Portfolio #2

Analysis

In a world where decisions significantly impact life, factors that influence these decisions will inevitably affect the lives of people. Data and information empower these decisions, providing foundations for organizations and individuals to make informed decisions based on evidence rather than just trusting their ‘gut’ or mere intuition. Now that we’ve established the importance of data and information, let’s ask ourselves, what do they really mean? How are they utilized to support organizations through an information system? What is an information system? And are there different types of information systems?

Analysis

A common difficulty among students is not understanding the concepts of information; like many terms, information also has multiple definitions based on context. Madden (2000), defined information as "a stimulus originating in one system that affects the interpretation by another system of either the second system’s relationship to the first or of the relationship the two systems share with a given environment..." [22, p. 348]. The difference between data and information is that data doesn’t give interpretation; unlike information, it is merely a set of symbols, and does not have meaning in itself (Ackoff, 1989; Bellinger et al., 2004; Davis & Olson, 1985; Zins, 2007).

Analysis

Information systems, on the other hand, are systems used to support different departments or functional areas within an organization. One important information system that directly supports areas of the organization is the Functional Area Information System which supports areas such as finance, accounting, sales, and manufacturing. There are also what are called organizational information systems with different types, namely: Transaction Processing System (TPS), Decision Support System, Dashboards, Electronic Commerce System, and many more (Rainer, 2020). Transaction processing systems process a large amount of business transactions, collecting and storing data continuously. A Decision Support System provides tools for “what-if” analysis and helps managers make informed decisions. A dashboard provides summarized information for executives to understand information about the organization easily. Whilst the Electronic Commerce System facilitates transactions between organizations, basically a much larger version of the TPS.

Analysis

It is important that we understand the difference between just raw symbols that lack inherent meaning, and it’s processed version, information, and only here it becomes an asset for both individuals and organizations. The relationship between both is a basis for the various types of information systems, from the continuous day-to-day processes of a TPS, up to the executive summaries of a dashboard. We use information systems as foundations that change raw data into a resource that enables organizations to be more efficient, make informed decisions in a world that gives significant importance to choices.

What is Information?

A stimulus originating in one system that affects the **interpretation** by another system of either the second system’s relationship to the first or of the relationship the two systems share with a given environment (Madden, 2000).

What is Data?

It is merely a set of symbols and **does not have meaning** in itself (Ackoff, 1989; Bellinger et al., 2004; Davis & Olson, 1985; Zins, 2007).

What is an Information System?

These are systems used to **support** different **departments** or functional areas within an **organization**.

Kinds of Organizational Information System

Transaction Processing System (TPS), Decision Support System, Dashboards, Electronic Commerce System, and many more (Rainer, 2020).

Transaction Processing Systems

Transaction processing systems process a large amount of business transactions, **collecting and storing data continuously**.

Decision Support System

A Decision Support System provides tools for **“what-if”** analysis and helps **managers** make informed decisions.

Dashboard

A dashboard provides summarized information for **executives** to understand information about the organization easily.

Electronic Commerce System

Whilst the Electronic Commerce System facilitates **transactions between organizations**, basically a much larger version of the TPS.

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