The implementation of information technology with respects to tqm 41861

Technology

There are several ways to ensure that information technology (IT) has been implemented into a business process with respects to Total Quality Management (TQM). TQM has many distinct features as compared to a traditional management system. Studying TQM's different requirements will allow us to assess the credentials of an ideal IT system in a business management process.

Customized to suit customer needs

An effective IT system in the context of TQM must enable customers to partake in transactions. Clients must be able retrieve the information that they require immediately. For example, a retail banking institution must have a system that allows customers to extract personal information such as: account information held with the bank, account balances and transaction history, 24 hours a day.

In the cases where the clients are not privy to the actual IT system, the system itself should extract data that records the clients' needs and wants and is able respond to requests instantaneously (Powers & Gregory, 2004).

An effective IT system is not a burden to the client but at the same time assures confidentiality.

Focused on long-term planning

It is difficult to design an IT platform geared for the long-term, as obsolescence is inevitable in the IT industry. However, a generous and intelligent resource allocation on an IT system would allow easy upgrades in the future. Management must understand changes in their clientele's market

- they would specifically have to foresee market demands in relation to their clients' changing expectations (Asay, 1998, p 345).

In the fashion industry, for instance, apparel changes with the seasons. An efficient retail clothing store would have to ensure that their systems allow inventory to be rotated as seasons come and go. Their system will also be able to add new items every few months. If a system can only accommodate stagnant or limited data for long periods of time, it has not been customized to suit TQM's long-run focus.

Flexible in producing reports

The ideal IT system that adheres to TQM standards must furnish management with statistics. Additionally, the operating system must be able to translate statistics into applicable graphs, charts, tables and illustrations to act as a guide for management decision making.

Business decision making under TQM is based on statistics rather than instinct. Therefore, the ideal IT system stores perpetual data and is able to massage figures into decision making tools.

Reliable and eliminates manual work

A paperless industry is an important TQM goal. Reliance on an IT system that does not falter is ideal for a management team employing TQM standards. With a dependable system, TQM eliminates manual work and preferably eliminates waste that is incurred through an industry that is highly dependant on paper.

A pro-active system that requires minimal supervision

A reliable and automated system is also a pro-active one. For example, a human resource division recording public holidays into their system, should only need to access the program once a year. When employees apply for leave online, they would automatically be alerted of the public holidays of that month. A system that is not pro-active would require employees to manually check up on public holidays. If errors are made, the human resource would have a double job to do - recording leave and manually informing employees of their application errors (Powers & Gregory, 2004).

Able to accommodate cross-border teams

Information transparency is a key attribute in a TQM environment. An IT system should accommodate different divisions in the use of the same system. Different teams are able to share information with their colleagues to facilitate efficient decision making (Asay, 1998, p 345).

The sales team, for instance, uses the system as a sales log providing the accounts department sales pipeline figures to forecast their financial reports.

Eliminates hierarchy protocol to tackle problems

Related to information transparency, an effective IT system allows employees, regardless of their designation, communication to solve problems.

In a manufacturing line where lower ranked employees work in processing departments, an ideal IT system would allow them to alert the management

team should there be an error in their processes - for example, machinery begins to churn out flawed microchips. The management team should be able to shut down the equipment immediately (cited in Frank & Frank, 2001).

Additionally, subordinates should be able to view their supervisors' projects and tasks through the system, just as a measure to maintain an organic management structure.

References

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