

IT Foundation Management —Cost Reduction & ROI

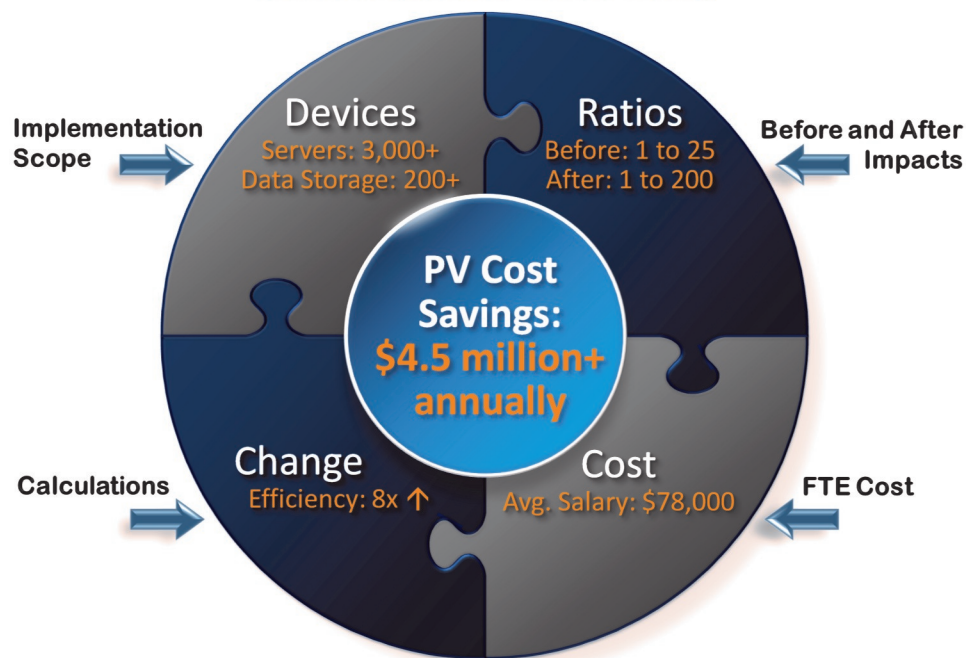
The IT Foundation Management delivers on the promise of *doing more with less*. It does this through streamlining, automating and optimizing many of the processes involved in IT infrastructure management.

Because IT Foundation Management builds from the bottom-up (the Foundation) it can significantly improve IT processes including device configuration, incident or problem remediation, updating and patching, and reporting.

Cost Reduction Use Case

One TDi customer provided the following information regarding the impact of IT Foundation Management on their business:

IT Foundation Management: Cost Reduction Case Study



Case Study Data

1. Servers (Solaris) being managed = 3,000+
2. Storage Devices being managed = 200+
3. BEFORE: Ratio of engineers to devices = 1 engineer per 25 devices
4. AFTER: Ratio of engineers to devices = 1 engineer per 200 devices

Using the before and after data collected by the customer, the average present value (PV) savings represents a cost savings of at least **\$4.5 million per year.**

Universal visibility was a key driver in this case, with multiple server groups in multiple locations with supporting engineers working from physically remote locations (from the servers and each other).

Providing a single, unified platform that enabled them to have universal visibility and real-time collaboration capabilities offset the geographical challenge in this use case.

Financial Calculations

A present value calculation was performed on this use case with the following assumptions:

Actual Data

1. Servers (Solaris) being managed = 3,000+
2. Storage Devices being managed = 200+
3. BEFORE: Ratio of engineers to devices = 1 engineer per 25 devices
4. AFTER: Ratio of engineers to devices = 1 engineer per 200 devices

Assumptions

1. Average administrator salary (5 yrs exp.) = \$78,000 (SANS Institute 2008)
2. Burden rate: 20%
3. Discount rate: 20%
4. Phase-in headcount reduction: Y1 = 25%, Y2 = 75%, Y3 = 100%

Major Telecom Company Cost Reduction				
Three Year Period				
	Year 1	Year 2	Year 3	
Original headcount	128	128	128	
BOY headcount	128		16	
Extrapolated BOY year 2		72		
Headcount ave during year	100	44	16	
Ave headcount reduction	28	84	112	
Ave salary	\$78,000	\$78,000	\$78,000	
				Total
Direct salary saved	\$2,184,000	\$6,552,000	\$8,736,000	\$17,472,000
Burden rate	120%	120%	120%	120%
	\$2,620,800	\$7,862,400	\$10,483,200	\$20,966,400
Discount rate	83.333%	69.444%	57.870%	
PV of cash savings	\$2,184,000	\$5,460,000	\$6,066,667	\$13,710,667

Cost Reduction Drivers

The more generic drivers of this cost reduction are the automation, streamlining and optimization of the processes behind deploying, configuring, maintaining and repairing the hardware and software in the IT infrastructure. These processes include:

1. Detect: Data capture (only data that is captured can be used to raise events or root-cause analysis)
2. Detect: Event Detection (data analysis to determine if an event has occurred)
3. Detect: Event Prioritization (event severity is determined)
4. Diagnose: Research Issue (additional information is required to understand event)
5. Diagnose: Data Gathering (additional data is required to determine cause)
6. Diagnose: Identify Remediation Target (determine physical entity needing remediation)
7. Remediate: Determine Remediation Action
8. Remediate: Research Remediation Action (more information is needed to determine the correct remediation action)
9. Remediate: Establish Console Connection
10. Remediate: Perform Remediation (including Remote Remediation)

IT Foundation Management automates, streamlines and optimizes all of these processes, often transforming them from difficult, time-consuming, and relatively unstructured processes to simple, highly automated ones.

Leverage Domain Experts



IT Foundation Management keeps domain experts focused on the unique value-added ability they bring to supporting the IT infrastructure. In simpler terms, IT Foundation Management enables them to quickly and efficiently do their jobs.

IT Foundation Management also provides them with the ability to encode their domain expertise into the system, translating individual knowledge into corporate knowledge.

The result is an optimized (efficient) work environment that undergoes continual improvement through use. IT Foundation Management effectively learns from your experts thereby increasing its value to the organization on a continuously evolving basis.

There are no trade-offs with IT Foundation Management either. As a result of employing IT Foundation Management—in addition to cost reduction the reliability and availability of systems is improved, the quality of service delivered to the business increases, and employee job satisfaction often rises sharply.

IT Foundation Management Drives Operational Maturity

The following diagram presents the maturity evolution behind this cost reduction study. As with all maturity matrices a baseline is created to assess the current state (red highlights) with goals established from there and results charted periodically to determine progress. For this case study the change in maturity after the first year is denoted by the green highlights.

IT Foundation Management – IT Operations Maturity Matrix					
LEVEL 5	All events in-band and out-of-band: all modes	Real-time (milliseconds) for all events	Assigns event priority for the majority of events automatically and continuously updates and expands	Uses automation to present descriptive event analysis data, continuously updates and expands analysis data, system-based event correlation	System managed remediation process, selected actions performed by system, captures & updates system with domain knowledge
LEVEL 4	All out-of-band events all modes: selected in-band events production mode only	Selected events in real-time (milliseconds), others programmatic (10 minutes or less)	Assigns event priority for a significant percentage of events automatically	Automation presents descriptive event analysis data, continuously updates & expands analysis data	System managed remediation process, selected actions performed by system
LEVEL 3	All in-band events: production mode only	Programmatic with lag – 10 minutes or more	Assigns event priority for select set of events automatically	Automation presents descriptive event analysis data, system-managed process	System managed remediation process
LEVEL 2	In-band (production) event monitoring of network notifications and comprehensive log messages	Programmatic with lag – 30 minutes or more	Manual – master record used and maintained	Manual– reference library available, common process	Manual – structured process, balance between symptom and root-cause focus
LEVEL 1	In-band (production) event monitoring including network notifications and selected log messages	Primarily by failure and service degradation	Manual– reference library available	Manual – no references, no master records, common process	Manual – structured process, symptom focused rather than root-cause
LEVEL 0	Limited and inconsistent event detection	By failure (fire fighting)	Manual – no references, no master records	Manual – no references, no master records, no common process	Manual – unstructured process, symptom focused rather than root-cause
	Scope of Event Detection	Event Detection Practice	Event Prioritization	Event Analysis	Event Remediation

Dramatic Departure from the Traditional Approach

IT Foundation Management represents a dramatic departure from the traditional approach where an often unmanageable array of tools are employed, work is chaotic, and consistency is lacking. IT Foundation Management approaches this challenge in a holistic manner that fills in the gaps, unifies the practice and optimizes work. In this way IT Operations maturity can be driven from a reactionary, effect-based firefighting mode prone to human error to an efficient, effective and controllable management practice.