Avoiding the Metaphoric "IT Fire" to having "Strategic IT Operations"

Scott Alldridge

- Co-founder and President of the IT Process Institute (ITPI)
- CEO of IP Services – Launched in 2001, IP Services developed within a branch of a Fortune 500 integrator
- Key role in developing and providing managed services and security services since before managed services was a recognized market
- Pioneered building services in the US based on a proven practices framework (ITIL) starting in 2002
- Advised some of the world's top service providers on IT best practices and service deliverables

Littlest Issues Can Cause The Greatest Problems

Carr Fire - Shasta and Trinity Counties in California

- The fire was started when a flat tire on a vehicle caused the wheel's rim to scrape against the asphalt, creating **sparks** that set off the fire.
- The fire burned 229,651 acres and destroyed at least 1,604 structures (1,077 were homes).
- The Carr Fire cost over $1.659 billion in damages, including $1.5 billion in insured losses and more than $158.7 million in suppression costs.
- At its height, the fire engaged as many as 4,766 personnel from multiple agencies.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Sparks in Banking IT w/ Devastating Outcomes

Bank in the Northwest

- When recovering from a catastrophic failure of the bank's virtual platform, the vendor inadvertently permitted two separate systems to write to the same disk. This causes the two systems to overwrite each other's data, making platform data become more corrupt each day until the problem was discovered many weeks later. **Caused by a Spark**

Consumer Credit Reporting Agency

- 143 million accounts breached caused by an unpatched Apache Struts vulnerability. **Caused by a Spark**

National Bank

- A bank that helps more than 750 small and community U.S. banks issue credit cards exposed the names, addresses, dates of birth and Social Security numbers of thousands of people due to a Web site misconfiguration. **Caused by a Spark**

Human error is financial services biggest vulnerability: IBM said the sharp rise is caused by cyber criminals targeting the weakest point in financial services firms' security is their employees.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

By The Numbers

Data Breach Cost(s) per Breach
- $3.86M is the average industry cost
- $7.0M is the average for financial institutions

The average cost to U.S. businesses per record, lost or stolen, during a breach was $225. Compare that to the financial industry's number of $336 per record and you can clearly see the issue.

95% of the top 20 U.S. commercial banks have a Network Security grade of 'C' or below.

Financial services firms also fall victim to cybersecurity attacks 300 times more frequently than businesses in other industries.

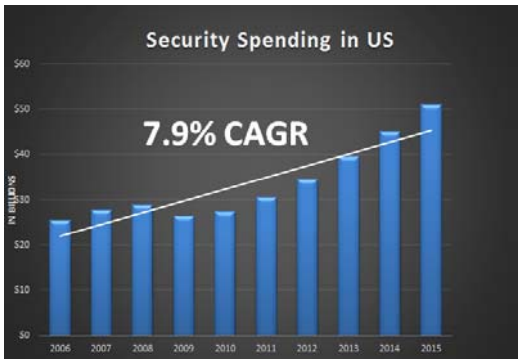
The rate of breaches, or theft of sensitive data, in the financial services industry has tripled over the past five years.

The mean-time to identify a security breach is 195 days.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Sparks In IT Spending

The industry has and continues to jump right to looking at technologies WITHOUT considering the strategic element of ***PEOPLE*** and ***PROCESS*** and the strategic alignment to the profitability of the business

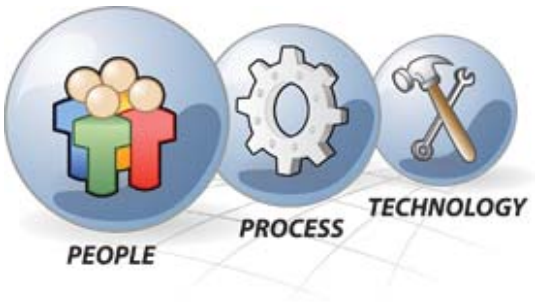


Source: Telecommunications Industry Association, Wilkofsky Gruen Associates

Source: Government Accountability Office

IP SERVICES

Avoiding IT Sparks Starts With…



In order for any bank to effectively optimize their quality in IT deliverables and enhance their security posture, all three areas need to be addressed and considered…with emphasis on the ***People*** and ***Process***!

IP SERVICES

Process…

So Many Best Practices Frameworks…Where To Start?

PCI Data Security Standard - NIST Cybersecurity Framework - HIPAA - COBIT - ISO 27001/27002 – HITRUST - COSO Enterprise Risk Management - SANS Critical Security Controls - ITIL – CMMI – LEAN IT – FFIEC - And many more…

- Where do I start and why?
- Does one return more value than another?
- Which one(s) are mandated by the government and who must comply?
- How do I provide verification that I am compliant?
- Is there any commonality between these frameworks?

IP SERVICES

ITPI Approach - Quantitative Decisions
Managing by FACT Not BELIEF

Research:
The Institute of Internal Auditors Research Foundation commissioned ITPI to conduct a study of how information technology controls impact operational performance and security

Benchmarking:
Surveys and interviews were done by 850 executives from North American-based IT organizations.
15 performance measures and the use and maturity of 53 IT controls were analyzed to reveal key findings

Prescriptive Guidance:
Visible Ops methodology was created as a result to simplify terminology and implementation of an ITIL framework where an ROI was most impactful

Descriptive vs Prescriptive

Descriptive – NIST, HIPAA, PCI Data Security Standard, COBIT, ISO 27001/27002, FFIEC, and other frameworks and compliance standards are great at defining "**what**" needs to be implemented. However, they do not discuss the "**how**" and what areas provide the greatest ROI when considering operational efficiency and data protection.

What is missing is the blueprint of "**how**"

Prescriptive – The mission of the ITPI and IP Services is and always has been to apply applicable/reliable data against IT best practices and methodology to offer a set of IT services that prioritizes the "**what**" and delivers the "**how**" through managed services.

"Strategic IT" – Another ITPI Analysis

We conducted a follow-up study of 269 IT organizations to find out what practices predict the highest levels of strategic alignment.

Analysis of those organizations with highest alignment scores indicates they are tightly integrated with the business.

This suggests that instead of trying to improve IT business alignment – IT organizations should take basic steps to improve IT business integration.

A simple archetype framework was determined to align the business objectives with the IT strategy.

Archetype Framework

A simple archetype framework can be used to assess IT's role in executing business strategy, and optimizing IT business integration.

An IT value archetype model helps IT executives quickly assess IT's structural fit with strategic key success factors.

There are three primary IT value archetypes:

1. ***Utility Providers*** focus on one primary purpose.
2. ***Process Optimizers*** focus on two primary purposes.
3. ***Revenue Enablers*** more evenly distribute focus on three primary purposes.

Utility Provider

Purpose - Provide common infrastructure and capabilities that support basic information and transaction management.

Key Challenges - Business units "go around" IT limits and controls. Competitors may be leveraging IT to win and keep customers.

Key Enabler – Better communication with and access to business management, customers, and suppliers helps prioritize shared service offerings.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Process Optimizer

Purpose - Provide common services. Plus – Optimize key business functions and processes with a focus on business-unit specific objectives and capabilities that drive competitive advantage.

Key Challenges - IT must balance standardization and centralization (Utility Provider focus) with meeting unique business requirements. IT needs to understand enterprise business key success factors.

Key Enabler – IT establishes touch points to get involved with business improvement efforts. Business is involved with IT planning and strategy.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Revenue Enabler

Purpose - Provide common services. Plus - optimize key business functions. Plus – Technology enable products and services in order to enter markets not possible without IT-enabled offerings.

Key Challenges - Pace of business change does not match IT's desire for stability. IT needs to understand the organization's customers.

Key Enabler – Operational excellence and effective IT-business touch points enable customer focus and agility. Understanding the competitive landscape reveals winning technology-enabled products and services.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Rethinking Strategic Alignment

IT capabilities are an increasingly important component of an organization's capabilities.

Business expectations for IT are rising: the vast majority of business processes are enabled by computers, and organizations have no fallback paper processes.

High levels of availability, reliability, and security are assumed for key business systems.

Process changes are impossible without technology.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Reality…

- Very few banks' IT departments are even Utility Providers!
- The primary purpose of IT is simply to provide common infrastructure and information management services.
- Budgets primarily are funded independently as a shared service, and secondarily as part of enterprise planning.
- Justifying IT investments by their potential for cost reduction as opposed to revenue gains from new technology-enabled products and services.
- Organizations measure IT success primarily by operating performance service level agreements (SLAs) and secondarily by business unit executive satisfaction.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

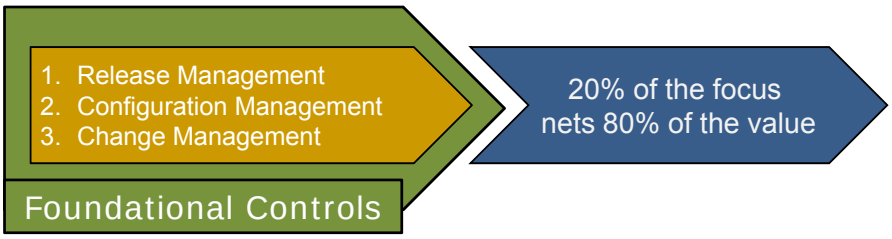
Archetype Framework Summary

- Revenue Enablers, who have the highest alignment performance scores, have the least control of their budget, but the highest budget growth.
- Utility Providers, who have the lowest alignment performance scores, have the most control of their budget, but the lowest budget growth.
- The budgets of 52% of the Revenue Enablers are growing more than 5% per year, compared to 28% of the Process Optimizers and 18% of the Utility Providers.

IT PROCESS INSTITUTE
RESEARCH | BENCHMARKING | PRESCRIPTIVE GUIDANCE

Where To Start…

A big problem in the IT industry is that best practice frameworks and most advisory services are not based on ***factual data***. ITPI's 14+ years of research, data analysis and benchmarking over 850 organizations uncovered three common service descriptions that lead to highly secure IT services.



IP SERVICES

Benchmarking

ITPI analyzed the data including 57 individual practices and 15 performance measures, and identified 12 sets of practices commonly implemented together.

One unique result highlighted by the top-performers indicated that ***91% of all security breaches were auto-detected*** when **release**, **change** and **configuration management controls** were implemented.

Nine controls predict **60 percent** of the performance variation of organizations.

IP SERVICES

What Are Those Controls?

1. A defined process to analyze and diagnose the root cause of problems.
2. Providing IT personnel with accurate information about the current configuration.
3. Changes are thoroughly tested before release.
4. Well-defined roles and responsibilities for IT personnel.
5. A defined process to review logs of violation and security activity to identify and resolve unauthorized access incidents.
6. A defined process to identify consequences if service-level targets are not met.
7. A defined process for IT configuration management.
8. A defined process for testing releases before moving to the production environment.
9. A configuration management database describes the relationships and dependencies between configuration items (infrastructure components).

Every Bank IT Leaders should be able to…

- Select the appropriate and necessary controls that align with the business strategy while mitigating risk and security threats.
- Focus on the right things…Is your IT organization following IT best practices and processes (i.e. Visible Ops methodology)?
- Deploy and maintain the necessary foundational controls to ensure proper operation and delivery…solving the “how”.
- Maintain policies, procedures, and attestation of a verifiable Configuration Management and Change Management process.
- Roll back to a current valid, secure, and working state of any of your critical IT Assets.

Leveraging IP Services As A Trusted Partner

17 years of experience has driven the following results:

- Increased operational efficiency and customer satisfaction due to ***increased service levels***.
- Achieve some of the highest levels of ***security performance*** the industry has ever seen.
- Provide ***prompt reporting*** and management of the key infrastructure metrics.
- Ability to ***demonstrate IT compliance*** on a daily basis.
- Customers achieved high-availability, monthly ***uptime of 99.99 percent*** on average.
- Delivered as a ***cost effective*** managed services/security services.

Where Can IP Services Help

By partnering with IP Services, you can leverage IT best practices frameworks and years of expert experience managing and securing clients' information.

Considerations

- Align with a culture of high performing IT management
- Average term as a client is 7 years
- Can simply subscribe to the needed services and team of experts
- Zero security breaches

Managed Service offerings

- Managed Cybersecurity
- Cloud Management
- Application & Systems Management
- Network Management
- IT Resources & Processes Management (Virtual CIO)
- Infrastructure Management

Scott Alldridge

IP Services / IT Process Institute

scott.alldridge@ipservices.com

scott.alldridge@itpi.org