Centralization versus Decentralization in Organizations

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Abstract

It has been discovered that in many organizations the information technology department is a separate entity, while in others each business unit incorporates their own information technology department. The former represents a centralized approach while the latter represents a decentralized approach. The centralized IT department suits some organizations better than others. However, it is becoming increasingly obvious that organizations may often consist of departments that prefer centralization as well as ones that prefer decentralization. Innovation and efficiency are the desired goals of the IT system in many organizations. In general, the available literature has identified decentralized systems as a major promoter of innovation. On the other hand, the centralized approach can promote a more efficient and controlled organization.
Centralization versus Decentralization

The general pattern of authority throughout an organization determines the extent to which that organization is centralized or decentralized. A centralized organization systematically works to concentrate authority at the upper levels. In a decentralized organization, management consciously attempts to spread authority to the lower organization levels. The traditional, centralized organization has long been favored as offering standardization and efficiency, while the newer decentralized organization is being touted as more flexible and effective.

Information Systems are a part of organizations. From a business perspective, information systems can be defined as an information technology orientated solution to organizational and management challenges. The interaction between the organization’s IT unit and other units is a key determinant of organizational success. Information systems can be centralized or decentralized. There has been a strong emphasis on the centralization versus decentralization issue in existing IT structure research. This has meant that the other IT research issues of a business unit have not been explored in detail. An organization’s IT structure should support its strategy and engage in research beneficial to this. However, current research into strategy supportive structures has stopped at the strategy-structure interface and did not look in detail at the IT-business unit interfaces. The key to better research is exploring the interface between business units and IT at a deeper level.

Discussion

Centralization refers to the allocation of all IT resources to one particular business unit that provides IT services to the whole organization. The main characteristics of a centralized approach include control, efficiency, and economy. Centralized approaches are effective in gaining or regaining control over an organization’s information system. A centralized IS may have always been centralized or it may be a cost saving regrouping of an organization’s IS to one particular location. The main advantages of centralized systems are that they provide centralized control using established technology and vendors. Information Systems professionals providing highly reliable operation maintain such systems. There should be no confusion over responsibilities and the software and hardware used should interface easily. Duplication of effort, resources, and expertise is also reduced, saving cost and time.

Centralized systems entail a high initial cost disadvantage. Furthermore, the information systems professionals who install and operate such systems are also expensive. The bureaucracy and inflexibility of such systems can also cause costs to escalate. Due to one central system carrying out all the requested tasks, this system is obviously going to be much slower than a decentralized arrangement where each business unit has its own autonomous system for local tasks. Similarly, local, independent processing is not allowed and the entire information system is dependent on the one CPU. If the CPU fails, the entire system is inoperable. In addition, many centralized information systems are isolated from real business priorities and concerns. Personal attentions to individual groups are not possible.
Centralization versus Decentralization gives individual business units autonomy over their own IT resources without any major considerations over other units unless it is essential to the overall organization policy. The main traits of a decentralized approach include flexibility, empowerment of individual business units, and service orientation. Decentralized approaches tend to be just as efficient as centralized ones in regard to meeting individual’s needs. In decentralized information systems, startup costs are relatively low. Tailoring and scaling the system to individual needs is also possible. Organizational flexibility and responsiveness are major advantages brought about by this increased autonomy. Also, there is greater scope for motivating and involving users. Due to the fact that local individuals control their own information system, the logic is that they will have to act in a much more responsible way because they control their own destiny. Perhaps the most important advantage is that reliability is increased greatly because multiple computer systems are involved. If one computer system fails, the system or at least part of it will still be able to function.

By their very nature, decentralized systems lack a centralized control. This can be very disadvantageous as conflicting ideas arise and clashes in policy lead to delays and inefficiency. Similarly, the one vendor may not supply all the many different components of the overall systems. This can lead to similar problems as those resulting from the conflicting ideas. Lower level managers may make decisions without fully understanding the "big picture." While top level managers typically have less detailed information about local operations than the lower level managers, they usually have more information about the company as a whole and should have a better understanding of the company's strategy. There also is a high degree of duplication of resources, effort, and expertise, which wastes time and causes cost increases.

In many organizations, the potential benefits of the contribution of information technology have been sorely under-appreciated. IT can enable information sharing, support business processes and transactions, and link customer information. IT can have a strong influence on the bargaining relationships between buyers and sellers. Information can be stored and retrieved far easier than in non-IT enabled organizations, and management can communicate with employees or each other more simply. Teamwork and group collaboration is also made easier. More indirectly, IT provides the employees of an organization with new skills, helps with the design plans of an organization, and provides tools that enhance education among employees.

A fundamental question to ask is whether or not IT will lead to centralization or decentralization. In terms of centralization, Management Information Systems enable management to obtain information more quickly and accurately, reducing uncertainty. Managers could make better decisions than they would have without the aid of IT. With regard to decentralization, electronic bulletin boards and discussion groups enable lower and middle level managers to stay better informed about organizational issues. It can be deducted that IT is a provider of both centralization and decentralization. Therefore, organizations do not have to choose rigidly between a centralized approach and a decentralized approach. IT permits simultaneous centralization-with-decentralization. A distributed system is a system that is partly centralized and partly decentralized.
Conclusion

Information Systems are a valuable part of the modern organization. With organizations becoming increasingly global, their IT systems have to be as well. This gives rise to the centralization versus decentralization argument. In a centralized environment everything is done in the one location, whereas in a decentralized environment work is done across many locations. IT has the ability to promote both efficiency and innovation. Efficiency deals with saving cost and time to provide better results. On the other hand, innovation is defined as the conceptualization of a new idea that provides new benefits.

A centralized system in general is efficient due to reduced duplication, more centralized control, and better standardization. Risk of entire system failure and high startup costs have the potential to hinder or even halt this efficiency, though. Innovation can be stifled in a centralized system due to its bureaucratic nature. On the contrary, in a decentralized system local users are more responsible for IS budgets, and their demands may be more restrained than if someone else was paying for it. Also, transport costs are significantly reduced.

A system that is part centralized and part decentralized is termed a distributed system. This is more representative of the real world than purely centralized organizations or decentralized organizations are. Information Technology, it can be concluded, is paramount to all modern organizations no matter what their background or management style. Information Systems promote efficiency as much as innovation and they provide as many important benefits to centralized systems as they do to decentralized systems.
References


