

Domain of Management

Throughout the field of Instructional Technology (IT), management-type roles, activities and theoretical underpinnings are prevalent. Within this domain, management involves controlling all aspects of the field through planning, organizing, coordinating and supervising. The responsibilities of an instructional technologist could range from macro-level management of an entire program with multiple departments to managing just one instructional design project, which is at the micro level. Regardless of the task, the required underlying skills are the same. A project manager must be able to motivate, provide leadership and organize team members, effectively communicate at all levels, organize programs, supervise employees, plan and administer budget and facilities, implement change, and plan for short- and long-term goals (Seels & Richey, 1994).

Project management within IT is closely related to information management and primarily comes from the theory and techniques derived from fields such as information science and library science, as well as the area of integrated technologies within the development domain of IT (Seels & Richey, 1994). There are several ways in which an instructional technologist can approach the task of management, regardless of the size or scope of the project. Deming's 14 Points (Deming, 1996) is one model that focuses on building quality into processes and viewing employees as investments, which can be used to effectively manage human resources.

As an instructional technologist, the ability to be highly organized is important. In terms of project management, this ability becomes paramount. The IT project manager must be able to establish a structure which facilitates problem-solving and decision-making intrinsically. This person must be able to assemble project teams, assign responsibilities to each member and oversee progress within individual areas, as well as the project as a whole. They also need to be able to provide a clearly articulated project scope, schedule of activities, risk management plan, resource management plan, and communications management plan (Pinto, 1998).

Within the management domain, all of the aforementioned activities and skills are common among all four domain subcategories, which include: project management, resource management, delivery system management and information management.

Project Management

In terms of instructional design and development, the primary areas of focus for a project manager in this sub-domain revolve around planning, monitoring and controlling the functions of the project. This means that their time at the beginning of a project is spent gathering information pertaining to costs, budget, risks, constraints, scheduling, stakeholders, and team members. Obtaining this information will enable the project manager to formulate a project scope statement, based on actual data, which will describe exactly what will be involved in completing the project and nothing more. Once the planning phase is complete, the project manager's focus will shift to ensuring that

each team member is making sufficient progress toward completing their specific task, and that the project as a whole is within budget and on schedule.

As with any successful project within the field of IT, utilizing models is a key ingredient. Michael Greer (1992) developed a model that is commonly used by project managers with instructional design needs. This ten-step model is divided into three phases: 1) project planning, 2) instructional development, and 3) follow-up. During the initial phase, the project manager is focused on organizing the project and determining the project scope. The next phase involves conducting a Front-End Analysis, developing instructional material drafts, evaluating the materials' efficacy (formative evaluation) and producing the final drafts. The final phase in this model is where the project manager utilizes and diffuses the materials throughout the organization or system. The last step involves conducting a summative evaluation to determine if the objectives of the project and instructional materials were met.

Resource Management

IT Project Managers are responsible for planning, monitoring, and controlling many different kinds of resources including facilities, supplies, money, personnel, time, instructional materials, as well as resource support systems and services. In this capacity, they are primarily concerned with knowing what resources are available and who controls them; what resources are needed to complete the project; any associated expenses, cost effectiveness, and justification of effectiveness for learning (Seels & Richey, 1994). Additionally, an instructional technologist would need to be able to estimate costs, create a budget, research and procure any needed supplies from outside the organization, as well as interview and hire staff (Pinto, 1998).

Delivery System Management

Closely linked to resource management, delivery system management is concerned with planning, monitoring and controlling distribution methods and their organization. This area of management is especially important when dealing with Learning Management Systems. The primary focus for an IT project manager here is making sure that the finished product matches the instructional objectives, available technology and learners. The project manager may want to use information obtained from a Front End Analysis and create a technology plan that includes all hardware/software requirements, resources, end-user support plan, policies and regulations, procedures for instructors, and guidelines for designers.

Information Management

With the main objective of providing accessible and user-friendly resources for learning, IT Project Managers must plan, monitor and control all aspects of information processing, storage and transfer. The technologies that are used to accomplish this goal are described within the development domain. The importance of this area is

immense because it is the key to world-wide, cross-cultural access to information and educational systems (Seels & Richey, 1994).

Another important aspect of information management is a concept more widely used today called Knowledge Management (KM). The technologies used for managing information help to facilitate KM practices within a system or organization. This means that as enabling technologies such as collaboration applications and visual tools are developed, the practice of knowledge management will continue to evolve. For the instructional designer or project manager, this means that learners will have more ways to acquire new knowledge, which is important in today's fast-paced world of global commerce. KM programs such as on-the-job peer discussions, professional training and mentoring are typically linked to organizational objectives like performance improvement, innovation or knowledge retention (Wikipedia, 2008).