IBM Institute for Business Value

Enterprise Resource Planning Systems drive cost reduction and efficiency in Finance and Accounting Operations

Benchmark data quantifies the value of integrated software applications

Overview

An analysis of data from 1,200 benchmarking study participants quantifies the benefits an organization can gain through the use of enterprise resource planning systems (ERPs). Benchmarking data shows that Finance organizations that have adopted ERPs experienced as much as 300 percent material improvements in efficiency, and as much as 65 percent reduction in costs associated with performing Finance and Accounting operations.

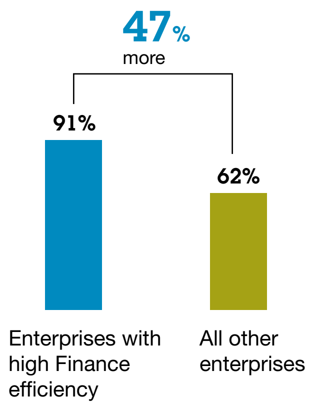
The basis for increasing performance

Organizations operating in today's increasingly volatile and uncertain global business climate are more dependent than ever on effectively partnering with the Finance organization to successfully navigate this complex environment. Over the years, Finance organizations have played an increasing role in developing enterprise strategy and helping achieve tactical objectives to improve operational performance, drive cost reduction, identify new revenue opportunities and forecast future performance. Increasing demands for this type of support have necessitated that Finance transform itself to become more efficient, and in so doing, free up resources – from traditional accounting transaction activities to more resources dedicated to decision support.

Findings from the 2010 IBM Global CFO Study, with over 1,900 participating senior Finance executives, support the notion that adopting a common financial system drives better value, scalability, efficiency and controls.[1] The CFO Study found that a main driver of Finance function efficiency, particularly in accounting transaction processing and operations, is the adoption of common process and data standards. The study found that this can be achieved by addressing three key change enablers:

1. A common ledger and accounting transaction applications that enable and sustain common processes and data
2. An enterprise-wide service delivery model for transactional activities, in the form of shared services, outsourcing or a hybrid combination[2]
3. Global process ownership, which is an essential prerequisite for the transformation to common processes and data.

Common financial applications are an important component of this holistic solution needed to enable higher performance as it drives greater adoption of standards across the enterprise. The end goal here is not just one system with a common chart of accounts, vendor file or stock keeping units (SKUs) – it is also to transform and sustain efficient processes across the value chain. Through system integration, organizations can reach "one version of the truth" in their data, and perform robust and meaningful business analytics. Over 90 percent of enterprises with high Finance efficiency have implemented a common ledger and accounting transaction applications, and show a significantly higher enterprise-wide adoption rate of a standard chart of accounts along with common processes and data definitions and globally mandated standards (see Figures 1 and 2).



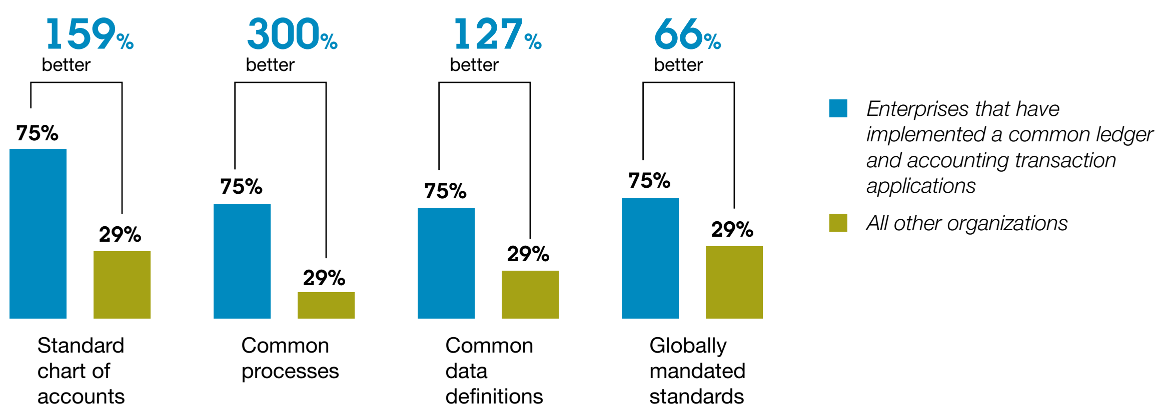
Source: "The New Value Integrator: Insights from the Chief Financial Officer Study." IBM Institute for Business Value. 2010. www.ibm.com/cfostudy

Figure 1: **Implementation of a common ledger and accounting transaction applications.**

A common technology platform reduces costs and drives efficiency

An analysis of data collected by the IBM Institute for Business Value Benchmarking Program provides empirical evidence of the cost and efficiency improvements inherent in implementing an enterprise-wide ERP system. Specifically, the adoption of ERP can be directly associated with lower process costs and faster cycle times across many Finance activities, including:

1. Planning, Budgeting and Forecasting;
2. General Accounting and Reporting; and
3. Finance Operations.



Source: "The New Value Integrator: Insights from the Chief Financial Officer Study." IBM Institute for Business Value. 2010. www.ibm.com/cfostudy

Figure 2: **Impact on standards (Percent adopted enterprise-wide > 75%).**

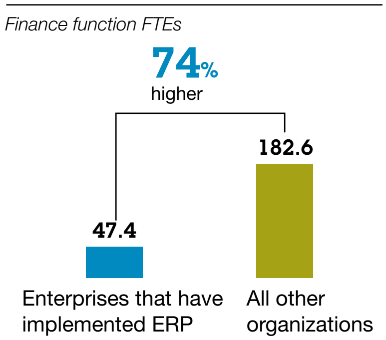


Figure 3: **Number of FTEs for the Finance function per US$1 billion business entity revenue.**

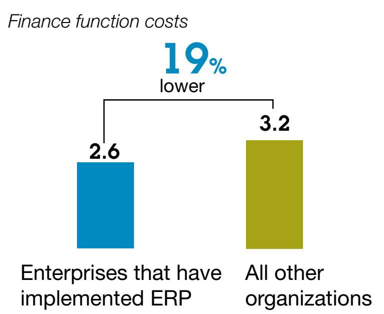


Figure 4: **Total Finance function cost as a percentage of SG&A.**

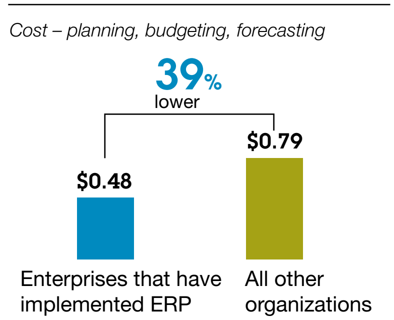


Figure 5: **Total cost of the process "Perform planning/budgeting/forecasting" per US$1,000 revenue.**

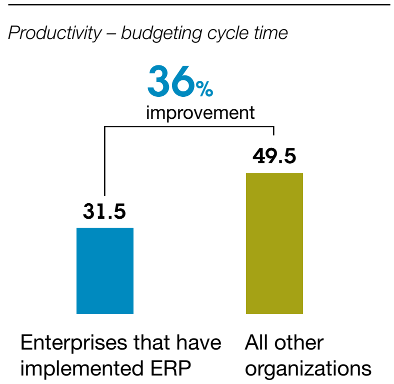


Figure 6: **Cycle time in days to complete the annual budget cycle.**

The approach taken for this analysis was, by design, conservative, since not every enterprise can or necessarily needs to aspire to be "World Class" across the board.[3] We examined the ***median*** performance of two Peer Groups: participants that have implemented an ERP system (ERP Peer Group) and those that have not (non-ERP Peer Group). Our objective was to demonstrate, by comparison of median results within a large set of Finance- and Accounting Operations-specific process areas, that tangible benefits are applicable to a broad population of companies that may not yet have considered adoption of a common technology platform. Overall, organizations that have implemented ERP have 74 percent fewer FTEs for the Finance function per US$1 billion revenue and 19 percent lower Finance function cost as a percentage of Selling, General & Administrative (SG&A) costs compared to all other organizations (see Figures 3 and 4).

We see these benefits across three major areas:

1. Planning, Budgeting and Forecasting

For the planning, budgeting and forecasting process, our analysis revealed that companies using ERP have lower median cost and improvements in the cycle time to complete the annual budget cycle (see Figures 5 and 6). They also show a significant improvement in productivity regarding the collection and manipulation of budget data and higher frequency in preparing financial forecasts (see Figures 7 and 8). This substantiates that organizations that have adopted a common technology platform spend less time collecting and reconciling data, and more time discerning valuable insights and allocating resources.

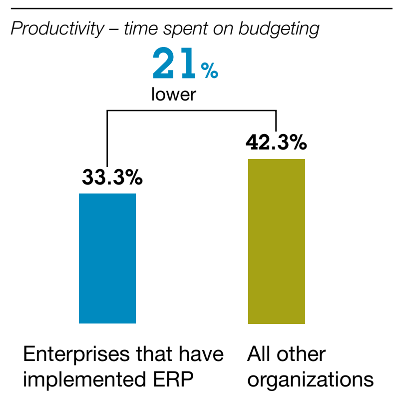


Figure 7: **Percentage of time spent collecting and manipulating budget data.**

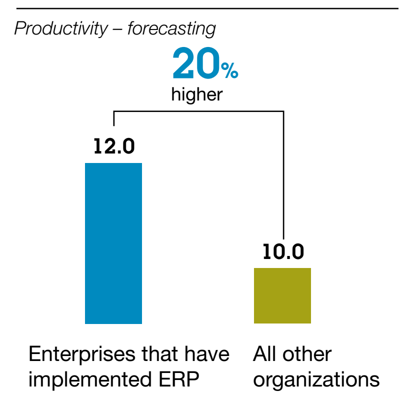


Figure 8: **Frequency per annum that financial forecasts are prepared.**

2. General Accounting and Reporting

Across General Accounting and Reporting, our analysis showed that companies using ERP have lower median FTE counts and faster cycle times. These improvements are further substantiated and explained when performance is examined in more detail, within specific Finance and Operations process areas.

- *General Accounting and Financial Reporting:* Across the entire general accounting and reporting cycle, the ERP Peer Group demonstrated an overall decrease in the number of FTEs per US$1 billion revenue (see Figure 9). The decrease in FTEs for financial reporting was even more substantial (see Figure 10). Adopting a common financial system enables organizations to create a enterprise-wide financial language through consistent data standards across the enterprise, which in turn makes consolidation and roll up of financial data less onerous and enables meaningful, objective comparisons across the enterprise.
- *Accounting close:* The full accounting close cycle was examined, from production of the initial trial balance to the release of earnings. A long-standing objective for many Finance organizations is to reduce the overall accounting period close cycle. Tactical steps to accelerate the close include addressing materiality thresholds for journal entries, automating feeds from sub-ledger systems and simplifying the chart of accounts, to name a few.
- All else being equal across peer groups examined, the adoption of ERP contributes to speed up the monthly and annual close (see Figures 11 and 12). Likewise, the median cycle time to produce flash reports at the business entity level was improved (see Figures 13 and 14).

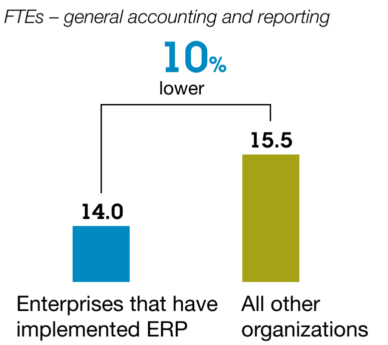


Figure 9: **Number of FTEs for the general accounting and reporting cycle per US$1 billion revenue.**

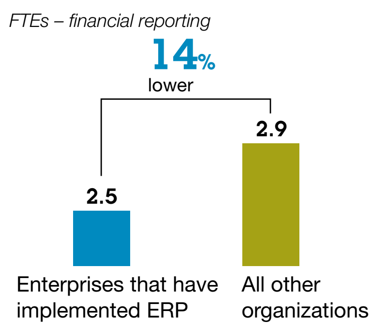


Figure 10: **Number of FTEs for the process “provide financial reporting” per US$1 billion revenue.**

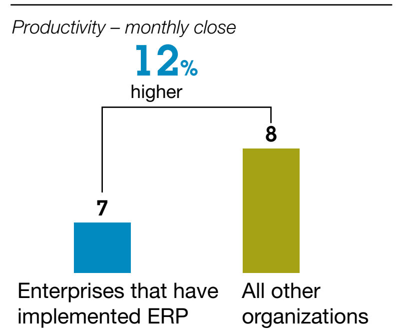


Figure 11: **Cycle time in days to perform monthly close at the business entity level.**

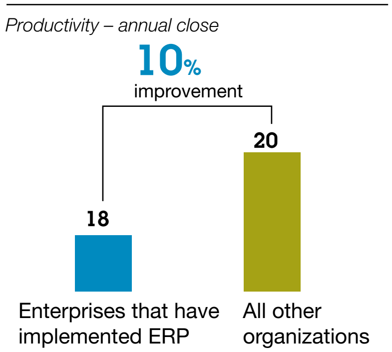


Figure 12: **Cycle time in days to perform annual close at the business entity level.**

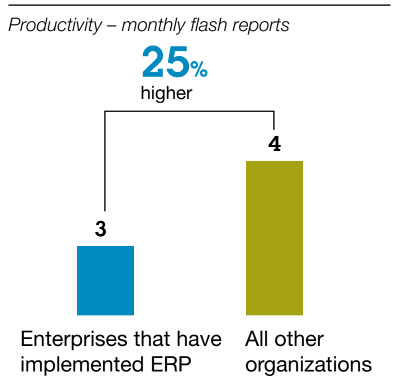


Figure 13: **Cycle time in days to produce monthly flash reports at the business entity level.**

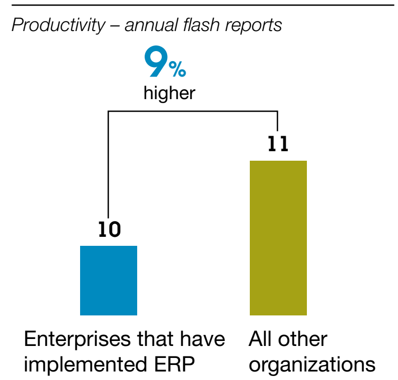


Figure 14: **Cycle time in days to produce annual flash reports at the business entity level.**

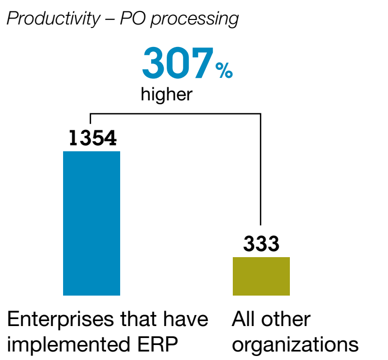


Figure 15: **Number of purchase orders processed per "order materials/ services" FTE.**

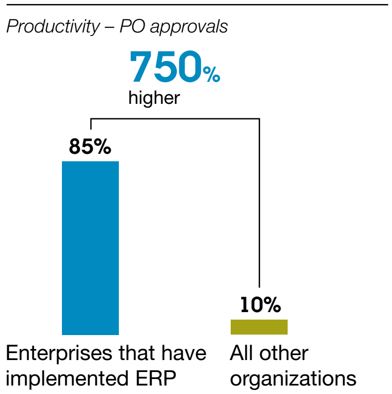


Figure 16: **Percentage of purchase orders approved electronically.**

3. Finance Operations

The scope of Finance Operations includes a broad range of operational accounting activities supporting sales, revenue recognition, cash receipts and cash application (order-to-cash), procurement support and accounts payable (procure-to-pay), payroll services, employee expense reimbursement, and associated controls and reconciliation of the financial transactions related to these sub-ledger activities. For example, two areas that showed significant improvements in cost, transaction volume and productivity were procure-to-pay and order-to-cash.

- *Procure-to-pay:* In the procure-to-pay cycle, the ERP Peer Group showed some of the greatest improvements. The median number of purchase orders processed per "order materials and services" FTE was more than 300 percent greater than all other organizations (see Figure 15). This result was aided by the fact that, not surprisingly, organizations that adopted ERP had a vastly higher percentage of purchase orders approved electronically (see Figure 16).
- *Order-to-cash:* Revenue accounting was examined across two key stages of the cycle; *process customer credit* and *invoice customer*. For the *process customer credit* area, the ERP Peer Group had 39 percent lower personnel costs per US$1,000 cost of continuing operations (see Figure 17). For the *invoice customer* area, the ERP Peer Group similarly outperforms the non-ERP Peer Group (see Figure 18). Total cost includes not only fully loaded personnel cost, but also system, overhead, outsource and other costs for the process.

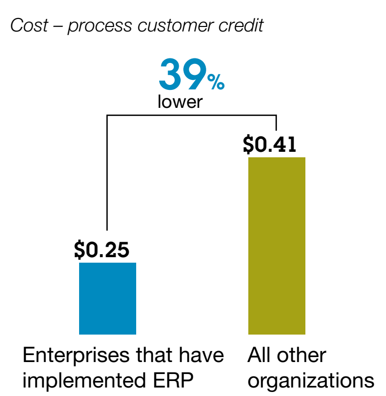


Figure 17: **Personnel cost (including benefits) of the process "process customer credit" per US$1,000 cost of continuing operations.**

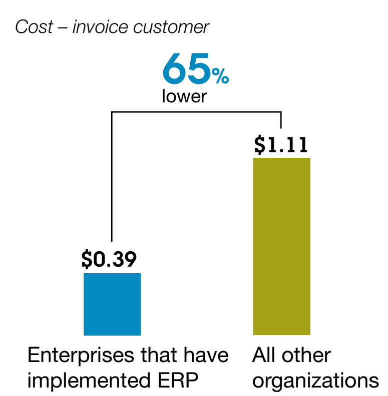


Figure 18: **Total cost of the process "invoice customer" per US$1,000 revenue.**

An ERP system is just one facet of transforming Finance

While the IBM benchmarking data clearly shows an improvement in cost effectiveness and efficiency in the Finance function through the adoption of a common financial system, the implementation of ERP is not by itself the whole solution. ERPs allow organizations to leverage proven processes associated with the ERP, and unify and standardize these processes across the global Finance function. However, the use of ERP is optimized when deployed in conjunction with several other "enablers." Specifically, at least two foundational elements should be in place to achieve the greatest benefits from ERP.

- **Process ownership.** Process and data standards, enabled by a global process owner, serve as "gatekeepers" to maintain common processes. Coupled with process ownership, institutionalizing processes in a common financial system helps enforce and sustain the process and data standards that lead to better Finance efficiency.
- **Optimal service delivery model.** A flexible service delivery model, in the form of shared services, outsourcing or a hybrid combination, will also drive Finance function efficiency by physically and virtually co-locating Finance processes – especially those with large transaction volumes. A properly designed shared services center or well-managed outsource service provider can drive the economies of scale, cost reduction and greater efficiency suggested by the model. Moving to such a service delivery model, like common financial applications, institutionalizes and enforces common processes and data, and hence can improve standards adoption enterprise-wide, leading to Finance efficiency.

These findings provide quantitative validation supporting the value of adopting an ERP system across most General Accounting and Finance Operations functions. In aggregate across Finance, these examples demonstrate significant savings.

The transformation potential based on cost and FTE headcount can provide a rich source of savings to invest in other Finance transformation initiatives, such as those focused on analytics and enterprise support that can make Finance a better, stronger business partner. The improvement in proportion of time the ERP Peer Group spent on collecting and manipulating budget data suggests that common and consistent data standards are an important component to help improve and increase support and partnering with the business to drive better business insight. So, take stock of your current financial systems and evaluate relative efficiencies and inefficiencies to discover both the potential for rationalization and the right level of integration in your organization's IT architecture.

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For more details on Finance function challenges, trends, future insights and new business models, please reference "The New Value Integrator: Insights from the Chief Financial Officer Study" at **ibm.com**/cfostudy and its companion study "Journey to a Value Integrator" at http://bit.ly/olyVMl.

To learn more about the IBM Institute for Value Benchmarking Program, visit **ibm.com**/iibv/benchmarking.

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References

1 IBM Institute for Business Value. "The New Value Integrator: Insights from the Global Chief Financial Officer Study." March 2010. www.ibm.com/cfostudy

2 For more information on the impact of service delivery models, see: IBM Institute for Business Value. "IBM benchmarks demonstrate the effectiveness of Service Delivery Models for Finance and Operations functions." August 2011. http://public.dhe.ibm.com/common/ssi/ecm/en/gbe03424usen/GBE03424USEN.PDF

3 "World Class" represents the top quintile performance (80th percentile) in the distribution of survey respondents.

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