Study on knowledge management practices in software development industry in Sri Lanka

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In the information age with expanded global market, many organizations compete for higher profit margins. As a result, using previous knowledge for redesigning and integrating business processes to increase operational efficiencies has become a necessity. Furthermore, organizations can improve quality of products and services by collective body of knowledge offered by employees of these organizations.

Software development process is a knowledge-intensive process. Therefore, with the increased complexity of Software Engineering (SE) project work, knowledge processes have led to a greater dependency upon solving problems. Software organizations gain local experience with the time by completing lots of SE project works, careful measurement of planned software activities, trial and error, feedback from customers and from the environment in general.

However, for better implementation of Knowledge Management (KM) practices, organizations need to be supported by right kind of people, process and technology. Organization’s people, processes and technology will at all times are either enablers of, or barriers to, effective knowledge management. Therefore, it is very important to identify the barriers and remove them and build enablers which support the effective KM practice within the organization. This study is built around this people, process and technology model. Therefore, people, process, technology are independent variables and effectiveness of KM is the dependent variable.

This study was undertaken to analyze key factors affecting to the effectiveness of KM, finding out the percentages of each people, process, and technology factors impact to the KM in software industry and as the main objective, study the current KM practices in Sri Lankan software development industry and find out the best KM practices.

The study is descriptive in nature. Stratified sampling technique under probability sampling design will be used to select the samples. Primary data will be collected from the samples by administering a structured questionnaire. The data will be collected from small to large KM practicing companies. Correlation and coefficient analysis, multiple regression analysis and ANOVA will be carried out on the collected data to derive the findings.

With the time by working on different projects, employees gather unique knowledge from their experience. The results of this study will help managers to facilitate adoption of KM and prioritizes its practices.

Keywords: Knowledge management, Software engineering, Sri Lanka