Deloitte.

2010 Finance book of metrics for technology Executive summary

Global Benchmarking Center
July 2010

Dear Colleague:

The economy may be showing signs of life, but executives in the high-tech industry are still searching for actionable improvement opportunities. "It seems like I've cut costs as much as I possibly can, but am I missing something?" "What are my peers doing that I'm not?" "Are there other performance-improvement efforts I can employ that won't hurt our ability to rebound quickly as the economy gets stronger?"

Measuring internal strengths and weaknesses — and comparing them against "best-in-class" performance of industry peer companies — can help executives in their efforts to identify and mitigate gaps that have the potential to impair the performance of both the finance function and the entire business.

Deloitte is continuing its annual finance diagnostic study for high-tech companies. The goal? Quantify performance improvement opportunities in core finance activities:

- Transaction processing
- General accounting and external reporting
- Performance management
- Controls
- Tax and treasury

This study is intended to provide high-tech executives relevant data and practical insights about their competitive positioning.

We hope you find the results of this study helpful and instructive, and we invite you to contact our specialists for further information about our research.

Sincerely,

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Overview

Overall finance cost-savings opportunity is $8.8 million per $1 billion in revenue

The economic downturn hit high-tech companies just as hard as other industries, and the five-year trend only reinforces that point (Figure 1). While the economy is showing signs of improvement, we're also seeing a fundamental shift from business to consumers as drivers of new growth and competition. More users, more client devices and an expanded cloud infrastructure to serve them is leading to an increased focus on communications and mobile products.

This shift is changing the high-tech landscape and creating operational challenges — market expansion, higher volumes, faster product introductions, etc. — that directly affect the finance organization. As the high-tech industry comes out of the downturn, we believe cost containment remains the most important factor for improving margins.

According to our study, a cost gap of $8.8 million per billion in revenue exists between the median and low-cost performers, with much of the savings opportunity occurring in process costs — labor and outsourcing. Examining those process costs further, the study shows a cost gap of $7.9 million per billion in revenue, with 33% of this opportunity in labor and outsourcing costs for the transaction processing process category (Figure 2).

Such gaps point to significant potential for cost reductions, not only for short-term relief during this economic downturn, but also for the long-term process efficiencies needed to jump start growth upon recovery.

By comparing their organization's performance against industry-specific measures like these, executives can get the help they need to make fast, effective decisions based on relevant, objective information — not anecdotal experience or gut reactions. The answer isn't always to be best in class; rather, the goal should be to find the position that makes the most sense for the organization's overall business strategy.

At the same time, cost-cutting initiatives should not be aimed at reaching the low-cost performer level per se. Organizations should determine their operational strategies and the realm of possibilities that balance cost and performance.

The answer isn't always to be best in class; rather, the goal should be to find the position that makes the most sense for the organization's overall business strategy.

Figure 1: Technology industry: 2005–2009
Based on 80 public U.S. hardware and software companies

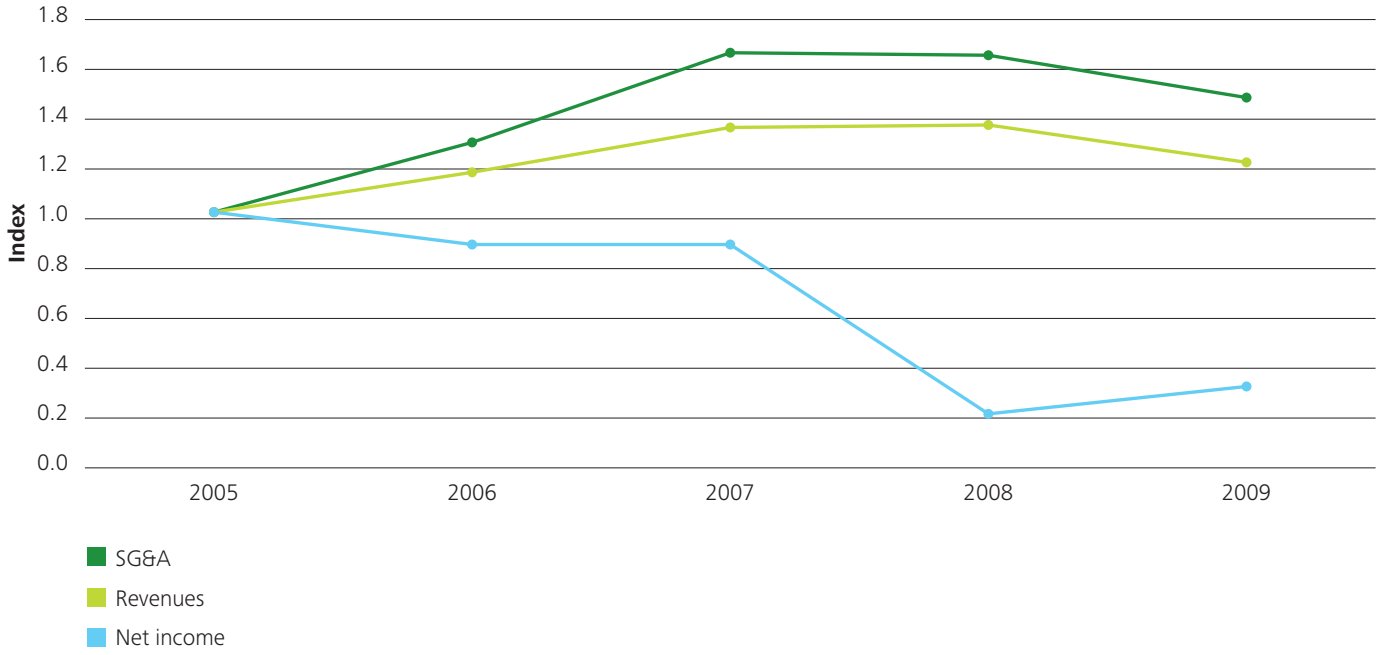
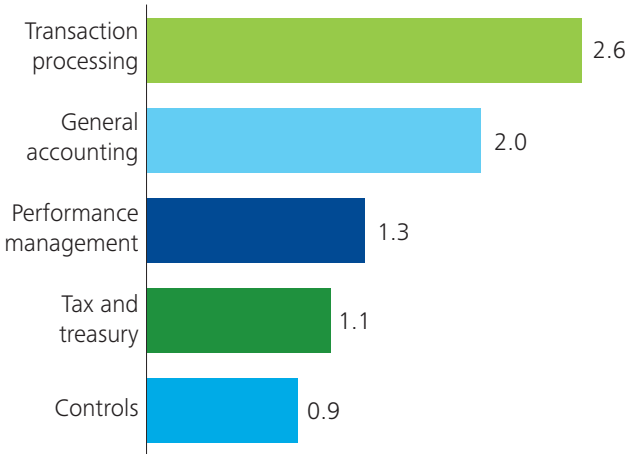


Figure 2: Total process gap ($US M) per $1 billion in revenue



Year-over-year trends

The gap between median and low-cost performers grew larger in the 2010 study

Overall, 2010 low-cost performers reduced costs by 7% since 2009, while the median increased by 3% (Figure 3).

Digging deeper into an examination of process costs, the median's process costs increased by 4%, while the low-cost performers reduced process costs by 11% (Figure 4). For both the median and low-cost performers, cost changes occurred primarily through staff-size changes, as wage rates showed minimal movement.

Low-cost performers likely achieved their savings by moving a higher percentage of their process costs toward outsourcing (10% more compared to 2009). The median, however, reduced its outsourcing allocation; this may explain its cost increase.

Both groups achieved their most substantial process cost reductions in the transaction processing area. While the median decreased transaction processing costs by 20%, they increased performance management costs by 30%. Meanwhile, the low-cost performers decreased transaction processing costs by 25% and general accounting by 22%.

Figure 3: Finance cost as a percent of revenue

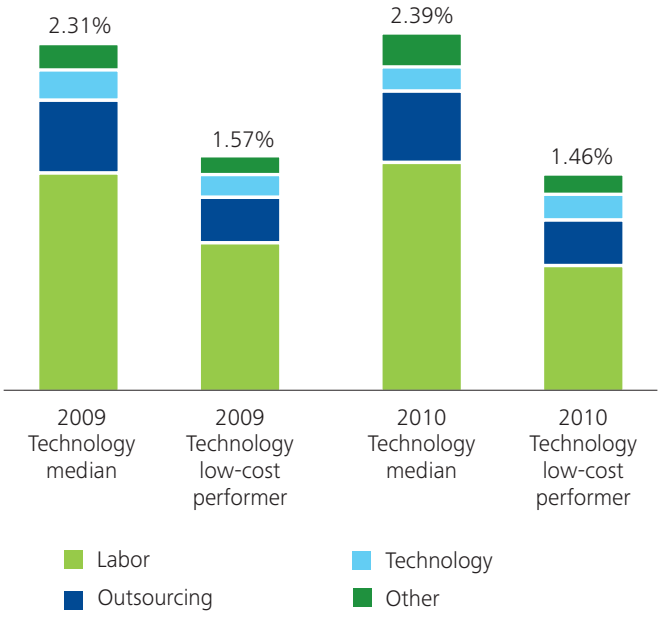
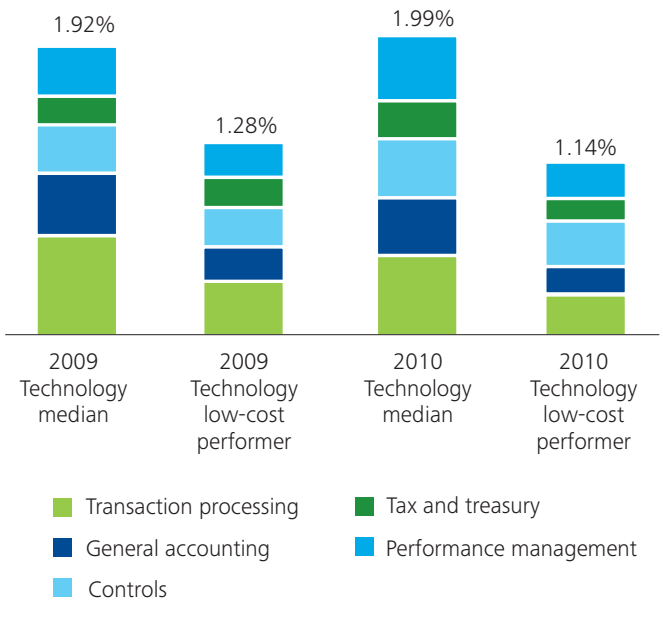


Figure 4: Process cost as a percent of revenue



We also examined costs specific to the hardware and software sectors. Both median and low-cost performers in the hardware sector reduced their total costs year over year; however, process costs tell a slightly different story. The median increased process costs slightly, while the low-cost performers decreased costs by 16% (Figure 5).

In the software sector, total costs increased slightly. Low-cost performers spent more on outsourcing, which increased their total process costs. Meanwhile, the median reduced their outsourcing costs by 9% (Figure 6).

Figure 5: Finance cost as a percent of revenue — hardware sector

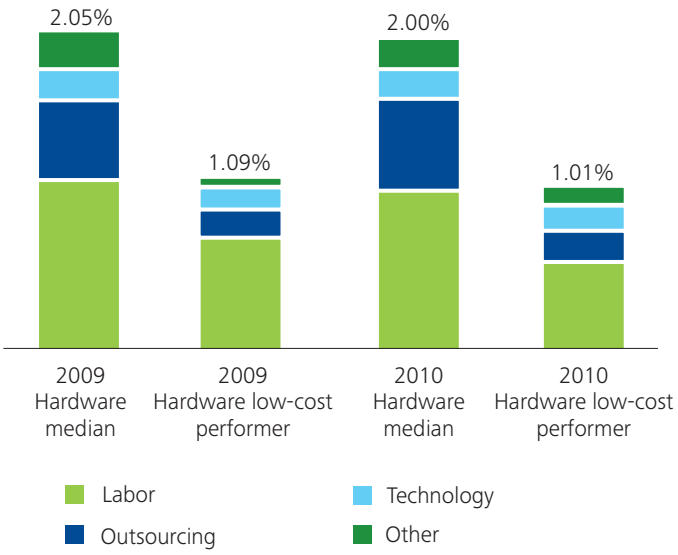
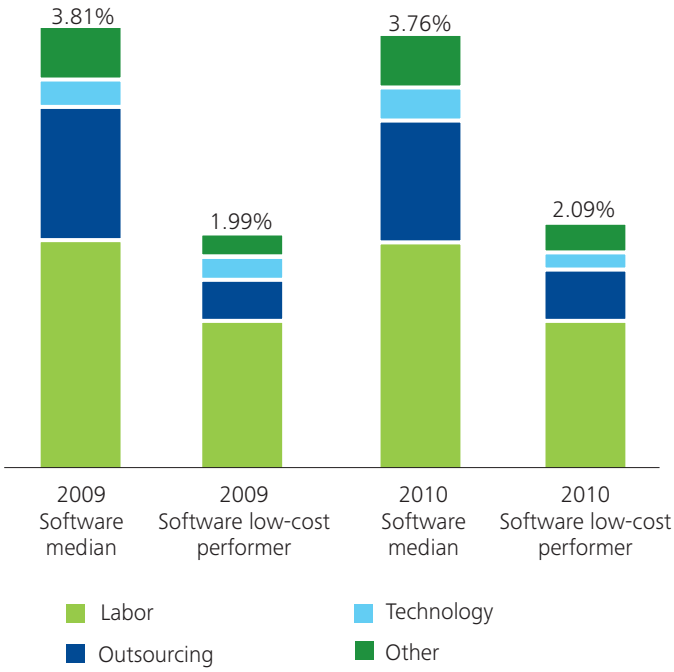


Figure 6: Finance cost as a percent of revenue — software sector



Key themes

2010 study results identify clear themes

Size matters

Executives assume that economies of scale exist in business. But the question often asked is this: "How much of a benefit can I expect?"

According to our data, the hardware sector realizes about 50% larger economies of scale than the software sector. Holding everything else constant, we see a 17% scale impact in total finance costs for hardware companies moving from $500 million to $1 billion in revenue. Software companies can realize a 12% benefit.

Hardware companies moving from $1 billion to $5 billion can enjoy a 47% incremental reduction in total finance costs, while software companies can see a 31% scale impact (Figure 7).

Automation matters

One way low-cost performers earn their rank is through consistently higher levels of automation and a higher proportion of technology investments than their median counterparts.

Low-cost performers handle more invoices automatically and have fewer manual journal entries. In addition, they use proportionally more standard reports than the more manually intensive ad-hoc reports (80% vs. 56% — Figure 8).

Figure 7: Finance cost as a percent of revenue

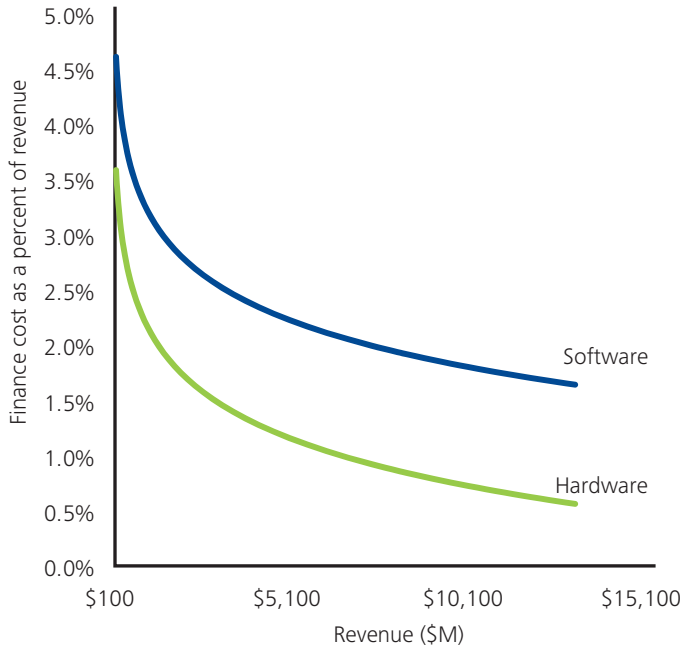
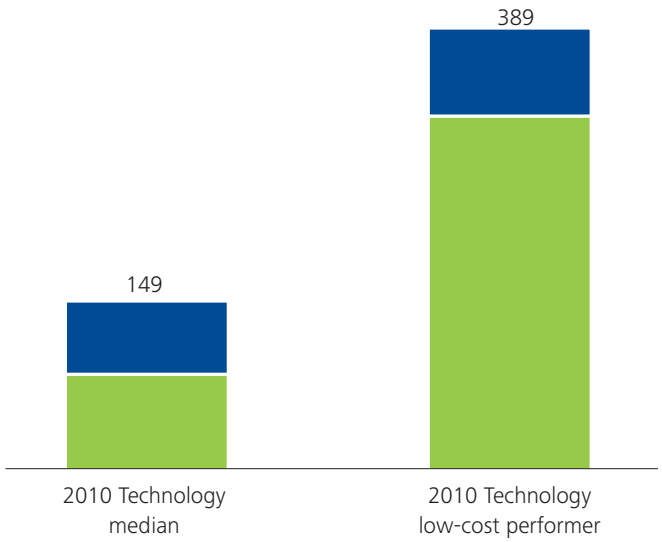


Figure 8: Number of management reports (standard and ad hoc) per $1 billion in revenue



Complexity matters

Median companies consistently have more complex environments than low-cost performers. Some of these are self-induced conditions — operating with three times more general ledger systems and nearly 10 times more active supplier significantly increases complexity.

Complexity "built-in" to the business can also negatively impact costs. As a company operates in more countries, finance costs rise accordingly, according to our data. Finance costs as a percent of revenue for companies that operate in 50 countries, for example, are, on average, between 2.5% and 3.5% higher than those for a company operating in only one country (Figure 9).

Service delivery model matters

Our study shows that an effective use of shared services reduces costs, while outsourcing seems to have the opposite effect. Low-cost performers process more of their invoices in a shared services center; however, total finance cost increases with higher proportions of outsourcing (Figure 10).

Since outsourcing is most often thought of as synonymous with cost reduction, how can that be? It's possible that companies are outsourcing poorly designed, inefficient processes, which only compounds the cost problem (we recommend redesigning processes before outsourcing them.) Another possible explanation is that finance process outsourcing is not as mature as other types (such as technology). That can result in both client and service provider climbing the experience curve together — at the company's expense.

Figure 9: Finance cost as a percent of revenue

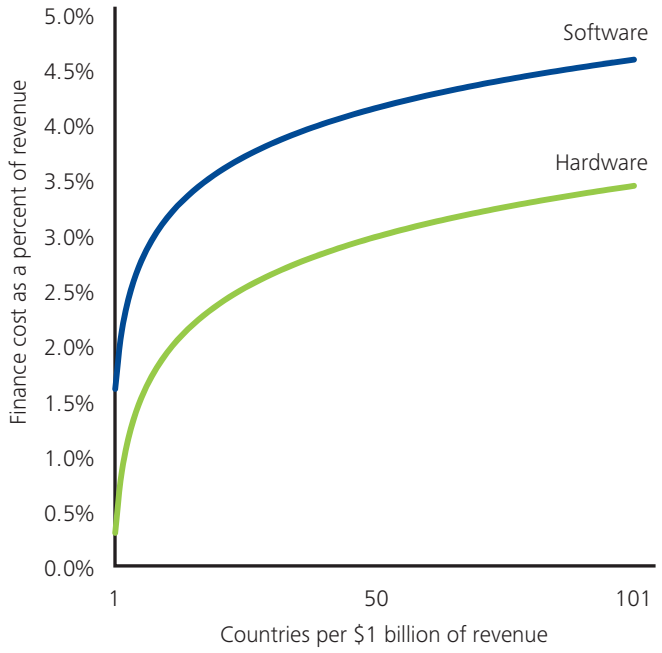
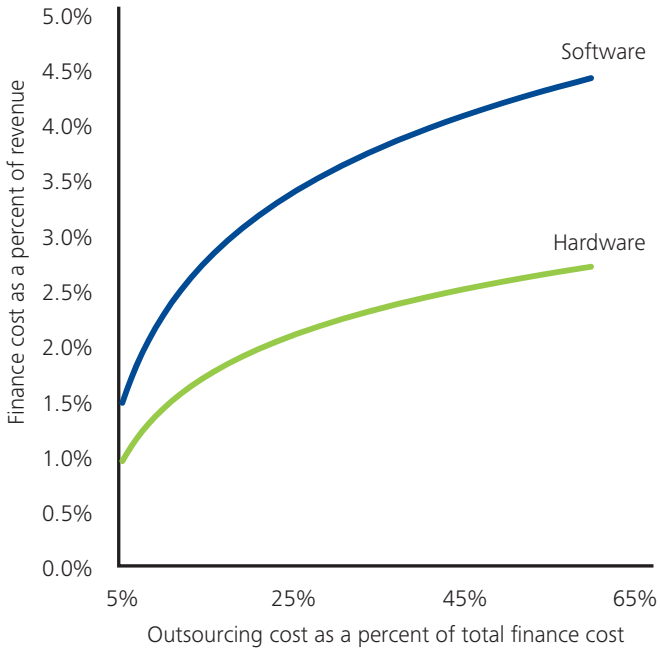


Figure 10: Finance cost as a percent of revenue



Functional analysis

In examining finance cost gaps, transaction processing and general accounting account for 59% of the total

Transaction processing

Low-cost performers have the advantage over their median counterparts in transaction processing because they employ 50% fewer staff that is offset by an 11% higher wage rate. While a reliance on outsourcing results in fewer staff, it also requires more experienced — and more expensive — staff to manage outsourcing relationships (Figure 11).

General accounting and external reporting

Lower staffing levels help give low-cost performers a 52% cost advantage over the median (Figure 12). In the general accounting process alone, low-cost performers have 49% fewer staff, with a 9% lower wage rate.

Figure 11: Transaction processing staff per $1 billion in revenue

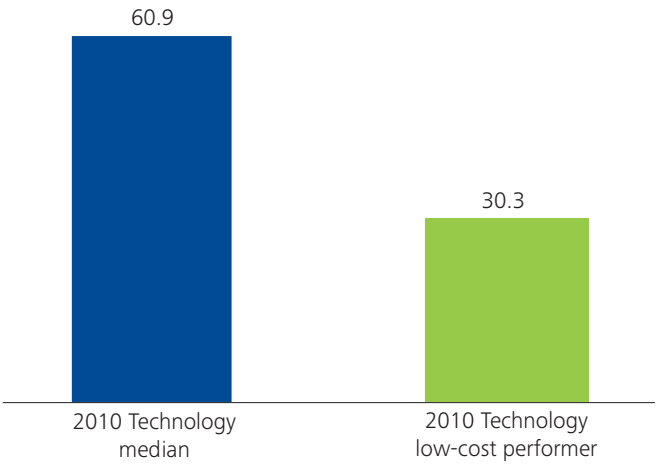
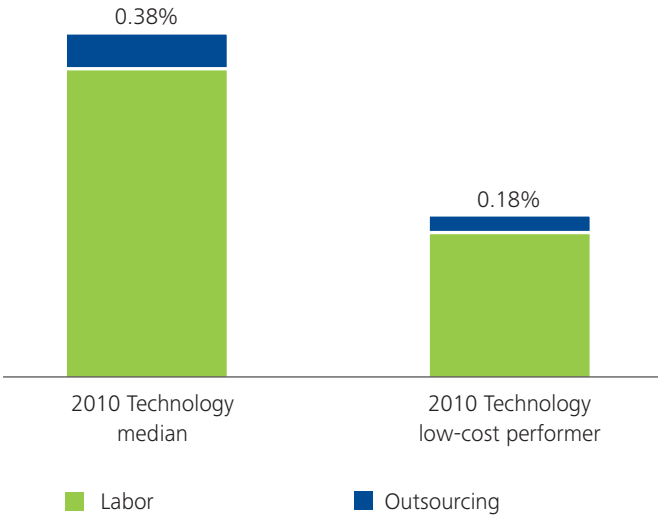


Figure 12: General accounting and external reporting process cost as a percent of revenue



Performance management

Low-cost performers have 46% fewer staff (Figure 14) at a slightly higher wage rate than the median.

Business strategy is a key driver for performance management costs. This area typically includes high-value-add activities, resulting in staff at slightly higher wage rates than the median. For this reason, low-cost performers in performance management are simply that — low cost. Spending more may make the most sense for the organization's business strategy (Figure 13).

Controls

Both median and low-cost performers outsource about 70% of their controls process costs. However, the similarities end there. The median's outsourcing leads to 16% fewer staff, but at a 25% higher wage rate (Figure 14).

Tax and treasury

Low-cost performers make effective use of outsourcing in tax and treasury. They outsource 20% less than the median in process costs, employing 47% fewer staff (Figure 15) at an 18% lower wage rate.

Figure 13: Performance management staff per $1 billion in revenue

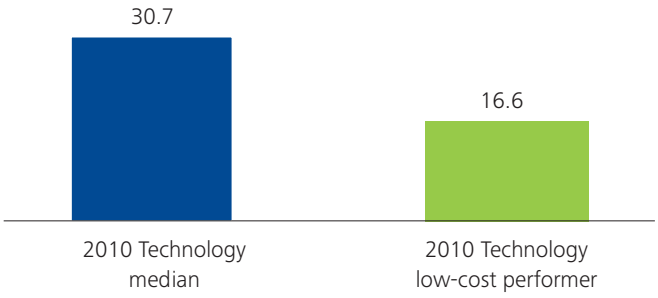


Figure 14: Controls process cost as a percent of revenue

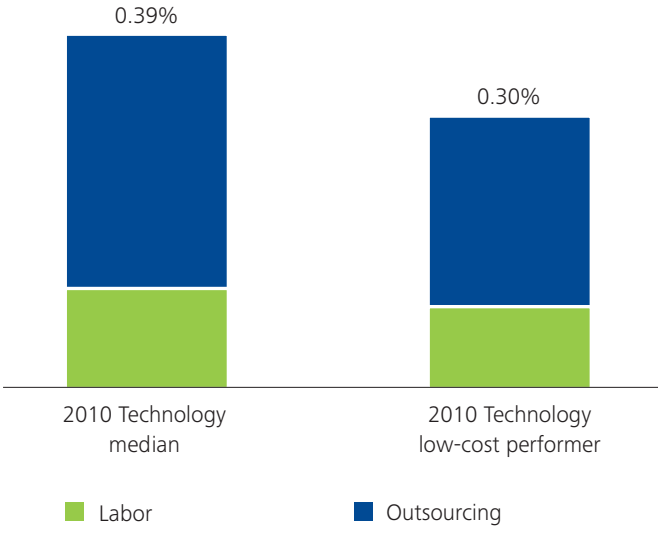


Figure 15: Tax and treasury staff per $1 billion in revenue

Next steps

There is ongoing pressure for finance executives in the high-tech industry to support the needs of the broad organization by playing four key roles:

- Operator: Creating efficiencies and cost effectiveness within finance
- Steward: Getting the books right — accurate, timely and reliable
- Catalyst: Inspiring change and helping create value across the company
- Strategist: Becoming the valued business partner and advisor

In this time of fundamental change, high-tech executives can help their organizations by understanding the industry trends and the demands they place on finance. The increasing consumer focus not only means more customers; it also means more small dollar transactions and a greater need for automation and scale. Companies are beginning to invest for growth, and finance can support this effort by following their lead and focusing on the things that matter most.

More than ever, executives need timely, relevant, industry-specific data to make effective business decisions, assess priorities and develop a plan for improvement in the most critical areas. Through benchmarking, executives can identify and prioritize improvement opportunities. They can also leverage ideas and approaches from effective performers who implement time-tested strategies and practices borne out in the data (Figure 17).

Of course, there is no single answer. Some cost-cutting initiatives are tactical and immediate; others are strategic and long-term. Cost reductions — even dramatic cutting — should reflect a balance of short-, mid- and long-term objectives so executives can effectively lead their companies forward during challenging business cycles.

The increasing consumer focus not only means more customers; it also means more small dollar transactions and a greater need for automation and scale.

Figure 17: Leading companies optimize processes, technology and service delivery across many finance areas

	Types of improvement			Finance process areas				
Case studies	Process integration	Technology improvement	Service delivery	Transaction processing	General accounting	Performance management	Controls	Tax and treasury
Situation: A company's claims and adjustments process in handling returns, rebates, etc., complicated the order-to-cash process. Processes were highly manual, time consuming, prone to error and voluminous — particularly given a growing direct-to-consumer focus. **Solution:** Redesigned processes, deployed self-service, introduced advanced contact center tools, and deflected 15-20% of contacts to automated, self-help channels.	●	●		●				
Situation: Company was aggressively expanding to emerging market locations. Expansions, however, were creating new, mini-finance functions. **Solution:** Finance got in front of expansions with launch of low-cost, "plug-and-play" regional and global delivery centers that could provide majority of finance support remotely, with minimal in-country needs. Avoided significant costs and helped increase speed-to-market cycle time.	●	●	●	●	●		●	●
Situation: A large technology company was refocusing its strategy and needed to significantly reduce costs while maintaining the finance knowledge and skills needed to partner with and support the business. **Solution:** Shifted transaction processing — as well as routine performance management activities — to an outsourcer, freeing retained finance staff to concentrate on identifying higher-value, strategic opportunities.	●		●	●	●	●		
Situation: A large hardware company was struggling to provide timely financial reporting information with its existing processes and resources. **Solution:** Finance identified major risks and related close tasks, standardized those entries, shifted low-risk activities outside the close, and adjusted approaches used for key estimates based on risk/value. Reduced cycle time, leading to an increased focus on value-added activities.	●				●		●	

Approach and methodology

Taxonomy

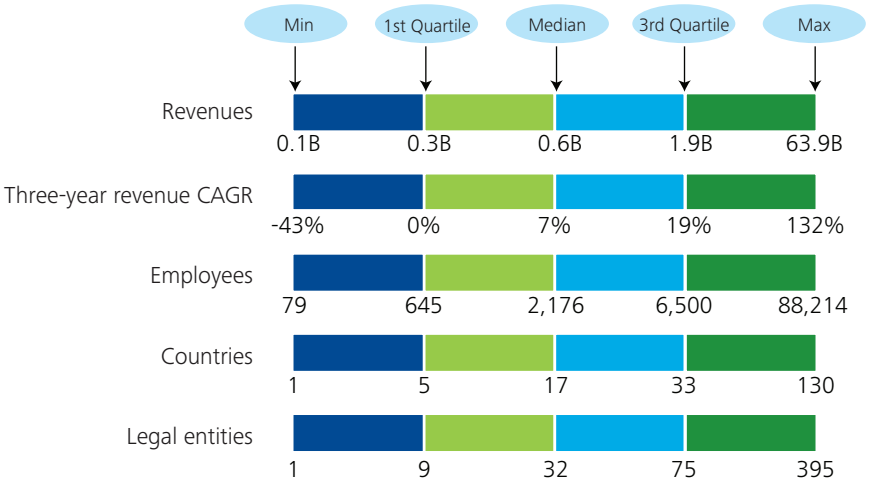
This report is the result of a Deloitte Global Benchmarking Center study of finance process performance specific to the high-tech sector. More than 70 organizations have participated in the study since 2008. For each, we gathered one year of data across 26 processes in five process categories. By following a strict taxonomy, the researchers generated apples-to-apples comparisons necessary for meaningful performance measures:

Transaction processing	General accounting and external reporting	Controls	Tax and treasury	Performance management
• Accounts payable • Accounts receivable • Billing • Collections • Cost accounting • Credit • Fixed assets • Freight payable • Project accounting • Revenue accounting • Travel and entertainment	• General accounting • External reporting	• Internal audit • External audit • Sarbanes compliance	• Income tax • Property tax • Sales and use tax • Treasury • Risk management	• Budgeting capital • Budgeting expense and revenue • Business financial analysis • Financial management reporting • Forecasting

Key definitions:

- Low-cost performers: Represents the first quartile in each of the five process categories*
- Median: Midpoint value of participants
- Total finance cost of the companies in the study:
  - Labor: Fully loaded labor cost (compensation and benefits) of employees, contractors and temporaries
  - Outsourcing: Services provided by third-party vendors
  - Technology: Hardware, software, license fees, and the related support
  - Other: Facilities, supplies, travel, training
- Process cost: Cost of labor plus outsourcing at the companies in the study

Profile of participants:



*Low-cost performers are not necessarily "best in class" along other meaningful dimensions, such as quality, innovation, or customer/employee satisfaction. The benchmarks in this study suggest possible cost-reduction opportunities, which must be balanced against growth strategies.

All study data referenced and presented in this report as well as the representations made and opinions expressed, unless specifically described otherwise, pertain only to the participating organizations and their responses to the Deloitte Global Benchmarking Center study of finance performance conducted in 2010.

Representative participant list

Hardware

Affymetrix, Inc.
Analog Devices, Inc.
Analogic Corporation
Dot Hill Systems Corporation
Extreme Networks, Inc.
Fortinet, Inc.
Freescale Semiconductor, Inc.
Fujimi Corporation
Hitachi Data Systems Corporation
Itron, Inc.
Jabil Circuit, Inc.
JDS Uniphase Corporation
Juniper Networks, Inc.
Kyocera Mita America, Inc.
Logitech Inc.
LSI Corporation
Marvell Semiconductor, Inc.
NEC Electronics Corporation
NetApp, Inc.
Nokia Corporation
Nortel Networks Inc.
Novatel Wireless, Inc.
Palm, Inc.
Polycom, Inc.
Power Integrations, Inc.
Rambus, Inc.
RF Micro Devices, Inc.
RISO, Inc.
Shuffle Master, Inc.
Silicon Image, Inc.
Sonus Networks, Inc.
Sumco Phoenix Corporation
TEAC America, Inc.
Techwell, Inc.
Trippe Manufacturing Inc.
Verigy US, Inc.
Xilinx, Inc.

Software

Art Technology Group, Inc.
Autodesk, Inc.
BMC Software, Inc.
CDC Software
CGI Group Inc.
Compuware Corporation
Deltek, Inc.
DST Systems
Epicor Software Corporation
Fair Issac Corporation
Getty Images, Inc.
Infor Global Solutions, Inc.
Intuit Inc.
JAE Electronics, Inc.
JDA Software Group, Inc.
Lawson Software, Inc.
Logicalis, Inc.
McAfee, Inc.
Merge Healthcare Incorporated
Microsoft Corporation
Netscout Systems, Inc.
Nuance Communications
Open Text Corporation
Oracle Corporation
Pegasystems Inc.
Pioneer North America, Inc.
QAD Inc.
Quest Software, Inc.
RealNetworks, Inc.
S1 Corporation
The Sage Group plc
Solera Holdings, Inc.
Taleo Corporation
Teradata Corporation
Unica Corporation
Vovici Corporation

Peer groups

The following is a list of technology-specific peer groups available for comparison in the Finance Diagnostic for Technology, as of July 2010:

Technology
Technology overall
Technology, small (<$1B in revenue)
Technology, large (>$1B in revenue)
Technology, global giants
Technology, non-manufacturing
Technology, non-manufacturing, small (<$1B in revenue)

Hardware
Hardware overall
Hardware, small (<$1B in revenue)
Hardware, large (>$1B in revenue)

Software
Software overall
Software, small (<$1B in revenue)
Software, large (>$1B in revenue)
Semiconductor (specific to NAICS 3344)
Computer and communications equipment manufacturing (specific to NAICS 3341 and 3342)

In addition, technology companies are represented in the following multiple-sector peer groups:

Cross industry
Cross industry overall
Cross industry, small (<$1B in revenue)
Cross industry, midsize (between $1B and $5B in revenue)
Cross industry, large global (>$5B in revenue)

Manufacturing
Manufacturing overall
Manufacturing, small (<$500M in revenue)
Manufacturing, small (<$1B in revenue)
Manufacturing, midsize (between $1B and $5B in revenue)
Manufacturing, large (>$5B in revenue)

Service
Service overall
Service, small (<$500M in revenue)
Service, small (<$1B in revenue)
Service, midsize (between $1B and $5B in revenue)
Service, global giants (>$5B in revenue)

Performance measures

The study offers a variety of performance measures (sample list below) important to senior-level executives:

Finance overall

- Total finance cost as a percent of revenue (LOTO)*
- Process category cost as a percent of revenue (labor and outsourcing by process category)
- Total finance staff per company revenue
- Finance span of control (ratio of staff to managers)
- Level of maturity of talent management program
- Finance labor costs as percent of revenue
- Finance outsourcing costs as percent of revenue
- Finance technology costs as percent of revenue
- Finance other costs as percent of revenue

Process category costs

- Transaction process labor costs as percent of revenue
- General accounting process labor costs as percent of revenue
- Control and risk management labor costs as percent of revenue
- Tax/treasury labor costs as percent of revenue
- Performance management labor costs as percent of revenue
- Transaction process outsourcing costs as percent of revenue
- General accounting process outsourcing costs as percent of revenue
- Control and risk management outsourcing costs as percent of revenue
- Tax/treasury outsourcing costs as percent of revenue
- Performance management outsourcing costs as percent of revenue
- Total finance FTEs per company revenue
- Finance function fully loaded labor rate
- Staff-to-manager ratio (span of control)

Transaction processing

- Transaction processing process cost as a percent of revenue
- Transaction processing staff per company revenue
- Transaction processing wage rate
- Transaction processing span of control (ratio of staff to managers)
- Accounts payable cost as a percent of revenue
- Percent of accounts payable vendor invoices processed in a shared services center
- Number of vendor invoices per company revenue
- Accountrs receivable cost as a percent of revenue
- Number of customer remittances per accounts receivable FTE (full-time employee)
- Percent of customer remittances posted automatically
- Time and expense cost as a percent of revenue
- Number of expense reports processed per time and expense FTE
- Number of business days from submission to delivery of expense report
- Billing cost as a percent of revenue
- Number of customer invoices processed per billing FTE
- Percent of customer invoices generated automatically

General accounting and external reporting

- General accounting and external reporting process cost as a percent of revenue
- General accounting and external reporting staff per company revenue
- General accounting and external reporting wage rate
- Number of general ledger systems
- Annual number of manual journal entries per company revenue
- Degree of system integration
- Generally Accepted Accounting Principles (GAAP) close process duration in business days (close to earning release)
- Sub-ledger cut-off to close process (business days)

Tax and treasury

- Tax and treasury process cost as a percent of revenue
- Tax and treasury staff per company revenue
- Tax and treasury wage rate
- Number of local jurisdictions
- Effective tax rate
- Number of days payable outstanding
- Number of days outstanding

Performance management

- Performance management process cost as a % of revenue
- Performance management staff per company revenue
- Performance management wage rate
- Budgeting process cycle time (business days)
- Planning done exclusively in automated tool (no, low, medium, high)
- Key performance indicators (no, low, medium, high)
- Monthly management reports (standard + ad hoc) per $1b in revenue
- Number standard reports per $1b revenue
- Number ad hoc reports per $1b revenue

About the Global Benchmarking Center

Deloitte's Global Benchmarking Center (GBC) was established to provide executives with industry-relevant metrics and insight. The GBC delivers this information through ongoing benchmark studies in areas such as sales, general and administrative (SG&A), finance and accounting, supply chain, information technology, human resources, and operations. The GBC has conducted studies in more than 700 global organizations since 2005. These studies are uniquely designed to provide industry-specific insight relevant to multiple functions.

Industry

- Consumer and Industrial Products
  - Aerospace and Defense
  - Automotive
  - Consumer Products
  - Process and Industrial Products
  - Retail
  - Tourism, Hospitality and Leisure
- Financial Services
  - Banking
  - Securities
  - Insurance
- Energy and Resources
  - Oil and Gas
  - Power and Utilities
- Life Sciences and Health Care
  - Health Care Providers
  - Health Plans
  - Life Sciences
- Government
  - Federal Government
  - State Government
  - Local
- Technology, Media, and Telecom
  - Media and Entertainment
  - **Technology**
    - **Hardware**
    - **Software**
  - Telecommunications

Function

- **Finance**
- Information Technology
- Human Resources
- Sales and Marketing
- Indirect Materials
- Corporate Services
- Legal
- Corporate Real Estate
- Supply Chain
- Operations
- Product Development

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Participation in this ongoing study is open to all high-tech companies. For information about participating in this study, visit www.deloitte.com/us/benchmarking, or contact:

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