The Impact of Big Data on the Management of Business Software Technology Projects

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Purpose of Study

Many factors can influence the ongoing management and execution of technology projects within the corporate business environment. Some of these elements are known a priori during the project planning phase. Others may require real-time data gathering and analysis during project execution. These real-time project data elements are often neglected, misclassified, or otherwise misinterpreted during the project execution phase increasing the risk of delays, quality issues, and missed business outcomes. The purpose of this research is to discover and analyze the impact, role, and level of influence of various project-related data on the ongoing management of technology projects. The goal is to provide a balance to the subjectivity currently used by project managers as they assess and report on their respective project execution progress.

Research Questions

1. What are the specific project data elements that can be gathered from business software technology projects? What is the impact, role, and level of influence of these data elements on the ongoing management of such projects?

2. Which tools and techniques are available to project managers and how can they be best used to harvest the identified real-time project data elements (i.e. data collection, analysis, and utilization) during the main phases of a project life-cycle (i.e. Initiation, Execution, and Transition & Value Capture)?

Overview & Background

Business Software Technology Management

Project Management – A Need For Balance

Despite software environment sophistication, growth, and improvements, business software project execution performance has been flat and without material improvement year over year, and across industries.

Any improvements are apparent anomalies and highly correlated to reduction of project scope, reduction of functionality, and ultimately due to lower function points and NOT due to improved organizational capabilities.

Can We Achieve An Optimal Balance?

Tools & Techniques

Harvesting Big Data

Hypothesis: Volumes of rich real-time data is available from business software when being developed. This Big Data can be harvested to provide a scientific assessment of current project status that can complement traditional and subjective reviews:

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Linus Torvalds

Talk is cheap. Show me the code.