copyright material without permission;

Security and Conditionality

In the course of the owner's work, they may have access to certain information about the end users, its clients, suppliers, business partners or any other third party that is confidential, competitive, and / or owned. The owner must protect confidential information about the end users and its business partners. Therefore, the owner should assume that the end user's information is confidential or sensitive from a competitive point of view unless it has a clear indication that the end user has publicly disclosed this information to the public. (Issa, 2010)

Furthermore, the owner shall always take the necessary and reasonable precautions to protect any confidential information relating to the end user or any other company to which you have access to information as well as owner should not disclose confidential information to anyone outside the applications, even to family members, unless disclosure:

- Duly authorized
- Relates to legitimate and clearly defined user needs
- Subject to a written confidentiality agreement approved by the owner and end user.

"Confidential Information" includes undeclared information that, if disclosed inappropriately, may benefit

competitors or harm the end user, suppliers, customers or any third party, or affect a reasonable investor's decision to buy or sell certain end user or Securities of their business partners. For example, earnings and expectations, business plans and strategies, significant restructuring, potential acquisitions, formulas, pricing, sales information, research and development of new products, undisclosed promotional and marketing activities, significant management changes, any change in auditors, withdrawal of audit reports and events related to user securities, All of them "confidential information". (Issa, 2010)

It is prohibited for the owner to use the user resources to carry out any personal political activities. No owner may use funds or user resources or receive compensation from the owner of peer-to participate in personal political activities, including contributions to candidates or political parties, if any. Information that contributes to raising issues of public interest affecting the owner may not be obtained. These statements are not intended to pressure the owner to adopt certain ideas or to support certain directions.

INTELLECTUAL PROPERTY OR THE COPY RIGHTS

Intellectual property is a valuable asset that must be protected at all times by all type of users and the designers or the owners of applications shall always use the trademark and other intellectual property rights appropriately. Intellectual property shall include all curricula, research, trademarks, trademarks, packaging designs, logos, copyrights, innovations, patents and trade secrets of the end users. (Issa, 2010)

The designer or the application owner should not allow any other party to use the user trademarks or other intellectual property rights without proper authorization and a licensing agreement. Furthermore, the trademarks should not be used in a degrading, abusive or hostile manner. In addition, Intellectual property also includes the work product of employees. As the applications designer or the owner, any work created by the end user, in whole or in part, in connection with the duties imposed on you and/or the use of user time, resources or information belongs to the user. For example, innovations, ideas, discoveries, improvements, works of art, processes, designs, programs or any other materials that may assist in the creation or authorship of the user.

In the other hand, the end user produces a huge number of records and documents every day. The end user's records must be kept, maintained and destroyed in accordance with all legal and regulatory record keeping requirements. Consequently, to properly manage business or end user records, the owner should:

- Adheres to the records management policies relating to all documents, files, electronic records, e-mails and others.
- Follow the retention periods specified in the record keeping schedule.

- Follow the instructions given in any Notice of Record keeping "legal custody"
- Consult with the end user if he has any questions regarding the period of filing of any document or if he has any questions regarding the documents referred to in the legal custody notice.

The destruction of files subject to notification of legal preservation, even if by mistake, may expose the end user and expose the owner to civil and criminal liability. (Issa, 2010)

DISCUSSION AND RECOMMENDATIONS

IT Business owner responsibility towards the end users and owners, shall act with responsibility and transparency goes hand in hand with protecting the value of partners, owners and end users. Each owner creates value for the shareholders or owners by placing the interest in the first place, maintaining accurate work records, protecting the resources, information and property and using it appropriately.

It is prohibited for the owners to use the owner or end user resources to carry out any personal or political activities. I encourage those who are working in designing and managing any business applications not to participate in any prohibited political activities in Oman.

Information that contributes to raising issues of public interest affecting the owner may not be obtained. These statements are not intended to pressure the business owners or application designers to adopt certain ideas or to support certain directions. All business owners adopt a policy of preventing conflicts of interest in the conduct of any of its own work, and the end users should review the policies of conflict of interest on a regular basis to ensure the constant promotion of work ethics for use in real life applications. Any ethical observations made by end users or other persons may be dealt with through the communication and reporting channels. The end user is responsible for asking questions and reporting conflicts and concerns when any problems of compliance or work, especially safety, health, environment, security, data leakage or illegal usage and behavior or arise.

Majority of business owners or IT applications designer or technology providers have a Code of Conduct and Code of Institutional Excellence, I encourage all parties to seek guidance or to report concerns to the key problems or issues which include but not limited:

- d. Exceptions or distortions in accounts or audits
- e. Fraud, theft, bribery, and other corrupt practices
- f. Anti-monopoly or trading violations based on internal information
- g. Matters related to the environment, safety or quality of education
- h. Discrimination or unlawful harassment
- i. Conflicts of actual or potential interest

- j. Guidance in respect of any legal, national, regional, tribal, state or municipal requirements applicable to the end users or to the business owners.

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