

Driving Excellence in IT Service Management through Six Sigma

A ProXimus Consulting Perspective



By Costa Mitsios
Managing Partner

ITSM

Information Technology
Service Management





Introduction

In today's digital-first enterprise landscape, IT Service Management (ITSM) plays a pivotal role in enabling business continuity, customer satisfaction, and operational efficiency.

However, many organizations struggle with inconsistent service delivery, high incident volumes, and unclear performance baselines.

To address these challenges systematically, **ProXimus Consulting advocates the application of Six Sigma methodologies to ITSM**—delivering measurable improvements in service quality, efficiency, and customer value.





The Case for Structured ITSM Process Improvement

Despite the adoption of mature ITSM platforms and frameworks such as ITIL v4, organizations often lack the data-driven discipline required to root out inefficiencies and eliminate recurring issues. Common pain points include:

- Excessive mean time to resolution (MTTR)
- High levels of service request rework
- Poor problem management effectiveness
- Inconsistent change success rates

Six Sigma offers a structured, statistical approach to reduce process variation, increase predictability, and elevate overall service performance.





Why Six Sigma for ITSM?

Six Sigma, with its DMAIC (Define, Measure, Analyze, Improve, Control) framework, is uniquely suited to address the complexity of ITSM environments. By focusing on quantifiable outcomes and continuous process control, Six Sigma transforms reactive service management into a proactive discipline.

Key benefits include:



Defect reduction: Lower error rates in incident, change, and request processes.



Cycle time optimization: Faster resolution and fulfillment times.



Improved SLA compliance: Data-backed insights to meet or exceed service-level agreements.



Customer satisfaction: Enhanced service experience through consistent performance.



ProXimus Consulting Approach: Six Sigma Meets ITIL

At ProXimus Consulting, we integrate **Six Sigma principles with ITIL v4 practices**, creating a tailored roadmap for each client. Our consultants, certified in both Six Sigma and ITIL, work closely with IT operations leaders to uncover root causes, quantify process performance, and implement targeted improvements.



DEFINE – Clarify the Problem and the Objective

Goal: Establish a clear, stakeholder-aligned understanding of the ITSM issue to be solved.

In this phase, we collaborate with business and IT leaders to identify the service performance gaps and align them with critical-to-quality (CTQ) metrics. For example, a recurring issue might be poor SLA adherence for incident resolution, or high rework in service requests.

Key Activities:



Define the problem in business terms (e.g., "High MTTR impacting customer satisfaction")




Identify stakeholders, service owners, and impacted users
Set clear project scope and boundaries (e.g., just Level 1 support vs. full incident lifecycle)



Document Voice of the Customer (VoC) and align to ITIL processes (e.g., Incident, Request, Change)



Draft a SIPOC diagram (Suppliers, Inputs, Process, Outputs, Customers)

 **ProXimus Insight.** We often use ITIL's Service Value Chain and Practice Model to map the problem area and align the improvement focus with overall service strategy.



MEASURE – Quantify the Current Performance

Goal: Collect baseline data to understand the current state of the process and establish a benchmark.

This is where ITSM platforms like ServiceNow, Jira Service Management, or BMC Remedy play a crucial role. We pull historical ticket data to build process performance dashboards, allowing us to understand process variation and frequency of defects.

Key Activities:



Collect data on ticket lifecycle, SLA breaches, reopen rates, backlog trends



Identify key process metrics (e.g., Mean Time to Resolve, First Contact Resolution)



Validate data accuracy (remove outliers, check for entry inconsistencies)



Establish baseline performance (e.g., current MTTR is 14 hours)



ProXimus Insight: We integrate measurement with existing service reporting dashboards, enabling near real-time visibility of baseline KPIs for both IT and business stakeholders.



ANALYZE – Find the Root Causes

Goal: Identify the factors that are creating inefficiencies, delays, or quality problems in service processes.

We dive into root cause analysis to understand why performance is falling short. This could involve technical, procedural, or organizational factors. For example, long resolution times might stem from misrouted tickets or missing knowledge base content.

Key Activities:



Conduct Pareto analysis (e.g., 80% of incidents caused by 20% of known issues)




Use Ishikawa (fishbone) diagrams to uncover possible cause categories



Apply regression analysis or correlation tools to test cause-effect relationships



Perform process walk-throughs and value stream mapping

 ***ProXimus Insight.*** We often find that "quick wins" emerge in this phase—such as automation gaps, unclear escalations, or incorrect categorization—that can be corrected before full redesign.



IMPROVE – Implement and Test Solutions

Goal: Design and pilot improvements that eliminate the root causes of poor performance.

This is where Six Sigma meets Lean principles. The focus is not just fixing broken steps but re-engineering the flow for higher speed, lower effort, and better quality.

Key Activities:



Design and test process improvements (e.g., auto-assignment, ticket templates, chatbots)



Optimize handoffs and decision points (e.g., reduce escalations)




Automate repetitive steps (e.g., password resets, software installs)



Train teams and revise SOPs



Pilot changes in a controlled environment and measure early results

 ***ProXimus Insight.*** We collaborate closely with process owners and tool administrators to ensure that ITSM tools are configured to support the new workflows—often using low-code/no-code features in ServiceNow.



CONTROL – Sustain the Gains and Prevent Regression

Goal: Ensure that improvements are maintained and continuously monitored over time.

Even the best process improvements will degrade without governance. We establish controls and feedback loops to maintain gains and empower ongoing improvement.

Key Activities:



Implement performance dashboards and KPIs (e.g., live SLA tracking)



Develop process control plans and owner accountability
Set up alerts for process deviations or SLA trends



Document updated process flows and knowledge articles



Institutionalize continuous improvement practices (e.g., Kaizen reviews, service health checks)




ProXimus Insight. We use control charts and ITSM analytics tools to monitor process stability over time, flagging anomalies before they turn into escalations.

Final Thought: DMAIC is Not a Project— It's a Capability

At ProXimus Consulting, we don't treat DMAIC as a one-time fix. Instead, we help IT organizations embed this approach into their service management culture, transforming ITSM from a reactive support function to a predictable, customer-focused service partner.

Whether you're seeking to optimize service desk operations, reduce change failure rates, or elevate customer experience, ProXimus Consulting brings the strategic insight and technical rigor to drive your ITSM transformation—powered by Six Sigma.



Let's build smarter, leaner, and more
resilient service management together.

info@proximus.gr

<https://proximus.gr>