

Best practices and the sdlc

[Business](#), [Management](#)



It has long been accepted that constant change is fundamental to IT. While most IT managers understand that change is part of the norm, the organizations that employ them often resist it. Successful IT development calls for having a clear blueprint for proper IT direction of an organization. By using a System Development Life Cycle (SDLC) model and sound best practice methods, an IT manager can define that blueprint and make the best possible IT decisions. According to [http://www. bigpedia. com](http://www.bigpedia.com) the SDLC relates to models or methodologies that people use to develop systems, generally computer systems.

A number of SDLC models have been created: waterfall, fountain, spiral, build and fix, and rapid prototyping. There is not a definitive correct model, but most models will include the following steps or at least a variation. The first step is the projects planning stage, in this stage the project manager (PM) decides which SDLC model to use. The PM will also survey and gather information in regards to the current team's skill and experience, any concerns or issues perceived by upper management, such as cost, and a process for following up the work agreement. The next step is the analysis of the system.

During the system analysis the PM breaks down the entire project in to small pieces and assigns each department their applicable tasks. This step is where the plan is finalized and the PM begins to move onto the systems design. Understanding the systems design is essential to developing the system. At this step, each department head devises a plan on how their section can help develop the system. In the third step, the architectural

design, these individual plans are spliced together to form the completed plan. Also during this step the work of building the system takes place.

The PM's focus shifts from planning the project to managing the development of the project. During the next step, the testing of the system takes place. This will ensure that all the bugs and flaws are removed before the deployment of the system. During the deployment step the system is used for its intended purpose. As with all systems the final step, is the maintenance of the system, which last for as long as the system is used. During this step, routine maintenance is performed to include updates. Either during or after the development of a system, certain methods or techniques are discovered to be better than other nes. In the IT industry, these ideas are sometimes called best practices. In a book titled " Electronic Government" by Jack Rabin best practices are described as an idea that suggests that there is a technique, method, or process that is more effective at delivering a desired outcome. The idea is that with proper processes, procedures, and testing, a desired outcome can be delivered with fewer problems. Best practices can also be defined as the most proficient and effective way of accomplishing a task, based on principles used repeatedly by numerous people.

Best practices are a way for a company to create standardization within their operating procedures. A great example of a best practice was displayed by Sprint recently. In August of 2008, Sprint created a guide to the infrastructure management layer to automate and speed the production of resources from within their data centers. By creating this guide, they were able to quickly manage, back up, and produce their data sets associated with

each testenvironmentbuild. As a result, Sprint has improved customer satisfaction, reducing the time it takes to fill requests.

Another example of a best practice was in 2004 the Air Force decided that it need it network administrators (admins) to pass quality checks before allowing them to operate on Air Force domains. Each Air Force base decided to test their network admins differently. This created a lot of confusion and large amounts of money for each Air Force base because they acted independently. Therefore, the Air Force decided to open a best practice suggestion program, which allowed each Air Force base to submit their procedures for quality checking their network admins.

Less than six months after the process started, the best practice tag was awarded to Eglin Air Force Base in Fort Walton Beach, Fl. They were allowed to implement their procedures Air Force wide. In the end, Eglin saved the Air Force six million dollars with its best practice procedures. As the term best practice has become more popular, some organizations have begun using best practices to refer to what are in fact rules, causing creativity to hamper. This will never be the case with Google.

Google believes that giving their employees freedom to move about the company without middle management following them around has actually prompted creativity. In a interview with CBS News Sunday Morning, Google CEO Sergey Brin explained that Google provides free gourmet breakfast, lunch and dinner—all prepared by gourmet chefs. They get free medical care, daycare, and there is even a massage chair in the lobby. All of these benefits spur creativity, which has made Google one of the World Wide Web pioneers.

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Google does not use best practice because they are too rigid and do not allow employees to “ think outside the box”. Some best practices are needed though. This was the case with Microsoft and Netscape. They used a synchronize and stabilize method created by David Yoffie and Michael Cusumano to orchestrate a massive overseeing and managing of source code. This method allowed the two corporations to work efficiently in a parallel. During their research, they found that both companies were doing very similar tasks nightly.

By creating a best practice model both companies could use they reduced production time by 15 %. Best practices along with the SDLC can help lay a great foundation for IT development. There are no set rules or guidelines for IT development. However, there is a certain structure that most successful IT projects have in common. The first step to planning a good IT project is the project selection. During this process the PM must analyze if there is a need for the system. Does someone already have a system similar that the team could use or buy?

After this step if the justification for the system is still necessary, then the team must move onto the next step, which is the planning of project controls. According to the paper Identifying Best Practices in InformationTechnologyProject Management, project controls are defined as an estimate, estimating, and budgeting. The estimate considers how many resources are needed to accomplish this project, the act of estimating is combining the results of post project reviews, metrics, consultation, and informed assessment to arrive at time and resource requirements for an activity, and budgeting is the total cost of the project.

Following this evaluation, you should assemble the team. It is important to compile a team that will be effective to the specific project. The team must understand the project goals and expectations. The next step is accessing the stakeholder's involvement in the project. The stakeholder can be anyone from the management of the company to an actual customer. Some stakeholders will want as much control as the PM while other, will be hands off allowing the PM to make all the decisions.

These guidelines are not all inclusive but they are a start to developing a successful IT project. Designing a good IT development project takes time and an excellent PM. There are many good models to follow, like the Arkansas best practices model. These models give a small or unorganized company the structure it needs to develop a good plan. If you follows these models along with a good SDLC you will be well on your way to creating a solid project. These two models can lay the foundation you need for a successful blueprint.