Configuration Management:
The Core of IT Operations

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Configuration management is actually nothing new. It has been at the heart of everything we do within IT. What is new is the clarification of its definition, a sudden acceleration in process development, and the emergence of technology solutions that are finally addressing configuration issues according to this clarified definition and process acceptance.

Configuration management, simply put, is the process of collecting and maintaining data that describes the IT environment. This data description helps us understand the structure of infrastructure, applications, services, and many other IT abstractions. This structure guides all aspects of IT operations, including the automation of management systems. We have been doing this since the dawn of IT, but the primary platform for execution of this process has been our own minds. Intuition and experience can no longer address the burden of understanding the increasing complexity around us. Even our most brilliant experts are crumbling under this complexity. New approaches are required.

Standardized environments, processes and automation offer great hope to manage this complexity, but such forces themselves rarely compel dramatic shifts like the one we now have with configuration management. Something else is driving this extraordinary market response. At least three powerful forces are converging to form a "perfect storm" for configuration management: regulatory compliance, process best practice acceleration, and the economic benefits of automation.

1. Regulatory compliance (e.g., Sarbanes-Oxley, BASEL II) mandates tight controls around multiple aspects of business. While one can argue the role of IT configuration in such broad efforts, business leaders are terrified that we cannot offer an accurate view of the IT domain, and more importantly, how that domain is changing over time. What may appear to be a benign change in IT may relate to an event that raises concerns about business practices and financial accountability. Organizations are turning to configuration management as a means to offer some insight into such events.
2. Increasing recognition of operational process best practices, largely around ITIL (IT Infrastructure Library), has sensitized people to the importance of configuration management and something called the CMDB (configuration management database). The CMDB is a subject for its own lengthy discussion as there is significant confusion around what this is and how to build it. Nevertheless, configuration management is central to all of these best practices, for without it, all other processes are encumbered.

3. Finally, automated discovery of IT characteristics is an obvious improvement over manual methods. Automation is inevitable because the driving force is one of the most powerful forces in the universe... economics. The case is simple. Companies need to save money to make money and history has proven the fiscal wisdom of automation.

Configuration management is a catalyst for a new revolution of discipline within IT. Companies must join this revolution to remain competitive. The basic process is defined and available. Technology solutions remain fragmented, but consolidation and innovation over the next two years will remarkably alter the landscape for configuration management. Everyone in IT should carefully follow this market and include configuration management and its fellow processes in their strategic plans.

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