

Managerial issues associated with managing an organization's is infrastructure es...

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Managing Information Technology has evolved just as the technologies have evolved. The usual basic managerial roles are in place involving people, equipment and processes. The process list is growing as well as the equipment list and maintenance requirements. The amount of resources to manage in the form of data has grown exponentially. Managers have to keep up to date with technologies as well as look into the future to be prepared for what's next. (Şanlı, 2010) \* Configuration management is mostly concerned with changes made to hardware, software, documentation, or anything that touches a system that may cause an issue. An up to date record of all infrastructure components are created and kept up to date (SAManage, 2010). Benefits of this system are asset tracking, system reliability, aid in defining policies and procedures, improved maintenance, better oversight of proposed changes, and improved management of systems and infrastructure in general. \* Software systems are available to help control CM and the database is referenced. Software packages available include a ticketing system. When a change needs to happen that could have an impact on any of the systems, it is vetted through all the owners of the various systems. It focuses around accountability.

Who has done what, and who has permission to alter the configuration. Approval not given for a change until the ticket makes a round robin of every department to assure systems are not affected. \* Software maintenance involves any altering or updating of a software system once it goes into production. Software needs modifying as time passes for various reasons. User needs may change requiring increased functionality. Problems with the software may need addressed. Changes in the hardware may require

modifications. Custom interfaces may need updated. Software maintenance is a very important piece worth consideration when purchasing, and may cost more than the original package. \* The IEEE-1219 standard identifies seven phases for software maintenance. It also defines their order of execution. The first is the problem identification and classifying as to scope of issue. Analysis is the second phase which includes planning for a design, implementation, testing and completion. The Design phase includes the modification to be made to the system and identifying modules that will be affected. It also includes the design of the testing and documentation updates.

The Implementation phase is the actual coding, testing and integration into a production mirrored system. The Regression testing phase is to verify the requirements of the modifications have been met. It also involved performance and functionality testing. This is the phase before presentation to the customer. The Acceptance Testing phase is the testing that involves systems, users, anyone pre-identified as a consumer of the product. It includes all the testing in the Regression Testing phase with the customer involved. Delivery is the final phase. The modified package is released for installation. It includes performing the installation and training the customer. (Canfora & Cimitile, 2000) \* There are several options for training and several can be offered to assure the end user and support staff is properly trained. Tutorials, computer based training modules and classroom type courses are among them.

Training a local expert and providing expert level support to assist as needed may be offered as well. Support levels are offered based on price allowing the customer to choose their own level and upgrade as needed. \* Of course there are many management issues with Information Systems management. Network management, Service level management, helpdesk management, the technical list goes on. Then there is the human management side with time management, performance management, human management in general. Then the information systems manager has to keep up with the technology, manage and maintain a contact list of outside vendors, occasionally look into the crystal ball to see what technology is on the horizon and start making plans for it. If that isn't enough, there is the usual, "other duties as assigned", in everybody's contract these days. The job is never a dull one, to say the least.

## References

Canfora, G., & Cimitile, A. (2000, November 29). Software Maintenance. Retrieved from aminer. org: [http://pdf.aminer.org/000/592/354/a\\_study\\_of\\_the\\_documentation\\_essential\\_to\\_s](http://pdf.aminer.org/000/592/354/a_study_of_the_documentation_essential_to_s)