Abstract

System analysis and requirements definition is a risky phase. It is susceptible to different types of risk factors from the initial preliminary investigation till the final delivery of the requirements document. Risks reside in this phase are considered the ones with the highest severity among other phases. Being the first phase in the development process, the occurrence of risks in this phase negatively influences subsequent phases, affects project progress, and has a negative impact on the project outcomes. Thus, managing probable risks in this phase deadly helps project managers control the majority of risks that might arise later in the subsequent phase. In order to manage risks properly, probable risks need to be identified early, then, risk management strategies have to be proposed and followed in order to avoid and mitigate their occurrence. In this paper, a total number of 28 risk factors have been introduced. For each risk factor, a set of management strategies is proposed. The identified factors and strategies were the harvest of brainstorming sessions with senior software practitioners, comprehensive literature survey, plus ready-made checklist and taxonomies. In order to validate our results, correlation analysis had been conducted through a web-based survey. The results confirmed our assumptions in that all of the identified risk factors have positive correlation with project failure.
Managing Risks in the System Analysis and Requirements Definition Phase

References

Index Terms

Computer Science  Software Engineering

Keywords

Requirements  Risk Factor  Risk Management  Software Development Lifecycle (SDLC)