Ethical IT Decision Making and Data Governance

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Abstract: This paper explores the importance of data governance in influencing ethical decision-making in the context of information technology (IT). Data governance is used as a management technique to ensure the quality of organisational data by establishing and implementing policies, procedures and standards. Three main types of data governance are discussed: silo-oriented data governance, functional data governance, and platform data governance. The impact of each type on ethical IT decision-making is analysed, highlighting the challenges and benefits associated with each approach.

Ethical IT decision-making hinges on robust data governance. Silo-oriented governance fosters fragmentation, conflicting standards, and security vulnerabilities. Functional Data Governance tailors policies to departments, enhancing accountability and risk mitigation but may lack unified ethics. Platform Data Governance builds on this, ensuring clearer accountability, data privacy, and unified ethical standards. To foster ethical IT decision-making, prioritize Platform Data Governance, establish a data platform for security, cultivate a unified ethical culture, and enforce organizational standards. These steps promote accountability, mitigate risks, and safeguard data integrity, crucial for ethically sound IT decisions in today's complex landscape.

Keywords: Data governance, Ethical decision-making, IT

1.   Introduction

1.1.   What is ethical decision-making (EDM)

When people or organizations are presented with morally significant circumstances or dilemmas, they use ethical principles and values to guide their decision-making. This process is known as ethical decision-making.

An individual's ethical decision-making is significantly influenced by his or her feelings, experiences, and intuitions, according to research in moral psychology. An individual's intuition will first provide a preliminary judgment while making a decision, indicating whether it is moral, immoral, or in the middle. [1]
Human emotions are also a significant predictor of moral decision-making at the same time. Emotion is a direct feeling state, whereas intuition is a hazy, hard-to-express feeling.

The following categories of emotions are regarded to be more closely associated with EDM: 1. "Prosocial" emotions—like empathy, sympathy, concern, or sympathy—that encourage morally

righteous behavior; 2. "Reproach" emotions—like shame and remorse; 3. or "other blame" feelings of revulsion, rage, and contempt.[2]

At the same time, consideration of environmental and human concerns is necessary when determining if an action complies with ethical norms. Environmental considerations include the moral severity of the issue (i.e., whether it violates the law or infringes on the rights of others), the issue's complexity and relevance, and the moral character and moral propensity of the decision-maker.

1.2. Ethical decision-making in IT

Decision-making is the behavior of human beings when faced with choices. In order to make the right decision, people usually need to have a deeper understanding of the problem, collect information related to the problem, and finally take actions they believe are feasible. Believe it will meet their expectations.[3]

The decisions humans make are often a combination of logic and experience. People often make initial judgments based on past experience or "gut feeling" and then make logical judgments by collecting and analyzing data or other information.

Today, as IT develops more and more rapidly, ethical IT decision-making has become a new topic. What actions and decisions are unethical? Under what circumstances is AI not allowed to be used? In the IT field, these must be discussed.[4]

For example, today with the continuous development of digital technology, the combination of IT technology and business has brought huge changes to modern business decision-making models. Through the training of IT models, the model can predict future development through past data and make decisions. IT models are more logical than human thinking and are not affected by subjective emotions, so they may not be consistent with ethical decision-making.[5]

1.3. The importance of ethical IT decision-making

IT ethical decision-making plays an important role in many aspects. For society, as an important achievement of technological development, IT also leads to various problems, such as data leakage, network security, etc. Therefore, IT ethical decision-making can ensure the stability of society. It is also necessary for organizations to reduce the occurrence of these accidents, which ensures the interests of the organization. At the same time, ensuring that organizations that implement ethical IT decisions can win a good social reputation is also very important for the long-term operation of the organization.[6]

For individuals, ethical IT decisions can ensure that their interests are not harmed, such as preventing the proliferation of pirated software and the leakage of private data.

2. Data governance

Data governance is a technique for managing IT data that, via the creation and application of organizational policies, procedures, and standards, guarantees the quality of the organization's data, including data availability, security, integrity, etc. For IT companies, data governance is a crucial management tool. The value of data inside the company can rise with the implementation of a data governance structure. Data governance influences results based on data, from more complicated automated projects to more straightforward daily business decisions, by enhancing overall data accuracy. [7]

Data governance activities are mostly driven by efforts related to big data and digital transformation. Organizations require more effective data governance procedures as the volumes of data from new data sources, such Internet of Things (IoT) technology, expand.

Three different types of data governance:

2.1. Silo-oriented data governance

Silo-oriented data governance tends to store different data in different departments.As a result, various departments may create unique policies, frameworks, or methods for handling data. To a certain extent, this data management technique can provide flexibility, but if different departments don't work together, there may be job duplication, low productivity, biased decision-making, and other issues.

2.2. Functional Data Governance

This method bases the organization and execution of data governance operations on the functional requirements and demands of various departments or business units. Within each functional domain, functional data governance clearly delineates who owns and is responsible for data management. This guarantees that the quality, integrity, and security of the data that each department's teams or individuals use and administer remain their responsibility. A dedicated data administrator is in charge of managing the uniform storage of data inside a data set. The organization owns the data; it is not dispersed among many divisions.

2.3. Platform Data Governance

Platform data governance creates a framework for processing and storing data. On this platform, members of organizations may exchange and access data. Additionally, by putting in place strong governance procedures, these organizations can make sure that their data assets are managed sensibly and efficiently to support business goals while lowering risk.[8]

3. What does it mean for ethical IT decision-making

3.1. If data governance is mature and executed well?

Let's discuss it in different situations.

3.1.1. Silo-oriented data governance

Dispersed data makes it more difficult to collect and analyze information, and it prevents organizations from developing a consistent strategy for making ethical IT decisions. Because of this, several corporate divisions or departments may have ethical standards that differ from one another or even contradict.

It is also challenging for organizations to create strong ethical accountability systems because of data fragmentation.It can be challenging for organizations to identify the root cause of ethical IT concerns and to hold people accountable. In addition, the possibility of a recurrence of the issue increases with the incapacity to effectively seek accountability.

Data security threats are also brought on by the scattered nature of data across departments. There is a higher chance of data theft when organizations are unable to establish a centralized, trustworthy database.

Information leakage issues, ambiguous accountability frameworks, and conflicting ethical norms might result from silo-oriented data governance. Therefore, silo-oriented data governance might not be the best option for morally sound IT decision-making.

3.1.2. Functional Data Governance

Functional Data Governance rules and processes to each business function's ethical aims and concerns is made possible by functional data governance. This consistency promotes a culture of ethical IT decision-making by guaranteeing that ethical considerations are included into each department's fundamental data governance policies.

Simultaneously, there is a defined ownership and responsibility for data in functional data governance, which makes it possible to effectively pursue accountability in the event of ethical difficulties to stop them from happening again.

Depending on the particular data requirements and hazards connected to each business function, Functional Data Governance can establish tailored ethical safeguards and controls. Through customization, organizations can mitigate possible harm by addressing ethical concerns including prejudice, security, and data privacy in a targeted manner.

Similar to Silo-oriented data governance, Functional Data Governance may also have unified ethical standards and a lack of communication between departments, resulting in different ethical standards.

Therefore, if the organisation has a mature Functional Data Governance, it will greatly help the organisation to achieve ETHICAL IT decision-making, including the formation of a good culture of ethical IT decision-making, a clear system of accountability, and the protection of data privacy, etc., but it may not be possible to form a unified code of ethics. There is a certain amount of ethical risk.

3.1.3. Platform Data Governance

Platform data governance further improves Functional Data Governance, with a clearer accountability system for effective recourse in organisations that practice Platform data governance. At the same time, data privacy is better protected as data is stored, managed, and recalled in a unified manner on a well-built platform, and only those with permissions can access the data.

At the same time, platform data governance establishes clear ethical guidelines and policies for data management within a given technology platform. Therefore, organisations can establish unified ethical standards that are well suited for ethical IT decision-making.

4. Advice

From the above points, we can see that ethical IT decision-making can be guaranteed by implementing Platform Data Governance. At the same time, building a data platform can also ensure the organization's data security.

In addition, establishing unified ethical standards for the organization and cultivating an organizational ethical decision-making culture can also promote ethical IT decision-making.

5. Conclusion

Moral decision-making is a decision involving principles and values that a person makes when faced with a moral issue. Factors influencing ethical decision-making include personal ethical factors (intuition and emotion) and ethical situational factors.

Because it safeguards human interests, lowers data-related incidents, improves an organization's social reputation, and upholds social stability, ethical IT decision-making is extremely important to people, organizations, and society as a whole. In order to achieve ethical IT decision-making, data governance is essential for guaranteeing the accuracy, safety, and compliance of data. To fulfill various data management demands and give companies and individuals assurance to support the

attainment of business objectives, reduce risk, and promote long-term sustainable development, it is split into three types: silo-oriented, functional, and platform-oriented.

Different types of data governance have different impacts on ethical decision-making. Platform data governance, which establishes unified ethical standards for the organization, is the best data governance for ethical IT decision-making.

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