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Lean Six Sigma in IT Management

Enhancing Quality
and Productivity

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Preface

Given the increasing complexity of the economic environment, companies must improve productivity efficiency as well as the quality of their products and services. Because IT services are mission-critical enablers of business processes, they are a major driver for the overall productivity and quality of business processes. Despite the importance of IT services, many businesses simply do not have the time or the management bandwidth to focus on technology and infrastructure issues, or are not willing to address these issues. Businesses are thus seeking IT services in a standardized form that have defined functionality, price and quality.

The aforementioned requirements challenge IT organizations to transition from pure technology-oriented providers to customer-oriented service providers. The Information Technology Infrastructure Library (ITIL) recommends a set of practices on how to best establish a customer-oriented IT service management model. While ITIL only describes what management and service delivery processes an IT service provider should implement, additional concepts are required to define exactly how to implement these processes. The underlying research shows that Lean Six Sigma is an appropriate approach to both implement new IT management and service delivery processes and to improve existing ones.

This research shows that Lean Six Sigma tools, originally designed for use in the manufacturing industry, must be tailored for application in the services industry due to differences between manufacturing and service delivery processes. IT organizations can apply the experience gained by other industries as well as the most efficient practices in order to appropriately address key organizational considerations, such as: establishing roles and structures; carrying out trainings and certification; and addressing key success factors.

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