Information Technology and Project Management:
How To Avoid Failure and Achieve Project Success

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Communication and information technology (IT) has developed rapidly within the last decade. As a result, project managers must be prepared to manage the current and future challenges within the project management field, as well as within the IT industry. Rapid globalization of business means organizations must significantly increase its capacity to accurately manage information and data. In response to this growing capacity demand, more discussion is needed to develop effective IT project management processes and approaches.

Role of Information Technology in Global Environment

Rapid changes in technology have created a market, and a society, where information is king. For most businesses, its information and data are the most valuable commodities it owns. Proper management and allocation of those resources are vital to an organization's long-term success. Beyond internal information, organizations must also find a way to productively manage external information, ensuring a constant awareness of market conditions and the changes that may occur at a moment's notice.

Staying on top of market changes is an important business survival trait. Therefore, effectively using technology to support corporate operations is an important part of managerial operations in most companies. There is s strong need to create a learning organization. In a learning organization information learned by individuals are shared within the company and leveraged to achieve strategic goals. Technology facilitates this sharing of information in a timely and widespread manner. Some of the largest and the strongest companies in the world can attribute much of their wealth to the proper use of information technology.

Consider companies like Google, Yahoo, and Microsoft who rely on information management to increase profits and develop new technology. Each of these companies build software, create programs, and use information retrieval processes that not only serve their internal profit needs, but also support the profit goals of others organizations that need to securely and efficiently manage information. Other companies profit from IT through a variety of professional services, including installing, consulting or handling information management for others.

Managers are increasingly realizing the importance of "tribal knowledge" to foster sharing and learning within the organization. This, of course, requires a sound information management system, which means IT projects will continue to fulfill a vital role in the new global economy.

It's for this reason that information management is often referred to as "knowledge management." Knowledge management is defined as an integrated and collaborative approach to creating, capturing, organizing, accessing and using information assets. Information assets are installed and modified through IT projects in order to support the application of knowledge management within companies.

Ultimately, there are limitless possible applications of IT in the production or service business. IT improves productivity, streamlines processes and enhances efficiency. It also enhances an organization's ability to enter new markets or collaborate with new partners.

Why IT Projects Fail

Despite the importance of information management in business operations, many companies experience difficulty in executing IT projects within the pre-determined time or budget constraints. Many IT designs are cancelled before completion and never implemented. Researchers have indicated that most IT projects fail because of poor project management skills. In these failed projects, estimation mistakes, lack of clarity, and unstable goal and objectives were cited as core problem areas. Below are additional areas of concern as described in the article, *Why Web Projects Fail*.

Poor planning

IT managers often lack the time to appropriately plan because of the pressure from senior management, and as a result, the project is performed before the plan is appropriately defined.

Unclear Goals and Objectives

Projects must have clearly defined requirements, the absence of which can create timing delays and communication bottlenecks. If a project manager lacks the experience to describe the type and the extent of resources he or she really needs, the project is at risk.

Misalignment

Information systems need to be aligned with the organization's business objectives. When discussing alignment, it is important to address market share, customer satisfaction, employee engagement, corporate citizenship and innovation. To begin, companies must properly assess everything, and then align its findings

with information systems. It is also essential for executive leadership to be actively involved in the alignment process to ensure strategic goals are met.

Quality of Interaction

The quality of the interaction between the Information System (IS) project team and the end-users in a development project are not always clearly linked to the success of projects in terms of meeting budgets and product goals. This is due to the lack of collaboration across business units that prevent proper program status updates that optimize operational reviews. Another issue relates to internal and external team conflicts that affect communication, and this reflects negatively on the project as a whole. Attention to both internal and external conflict is necessary to accomplish project goals successfully.

Changing Objectives during Project

Inside the realm of project management, judgment must be made as to whether to remain loyal to the initial requirements and objectives or to make changes. Sometimes project managers cannot handle trade-off decisions and make decisions without the basis of rational insights.

Unrealistic Resource Estimates

Project managers can fail to differentiate between time, scope and duration. Time on task generally means the time required to complete a task without interruptions. Duration is the time actually required to finish a task, taking into account problems and interruptions. Scope is the process of determining and documenting specific project goals, deliverables, tasks and deadlines. Defining scope is typically a problem area for many project managers since most are linear thinkers, making decisions without considering other factors that might disrupt the harmony of the project.

Human Capital

Finding and keeping the right people on a project is a big challenge for most project managers. In certain industries, such as government defense and aerospace, work cannot be outsourced without a specific technical skill or security clearance, making the management of human capital a big issue. Motivation also plays a part in keeping the best people on a project team. It's important to realize that talent can easily move to a competitor. Project managers must create a collaborative, mutually beneficial work environment where individual talents can thrive and people feel appreciated for their work. Maintaining a good work/life balance is also important, especially for projects that require overtime and after-hour work.



Conclusion

Interest in project management is expected to increase in the near future, partly due to rapidly developing globalization and growing awareness of knowledge management. Companies must manage a wider range of coverage, increasingly complex information system architecture, and the rapidly changing environment. In order to face such challenges, chief information officers (CIOs) must create an IT portfolio management model that is aligned with business goals. It will help the CIO to maintain control over corporate IT assets and IT processes. Furthermore, the CIO and IT project manager should be aware of the common mistakes that destroy IT projects and learn from the identified mistakes. These learning experiences should be captured in a repository so the successors do not make the same mistakes.



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