



P A N O R A M A  
CONSULTING SOLUTIONS

# 2019 ERP Report:

People | Process | Technology

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# Introduction

Since 2008, Panorama's ERP consultants have been monitoring the ERP industry for trends relevant to ERP projects and digital transformations. Our analysis has been independent, vendor-neutral and thought-provoking, providing organizations with realistic expectations for their ERP implementations.

This year's report delves even deeper into the data to analyze what these trends mean for organizations now and in the future. The 2019 ERP Report investigates software selection and implementation trends across industries, organization sizes and geographic locations. The report summarizes Panorama's independent research into ERP customers' selection and implementation decisions and their project results.

**The findings from this year's report point to one important concept: ERP projects are most successful when focused on integrating people, processes and technology.**

# Respondent Overview

**Data Collection Timeframe:** January to February 2019

**Number of Respondents:** 241

**Average Annual Revenue:** \$1.7 billion

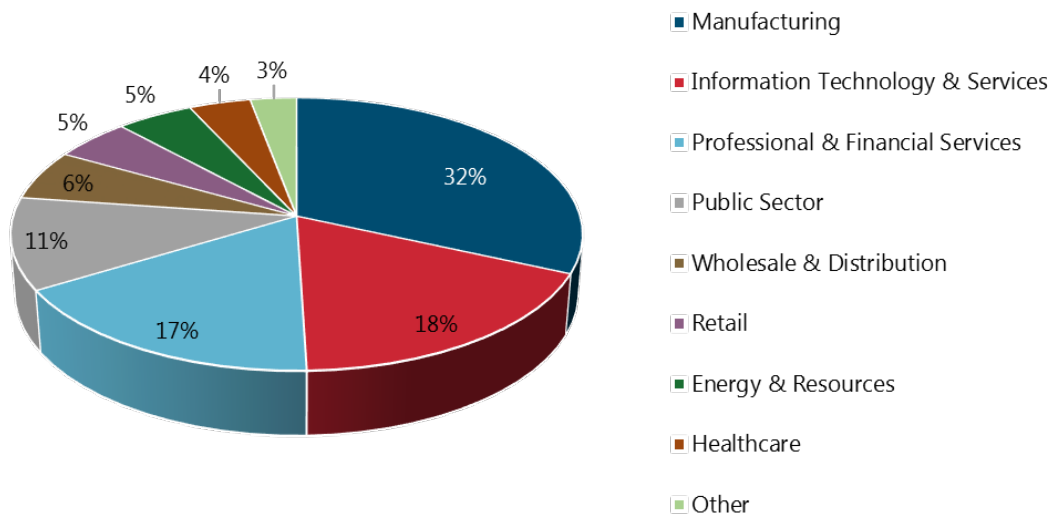
**Average Number of Employees:** 1,080

**Average Number of Software Licenses Purchased:** 356

**Percentage of Multinational Organizations:** 44%

**Percentage of Organizations That Have Completed Implementation:** 44%

## Industries



Percentages do not always equal 100% due to rounding.

# ERP Selection & Implementation

In 2019, organizations continue to experience a more rapid beat of technology development, improvement and sunsetting. ERP systems continue to evolve to address more complex processes in a digital era and fulfill the need for B2B and B2C integrated global commerce.

## ERP Selection

Recently, we have seen organizations of all types and sizes face challenges like rising costs, resource constraints and the loss of subject matter experts as they leave the workforce. It is likely that organizations in our study are facing similar challenges prompting them to replace or upgrade their existing technology. As the application landscape continuously grows and consolidates, organizations are becoming increasingly interested in more integrated and robust technology solutions.

## Selection Best Practices

We have found that during the selection process, using some of the project budget to align the organization and properly document requirements, saves organizations time and money throughout the project, particularly during the design phase of implementation. One of our recent clients saw significant cost savings during implementation by investing in a thorough selection process. The CFO of the organization commented that the investment in selection did not increase the total project budget because money that would have been spent later in the project was simply spent earlier. As we have seen in our project recovery engagements, organizations that do not invest in requirements definition before selecting software often experience budget and timeline overruns as well as low benefits realization.

## The Changing ERP Vendor Landscape

Traditional ERP systems are expanding their footprint to include CRM (Customer Relationship Management), HCM (Human Capital Management), EAM (Enterprise Asset Management), PLM (Product Lifecycle Management), PIM (Product Information Management), PDM (Product Data Management), QA (Quality Assurance), MES (Manufacturing Execution System), Supply Chain Management (SCM), TMS (Transportation Management System) and WMS (Warehouse Management

System), among others. Each of these applications can be deployed as complementary systems to complementary systems to support a postmodern ERP strategy or can be embedded in or integrated with a core ERP system.

Large ERP vendors are acquiring these niche applications once they meet a certain threshold of functionality or market share. Some large PLM/PDM vendors are acquiring Tier 2 ERP systems so they can create more of an end-to-end solution. CRM vendors are expanding functionality by adding call center or field service capabilities. SCM vendors are combining advanced forecasting capabilities as well as real-time inventory status, advanced warehousing and transportation management functionality.

Vendors also are focusing on developing and acquiring technology that enables organizations to digitize their customer interactions. For example, eCommerce platforms are increasingly popular among organizations. When helping organizations improve their customer experience, we ensure their eCommerce functionality fully integrates with their main ERP system because customer data, inventory and vendor master data, dynamic pricing and real-time supply chain information are essential for establishing defined delivery dates.

In addition, vendors are integrating digital tools, such as machine learning or artificial intelligence (AI), robotic process automation (RPA) and the Internet of Things (IoT), to remove manual processes and integrate a more scalable model to meet the needs of customers. By embracing digital transformation, organizations are able to leverage data to improve the customer experience and manage data in real time to make quick decisions.

## Understanding the ERP Vendor Landscape

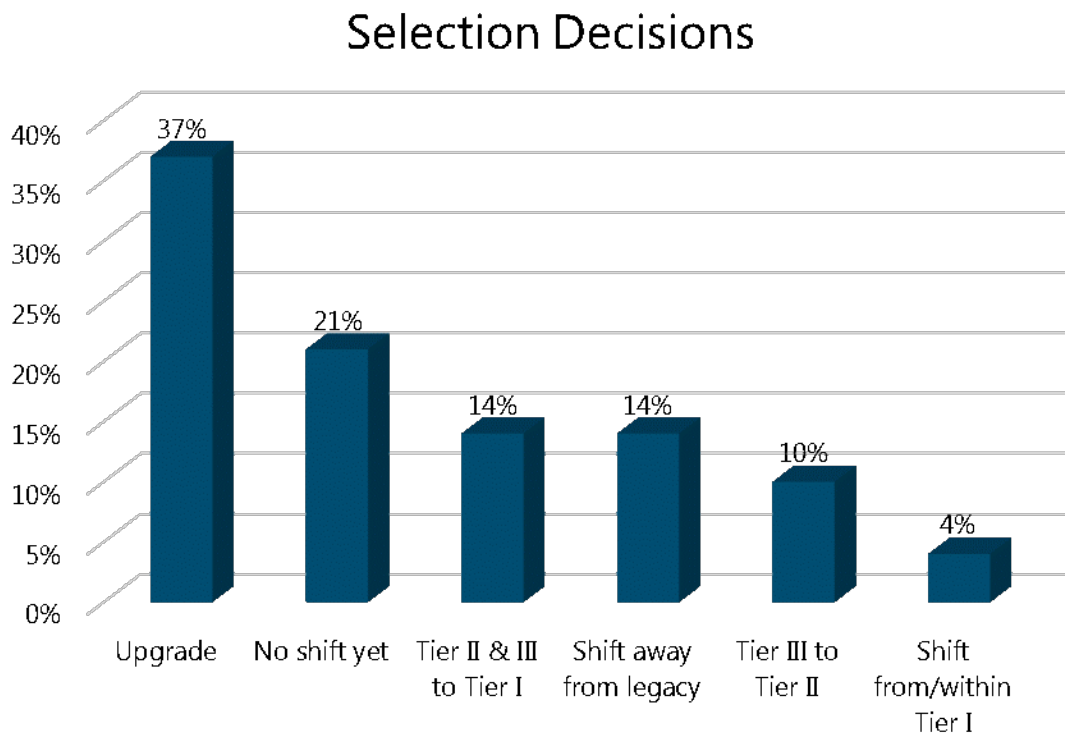
Panorama categorizes ERP systems into Tiers based on factors such as target organization size, vendor revenue, target number of users and other factors, such as functional complexity:

<b>Tier I</b>	These systems are designed for enterprises with more than \$750 million in annual revenue. Most enterprises of this size have complex processes within their operations or complexity around consolidation and entity management. Tier I applications address multiple industries and scalability.	<b>Examples:</b> SAP S/4/HANA, Oracle Cloud Apps, Infor M3, Infor LN
<b>Upper Tier II</b>	These systems typically serve small to mid-sized organizations with \$250 million to \$750 million in annual revenue. Organizations of this size typically serve multiple industries and have multiple business units to manage.	<b>Examples:</b> Microsoft Dynamics 365 for Finance and Operations, IFS, Sage Enterprise Management

<b>Lower Tier II</b>	These systems typically serve small to mid-sized organizations with \$10 million to \$250 million in annual revenue. These organizations typically serve one industry and have a single entity to manage.	<b>Examples:</b> Infor CloudSuite Industrial, Infor CloudSuite Distribution, NetSuite, abas, IQMS, Plex, Microsoft Dynamics 365 Business Central, SYSPRO
<b>Tier III</b>	These systems include point solutions with niche functionality. They're designed for smaller organizations or can be used to supplement a larger ERP system.	<b>Examples:</b> Sage ERP 100, Sage ERP 300, Aptean

## Common Selection Scenarios

Many ERP systems cannot support complex operations. As organizations grow, they need a system that can scale to meet their needs. Oftentimes, these systems just need an upgrade. Other times, these systems are legacy systems that organizations decide to replace. There are many other common selection scenarios that organizations in our study experienced:



Percentages do not always equal 100% due to rounding.

## **Upgrading**

Many organizations have decided to stick with their current vendor with 37% of respondents reporting that they are upgrading to new versions of their current software. In our experience, organizations view upgrades as relatively easy compared to full ERP implementations.

Vendors, like SAP and Microsoft Dynamics, provide many fully-functional products that are also scalable. However, many organizations are running old versions of these products. These organizations have the opportunity to improve their operational efficiency by upgrading their outdated technology.

## **No Shift Yet**

Our study shows 21% of organizations indicated no preference of new software. These organizations may still be in the evaluation process or they may not want new technology at all. When organizations are unsure if they need new technology, we work with them to define better ways to operate so they can increase efficiencies. This typically happens during a merger or acquisition where the firms are not excited about purchasing new software but instead want to eliminate redundancies, improve or meld organizational cultures and increase operating margins.

## **Shifting to a Higher Tier**

Whether shifting from Tier III to Tier II, Tier II to Tier I, or from Tier III directly to Tier I, 24% of organizations in our study are moving to a higher tier ERP system.

Many systems are not robust enough on their own to support an organization's global operations. As a result, some organizations integrate these systems with more functional products. Other organizations completely replace their niche applications with full ERP systems.

### **Selection Advice**

*Executive sponsorship and employee buy-in are essential to a successful selection process. Larger organizations typically have the capital to invest in activities that secure buy-in before selection. However, smaller organizations have limited money and resources as well as minimal ERP implementation experience. As a result, they don't invest in pre-implementation activities or a thorough selection process.*

While industry commentators may be claiming that small ERP vendors are poised to take significant market share from larger vendors, our report shows more organizations moving toward larger vendors rather than the other way around. This has been true in our client experience, as well. Many of our clients view Tier I vendors as less risky because they have proven products and proven product roadmaps.

We see no reason to believe that Tier I vendors will be overtaken by niche vendors. In fact, large vendors are acquiring many of these small vendors. Oracle, for example, is the number one data supplier to brands like Google, Facebook, McDonald's, Coke and Amazon. Vendors like Oracle likely are not going to be overtaken by niche vendors.

## ***Shifting Away From Legacy Software***

Homegrown systems are still very prevalent with 14% of respondents moving away from a legacy system. These systems are not able to integrate large amounts of data and ensure a single source of truth.

Many legacy systems are proprietary systems. Replacing a proprietary system is especially difficult for organizations. Often, a small group of IT resources or one particular resource has built the system and there is no documentation. These IT resources can be resistant to change due to fears about job security.

In our experience, some organizations that grow dissatisfied with their legacy system may want to re-architect or rebuild it rather than replace it. However, we often find that it's better to replace it altogether. Since modern ERP vendors are developing technology to address more diverse needs, organizations that move to one of these systems see many business benefits. "Replacing an application gives you maximum opportunity and flexibility to improve technology, architecture and functionality." Gartner<sup>1</sup>



## Shifting to Another Tier I or Replacing a Component of a Tier I System

Interestingly, 4% of respondents are either replacing a component of their Tier I system to address specific requirements or are changing from one Tier I software to another. In some instances, organizations with tech savvy resources are deploying open source software.

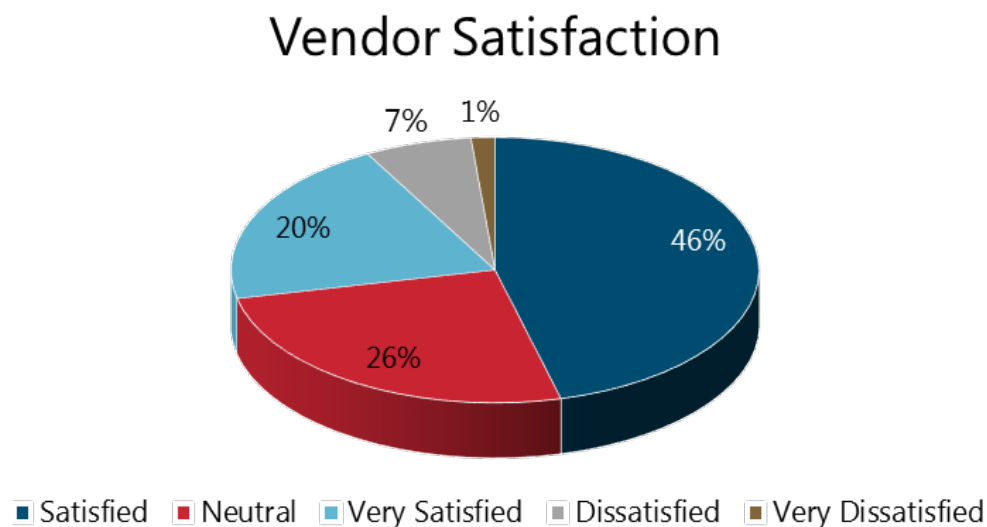
Why are organizations replacing components of their Tier I systems? ERP vendors are continuously developing their software, and specialized software is becoming more capable of handling specific needs.

In the cases where organizations are moving from one Tier I system to another, this often is because the existing system was poorly implemented. While the system may have had robust functionality, it was not fully utilized. A bad experience implementing a particular system tends to taint an organization's view of the vendor providing that system.

## Vendor Satisfaction

Through our experience in recovering troubled ERP projects, we've found that vendor dissatisfaction seems to be driven by poor requirements definition and a lack of organizational alignment before implementation. Before selecting an ERP vendor, organizations should invest time in desired state business design and alignment activities to define their business processes.

Most organizations in our study are satisfied with their choice of ERP vendor:

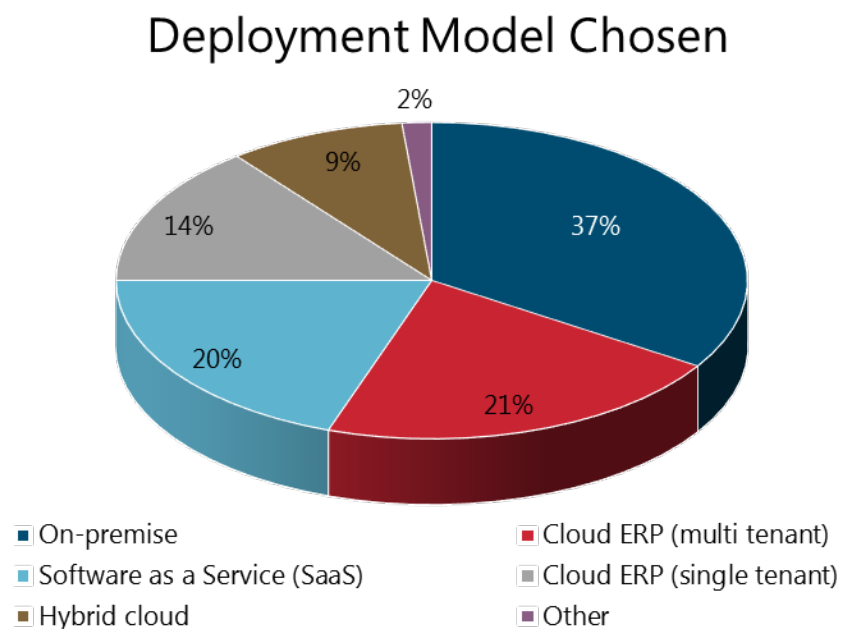


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Most ERP vendors have a combination of direct services and a partner channel. Within a partner channel, there are system integrators, value added resellers, and resellers. It is critical to understand each methodology and approach to client relationships. Each has benefits and drawbacks, but the key to vendor satisfaction is a trusted relationship.

## Deployment Options

When evaluating ERP systems, possible deployment options is an important factor to consider. Cloud ERP software, for example, can only be deployed in the cloud, while other systems have multiple deployment options. Organizations in our study are deploying their software in a variety of ways:



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## On-premise Deployment

On-premise deployment is the most popular choice among respondents. While this software is typically deployed in the physical location of the organization itself, it may not always be hosted there. Some organizations may be hosting on-premise software in the cloud.

Why is on-premise deployment so popular if ERP vendors seem to be heavily promoting cloud deployment? "Vendors are at last softening their tone, realizing that a hybrid or on-premises deployment is better than risking the loss of a customer." - Gartner<sup>2</sup>

We have found that mid-sized and large organizations like the level of control that on-premise deployment offers.

## Cloud Deployment

Another popular deployment option among respondents is multi-tenant cloud, which is more popular than single-tenant cloud. A multi-tenant cloud environment allows organizations to share computing resources in a public or private cloud. This is the preferred deployment model for most cloud applications.

A single-tenant cloud environment is similar but allows the organization greater control over the environment. While software is deployed in a private cloud, it is hosted in the cloud provider's ecosystem allowing easier integration with the provider's other products within that ecosystem. Many of our clients are more interested in single-tenant cloud because these clients generally have complex processes. While these single-tenant systems may have higher costs, they are more flexible.

Whether organizations are considering a multi-tenant or single-tenant environment, they often are attracted to cloud deployment because it is perceived as having a lower total cost of ownership than on-premise deployment. While we have seen cloud deployment options for traditional ERP keep software and implementation costs reduced for smaller firms, cloud deployment is often more expensive than on-premise in the long term.



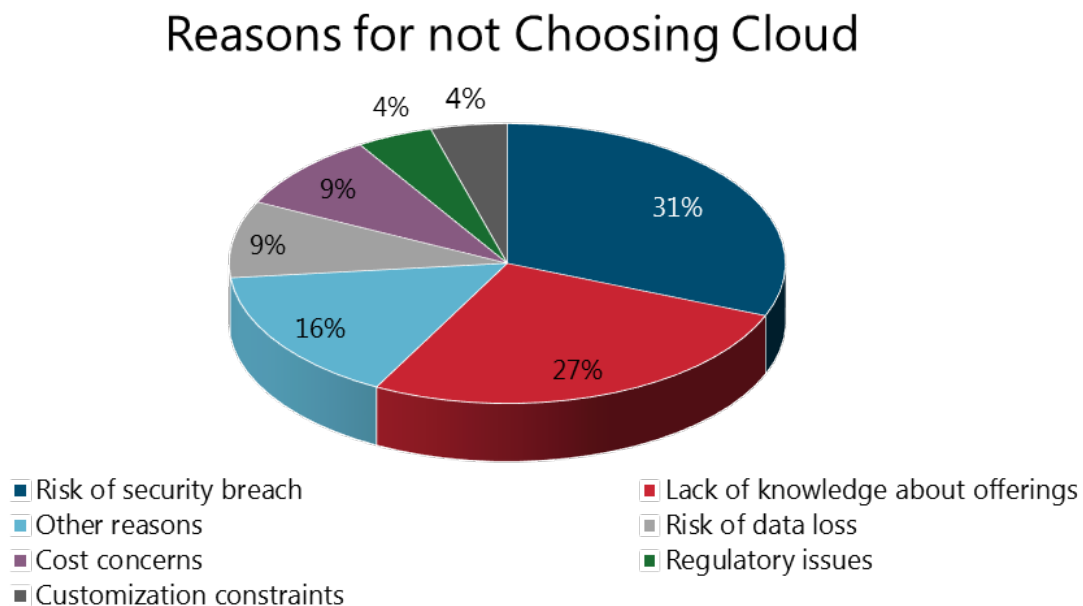
## What About Hybrid Cloud?

In a hybrid cloud scenario, organizations host some applications on-premise – or in a private cloud and other applications in a public cloud environment. Only 9% of organizations in our study are choosing this deployment model.

We've found that many organizations have misunderstandings about hybrid deployment. They worry that the management of multiple systems may be difficult. However, with proper integration, this is not the case. In addition, many solutions are pre-packaged as hybrid solutions, so they require no integration and can be managed centrally.

## Reasons for not Choosing Cloud Deployment

Among those organizations that are not deploying their software in the cloud, common reasons include fear of security risks and lack of knowledge about cloud offerings:



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## Cloud Misconceptions

Many organizations do not realize how vigilant cloud ERP vendors can be when it comes to security. Cloud vendors are extremely vigilant because they know they are popular targets for security breaches.

Another common misconception about the cloud is equating cloud ERP software with cloud hosting. Modern cloud ERP systems are not just on-premise systems hosted in the cloud. They are systems that are built in the cloud and hosted in the cloud. Unlike cloud-hosted on-premise systems, true cloud ERP systems do not require upgrades since the provider updates the software on a regular basis.

## Implementation Approach

There is no easy way to implement an ERP system because the implementation process is a disruptive undertaking for any organization. It requires steady leadership, significant resource investment, the right system integrator as well as a detail project plan and communication strategy. Ultimately, ERP success requires a thorough analysis and integration of people, processes and technology.

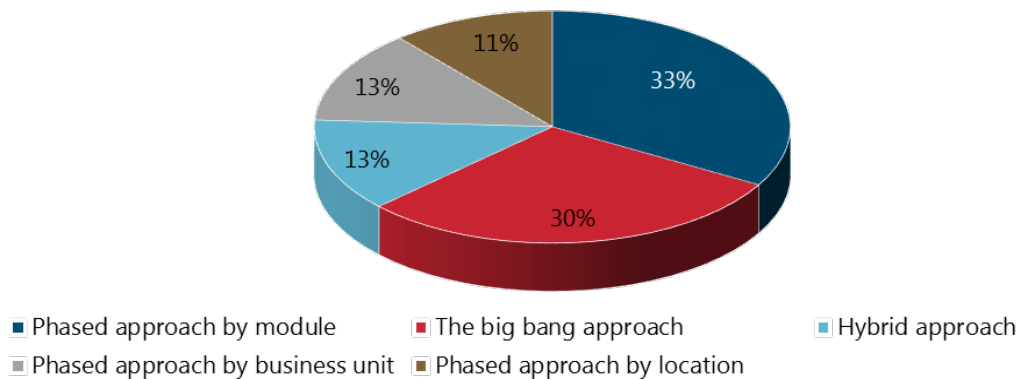
Before implementation, project teams must examine their organization's business processes to determine the most effective way to implement the system. There are several implementation approaches to consider:

- Phased Approach
  - › by module
  - › by location
  - › by business unit
- Hybrid Approach
- Big Bang Approach

## The Phased Approach

As shown on the following page, the most popular implementation approach among respondents is implementing ERP in phases by module.

## Implementation Approach



Percentages do not always equal 100% due to rounding.

The average annual revenue of organizations in our dataset is \$1.7 billion, which is large enough to warrant a phased implementation. This makes sense for organizations of this size because going live with all modules, departments and locations at once can be riskier to a large organization than a smaller organization.

### Phasing by Module

Phasing an implementation by module allows the organization to concentrate on one function of the business at a time. This is beneficial from a people and process standpoint as it gives employees more time to learn the software and enables quick wins. This allows the organization to make adjustments as it learns how much time it takes to implement each module and train employees within each function.

#### **Data Migration Tip**

*If data is currently being manually transferred between legacy modules, the organization may be able to implement a new module and follow a similar manual transfer process between the newly implemented module and a legacy module, enabling a phased implementation by module. Even if the data transfer is currently done electronically, it may be possible to borrow the logic used to transfer between legacy modules and utilize it to transfer data between the legacy system and the new ERP system.*

The challenges of using the phase-by-module approach include:

- Since some of the organization will be on the legacy system and some will be on the new ERP system, temporary integrations or data transfer mechanisms must be created. These integrations may be time consuming to build and test, and they may distract from the overall process of implementing the system. In most cases where interfaces are developed for a phased implementation, the labor to develop these interfaces is discarded when the full implementation is complete.
- When part of the organization is still using the legacy system, the organization will have limited ability to use all of the features and capabilities of the new software. Many features may be dependent on data that is created in one of the future modules of the ERP but is not supported in the legacy application.

## ***Phasing by Business Unit***

Our large, multinational clients tend to implement in phases by business unit instead of by module because they like the fact that each business unit can be managed as a separate entity.

One of our recent clients began their phased implementation with the business unit that was the most enthusiastic about the implementation and had a clear vision of how the software could enable their local work strategy. This served as a catalyst by energizing the rest of the organization and facilitating project buy-in.

Phasing by business unit simplifies the number of temporary interfaces. Each business unit that goes into the new ERP can use all of the new features and capabilities since their business unit is entirely on the new system. This also paves the way for making adjustments to processes or integrations before moving on to the next business unit, ensuring a progressively more efficient implementation with each phase.

With one business unit on the new system and the remaining business units on the legacy system, there is still a financial consolidation process necessary. However, financial consolidation is usually simpler than trying to integrate separate modules of an ERP system.

## **The Big Bang Approach**

Another common implementation approach among respondents is the big bang approach. In this scenario, organizations go live with all modules and offices at the same time. This is a common approach for implementations involving only one or two business units. For large implementations involving multiple business units, the big bang approach is less common since it's risky to have multiple business units simultaneously go-live on a new system that could be volatile.

While it is challenging to support the entire organization during a big bang implementation, there are many advantages:

- There is reduced need to do a temporary integration between a new module and a legacy module. All of the business unit's data is transferred to the new system during the cutover. The ERP system can function as intended since the entire system provides cohesive features and capabilities. No new interfaces need to be developed between the legacy module and the new ERP system.
- Data can be immediately shared throughout the organization. The organization can begin reporting and analyzing data from the entire organization, not just one module or one business unit.

## The Hybrid Approach

Some organizations may prefer a hybrid implementation approach. This approach combines several different phasing approaches based on an organization's unique needs. It's important to carefully consider different phasing options during implementation planning and obtain buy-in from all business units.

# Strategic Alignment

When implementing ERP software, a clearly-defined digital strategy is essential. Executives and middle management should be aligned around the scope of change as well as what benefits need to be achieved to improve the organization's competitive advantage. Alignment is also necessary between people and processes and the new technology.

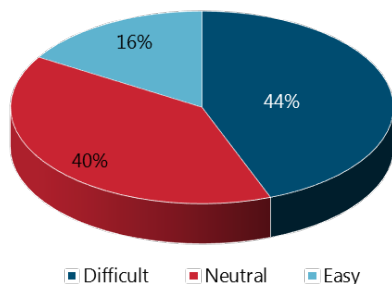
## People & Processes vs. Technology

Organizations should first have a clear vision for their corporate strategy and prepare their people and processes to support that strategy before determining what technology to implement. During client engagements, we focus on creating a solid people and process foundation first, which is recommended before going through selection. This ensures organizations receive the most benefit from technology.

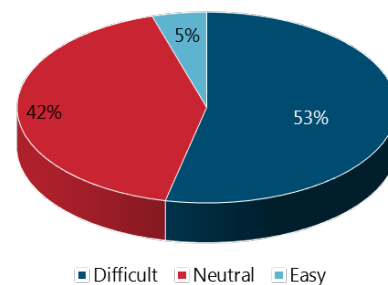
## Technical Aspects are Easier Than People and Process Aspects

Of those organizations that have completed implementation, the percentage that found the technical aspects of their projects easy is higher than the percentage of organizations that found the process change and organizational change aspects easy:

Difficulty of Technical Aspects



Difficulty of Process Change & Organizational Change



Percentages do not always equal 100% due to rounding.



### ***People Naturally Resist Change***

*Organizational changes are difficult because people naturally resist change. Employees may refuse to learn new processes, or they may speak negatively about the project amongst coworkers.*

*The most difficult part of change management is identifying and eliminating the barriers preventing employees from using new software. This involves extensive communication and training aimed at developing new organizational digital competencies.*

Technical aspects of implementation, such as data conversion, are by no means easy, but compared to change management, they can be relatively painless if the organization takes the time to prepare. We recommend identifying business process owners, business sponsors and change leaders willing to participate in the project's success.

We often must educate our clients about the importance of pre-implementation planning. For example, if an organization does not spend time cleansing and migrating their data long before implementation, it may find the technical aspects of implementation quite difficult.

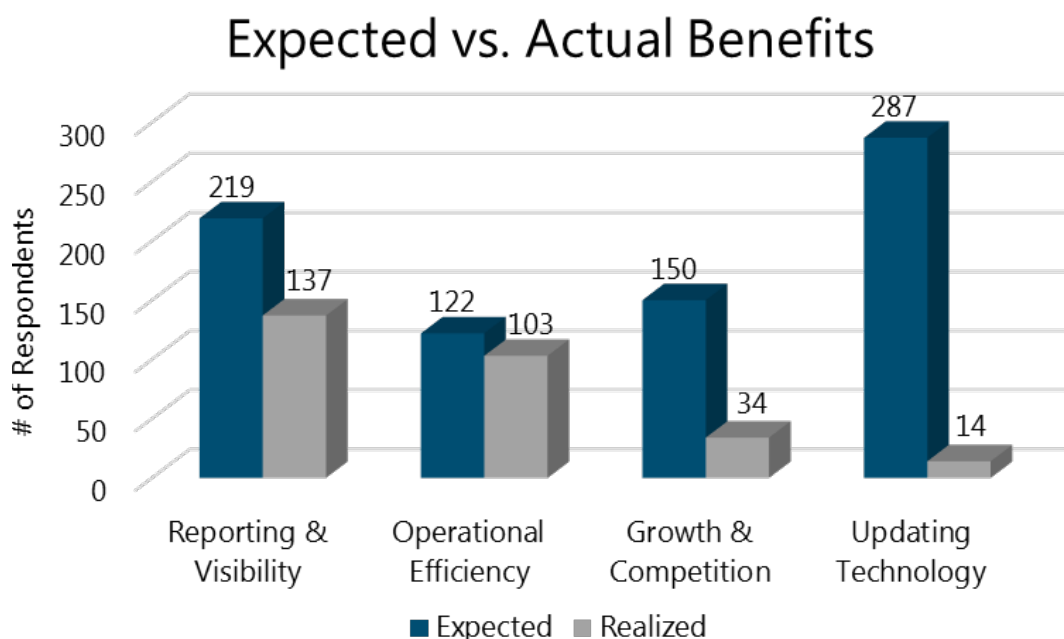
Organizations must not let technology challenges distract them from the people and process aspects of implementation. Successful ERP implementations are those that focus on using digital technology to enable continuous improvement of operating processes and business models while helping employees develop digital competencies.

## Expected vs. Actual Business Benefits

Organizations are often enamored with technology, and ERP projects are usually initiated by the IT department. While technology is certainly a powerful contributor to business benefits, technology by itself does not create benefits.

A recent client had many product quality issues and executives believed that by implementing a better ERP system, they could solve this problem. We were hired to help the organization select an ERP system but decided to conduct a small assessment and found that employees did not have job descriptions or clear processes across the supply chain. As a result, there were no clear process owners and no way to hold anyone accountable. We recommended that they align the organization, create clear processes and remove redundancies to implement best practices from an operational perspective. Once the organization had clear processes, employees felt more comfortable and had higher job satisfaction. Only then did we work with the IT department to identify which ERP system would enable workflows for best-in-class product quality.

An exclusive focus on technology may be one reason many organizations in our study are not achieving the benefits they expect. In fact, there is a significant disparity between the types of reasons organizations implement ERP and the types of benefits they realize:



## Updating Technology

While technology-related reasons were the most common reasons organizations implement ERP, few organizations realized benefits in this area.

Expected Technology-related Benefits:	Realized Technology-related Benefits:
<ul style="list-style-type: none"> <li>To replace an old ERP or legacy system</li> </ul>	<ul style="list-style-type: none"> <li>Reduced IT maintenance costs</li> </ul>
<ul style="list-style-type: none"> <li>To better integrate systems across locations</li> </ul>	<ul style="list-style-type: none"> <li>Integration of business operations/ process</li> </ul>
<ul style="list-style-type: none"> <li>To appease the parent company or other stakeholders</li> </ul>	

While technology-related reasons are good reasons to replace ERP software, they should be accompanied by business-focused motivations – such as improving customer experience – if the organization hopes to maximize business benefits.

Legacy systems are often implemented with a technology-focused mindset and do not integrate well with newer systems. Many organizations decide to replace their legacy software because they want a single platform with real-time data that can provide a single source of truth.

With these goals in mind, organizations can increase their competitive advantage, execute their strategy and build digital business capabilities.

Another possible reason organizations are replacing their legacy systems is they are expensive to maintain. When these systems are replaced, organizations typically see a reduction in maintenance costs over time. However, this benefit can take several months to realize, which may be why few organizations are indicating that they realized this benefit.

Many of our manufacturing clients are replacing legacy systems. In our experience, legacy manufacturing execution (MES) systems do not integrate well with other applications. Replacing a legacy MES system can remove operational silos and increase cross-functional collaboration.

## Reporting and Visibility

Reporting-related benefits are the most common benefits organizations are realizing. However, not all the organizations who anticipate these benefits realize them.

Expected Reporting-related Benefits:	Realized Reporting-related Benefits:
<ul style="list-style-type: none"><li>• To improve access to real-time data</li></ul>	<ul style="list-style-type: none"><li>• Availability of data</li></ul>
<ul style="list-style-type: none"><li>• To ensure reporting/regulatory compliance</li></ul>	<ul style="list-style-type: none"><li>• Improved data reliability</li></ul>
<ul style="list-style-type: none"><li>• To make employee jobs easier</li></ul>	<ul style="list-style-type: none"><li>• Controls for compliance</li></ul>
<ul style="list-style-type: none"><li>• Better informed decision-making</li></ul>	
<ul style="list-style-type: none"><li>• Better visibility into operations</li></ul>	

While access to real-time data is an important benefit to anticipate, focusing on this goal alone may make it difficult to achieve. Organizations must focus on additional goals that enable real-time data.

For example, a better way to improve access to real-time data may be focusing on goals such as increasing process efficiency and improving the customer experience. When organizations define these goals, they ensure all stakeholders are aligned around the desired outcome. This in turn provides well-designed customer-focused processes, increasing efficiency and enabling data insights.

Defining goals provides a foundation for selecting a system that can support the desired state.

### ***Accessing Real-time Data***

*When organizations need real-time data, they should invest in business intelligence and automation. These capabilities are part of most modern ERP systems. Older ERP systems are great at organizing and collecting data, but in today's world, organizations need systems to perform analytics and live reporting.*

# Operational Efficiency

While organizations generally believe they will gain operational efficiency, few organizations truly define these benefits before embarking on this journey. This leads to fewer organizations realizing efficiency-related benefits.

Expected Efficiency-related Benefits:	Realized Efficiency-related Benefits:
<ul style="list-style-type: none"><li>• To improve business performance</li></ul>	<ul style="list-style-type: none"><li>• Improved productivity and efficiency</li></ul>
<ul style="list-style-type: none"><li>• To standardize global business operations</li></ul>	<ul style="list-style-type: none"><li>• Standardized operations</li></ul>
<ul style="list-style-type: none"><li>• To reduce working capital</li></ul>	<ul style="list-style-type: none"><li>• Reduced direct operating and/or labor costs</li></ul>
	<ul style="list-style-type: none"><li>• Less duplication of effort</li></ul>

Failing to outline an expected benefit usually means organizations will not realize it because they cannot hold people accountable or ensure the right activities are included in the project plan.

## Process Standardization

*Many of our clients are implementing ERP to standardize operations across business units. However, few organizations in our study cited this as an impetus for their ERP implementation. This most likely is related to the fact that less than half of respondents indicated their organizations are located in multiple countries.*

We've worked with many organizations wanting to free employees from repetitive efforts so employees can spend more time on innovation. While this is a common motivation for implementing ERP, many organizations do not formally outline specific goals related to it. Organizations must ensure clarity and alignment around efficiency goals before selecting ERP software if they hope to free up resources to make higher-level contributions.

The only way to achieve significant efficiency gains is by defining process improvements and measuring key performance indicators (KPIs) throughout the project. These goals should be specific and measurable. For example, if an organization wants to decrease cycle time, they should document how long the process takes in the current state and how long they want it to take in the future state.

## Growth and Competition

These types of benefits are elusive to organizations in our study. Many more organizations anticipated these benefits than realized them.

Expected Growth-related Benefits:	Realized Growth-related Benefits:
<ul style="list-style-type: none"><li>• To position the company for growth</li></ul>	<ul style="list-style-type: none"><li>• Improved lead time and improved inventory levels</li></ul>
<ul style="list-style-type: none"><li>• To better serve customers</li></ul>	<ul style="list-style-type: none"><li>• Improved interaction with customers</li></ul>
<ul style="list-style-type: none"><li>• Because other companies have ERP</li></ul>	<ul style="list-style-type: none"><li>• Improved interaction with suppliers</li></ul>

Growth-related goals should be clear and actionable so each division understands their role in supporting the organization's goals. For example, a clearly-defined goal might be, "To produce 2,000 gaskets per plant per day and be able to ship within 24 hours." This is a goal that division managers can analyze and pursue. It also is a clear objective for a system requirement.

However, anticipating benefits does not always mean the organization will realize them. As mentioned earlier, there are intermediate benefits organizations must achieve to enable certain benefits.

While improving the customer experience is a great goal to define, organizations must define additional, related goals to enable this high-level benefit. For example, organizations should outline specific data insights they need for improving their customer intelligence.

Most of our clients share a common mantra of "improving customer service," but this is defined differently within each organization. The customer is not just the end consumer (in B2C organizations) or other businesses (B2B) but contains aspects within each functional area of an organization. For example, sales people have many "customers" inside a company consuming their data. Operations can be a customer of sales; finance can be a customer of operations and so forth. These customers of information need accurate, real-time data.

Better customer service starts internally, and eventually, the end customer is reached. Whether it be internal or external, all organizations should be looking to serve their customers better using technology as the enabler.



## ***Benefits Realization Timeframe***

***11 months for SMBs***

***7 months for large enterprises***

## **How Long Does it Take to Realize These Benefits?**

It takes an average of 11 months after go-live for SMBs and 7 months after go-live for large enterprises to realize the benefits mentioned above.

While this may seem like a relatively short time period, the study does not specify what level of improvement organizations achieved for each business benefit. Many organizations do not measure this.

“Meaningful outcomes are about changed business performance, and too many project proposals specify technologies, functions, features and activity without clearly describing how operational or financial performance will be affected. The result is that searches for outcomes are disruptive, time-consuming and, in many cases, less than meaningful, or even irritating, to executive sponsors.” - Gartner<sup>3</sup>

How should organizations measure outcomes? We often recommend setting up a center of excellence to define KPIs that will define expected benefits. Sometimes, these are purely cost benefits, but oftentimes, these benefits are tied to objectives supporting the corporate strategy. KPIs could be related to customer satisfaction, cycle time in manufacturing or delivery time to customers.

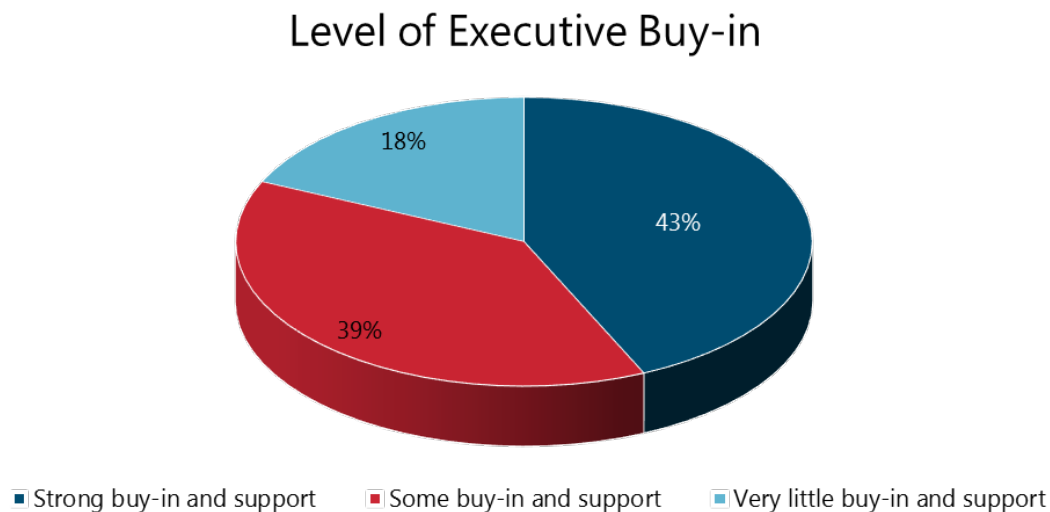
Our clients typically realize full business benefits from out-of-the-box functionality within 9 to 12 months of go-live. By “full,” we mean the full amount of benefits they expected. While this is a bit longer than the benefits realization timeframe for survey respondents, many of these respondents may not have realized the full amount of their expected benefits.

Benefits realization should continue many years after go-live as new organizational goals are identified. This is known as continuous improvement. If an organization prioritizes continuous improvement, the project team and end-users will be more likely to identify new business benefits the system might achieve. Like the initial business benefits, these new benefits should align with the organization's strategic goals.

## Executive Buy-in & Involvement

Executive buy-in ensures the ERP implementation aligns with the organization's overall strategy and does not become a technology project.

Of those organizations that have completed implementation, most managed to elicit at least some project buy-in from their executive teams. Strong executive buy-in was more common than only some executive buy-in:



Percentages do not always equal 100% due to rounding.

## Gaining Executive Buy-in Takes Time and Effort

Most of our clients do not have strong executive buy-in during the initial phases of the project. Our project teams must work hard to elicit executive buy-in at the start of any project. We have learned that many executives are initially skeptical about certain aspects of ERP projects and need to gain insight into the advantages of key components of ERP success, such as change management.

If this skepticism remains unaddressed, executives may set project budgets that are too small to cover change management and business process management activities.

It's likely that organizations in our study who have strong executive buy-in have walked a long road to get there.

## How to Achieve Executive Buy-in

Asking executives questions, such as what they would like to achieve with new technology, can help establish buy-in. During client engagements, we take a “top-down” approach to establishing executive buy-in. We facilitate discussions around corporate strategy so executives understand project goals at a high level. Often, we find a lack of buy-in around the importance of change management, so we help executives understand its importance by asking them questions about how they intend to measure success. This gets them thinking about the user adoption side of success and what degree of business transformation is needed to achieve organizational objectives.

In our experience, eliciting buy-in from executives works better when the appeal is business-focused rather than technology-focused. For some CIOs, this can be challenging. “There is often a strange paradox in that boards expect CIOs to be business-focused, strategic and succinct. Yet when presented with an ERP strategy in such terms, CIOs may shift the focus to vendors and technologies since that is what they are accustomed to talking to CIOs about.” - Gartner<sup>4</sup>



Our experience with some of the best-in-class CIOs is that they are actively driving business and digital transformation. In contrast to Gartner's observations, our most recent experience has been that today's CIO is much more interested in how to move the business forward and works directly with the CEO and CFO in being more strategic and aligning people, processes and technology. As a result, we are seeing budgets that support complete business transformations as executives strive to build a more digital-enabled business.

The stronger the executive buy-in at the beginning of a project, the more alignment the organization will have around strategic goals, making these goals easier to achieve.

A background image showing three business professionals in a meeting. A man in a white shirt and tie is pointing at a document on a table. A woman with blonde hair is looking at the document and holding a pen to her chin. Another person is partially visible on the right. A semi-transparent blue box with white text is overlaid on the image.

### ***Most Organizations are Using Consultants***

***65% of SMBs use consultants***

***46% of large enterprises use consultants***

## ERP Consultants

While Panorama's ERP consultants are independent and technology-agnostic, many ERP consultants are tied to one or more ERP vendors. These consultants tend to focus more on the technology aspects of implementation than the people and process aspects.

Most (63%) organizations in our study are using ERP consultants to assist with their ERP projects. This is in line with Gartner's findings. "By 2020, more than 50% of organizations will have a formalized ERP strategy that supports digital business goals. At least 30% of those organizations will look for external support to help create those ERP strategies." - Gartner<sup>5</sup>

## SMBs vs. Large Enterprises

Our study shows more small and mid-sized businesses (SMBs) are using ERP consultants compared to large enterprises. Only 46% of large enterprises use ERP consultants, while this is true for 65% of SMBs.

One reason for this is that SMBs tend to have more skill gaps than larger organizations, especially when it comes to digital skills and business transformation skills. "Workers with the most sought after and new digital-era technology skills are in very limited supply, which means mid-size enterprises (MSEs) often find it difficult to attract them." - Gartner. In addition, Gartner points out that "CIOs at MSEs sometimes struggle to effectively execute on their organization's digital business strategy because of a lack of adequate levels of business acumen among IT employees."<sup>6</sup>

# The Importance of ERP Consultants

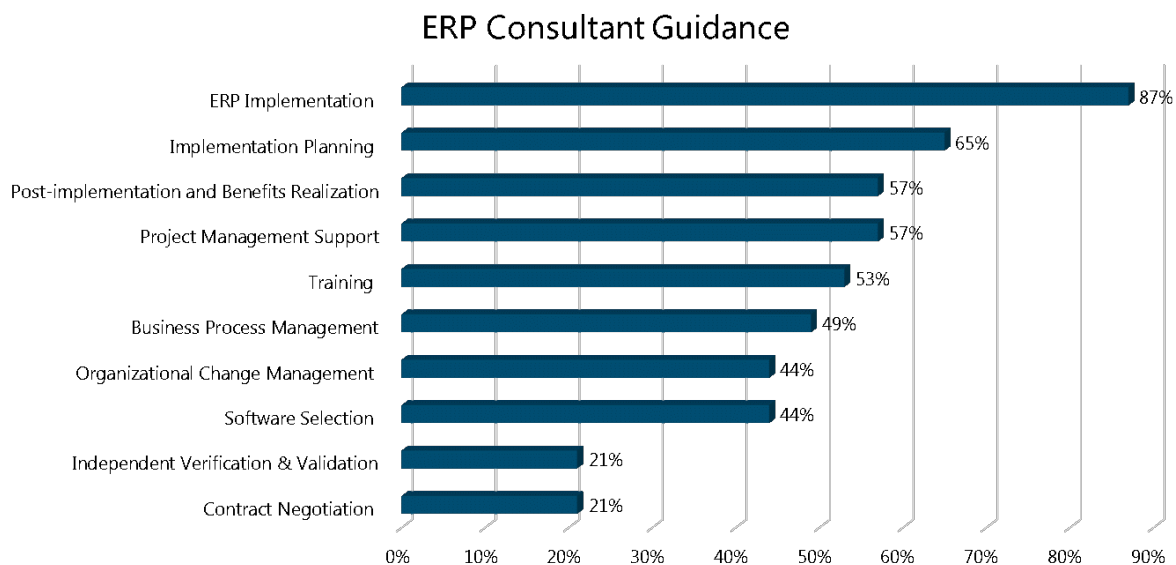
Hiring ERP consultants is one of the most effective ways to supplement skill gaps. Even if organizations think their teams have adequate technical, process and change management expertise, they should consider how much ERP project experience their teams have – likely not much.

ERP project experience is vital when it comes to setting realistic expectations. A consultant with ERP project experience has the advantage of lessons learned from the most successful and least successful implementations.

ERP consultants are especially useful when it comes to achieving organizational alignment and looking at issues from a non-biased view point to give executives a more realistic perspective. ERP consultants, like Panorama, that use a holistic approach ensure organizations’ people, processes and technology align with the same strategic goals.

## Reasons for Hiring ERP Consultants

The most common guidance organizations are seeking from ERP consultants is ERP implementation guidance: 87% are seeking guidance on their ERP implementation as a whole, and 65% are seeking guidance on implementation planning:



Less than half of organizations are using ERP consultants for either change management or business process management services. It's no coincidence that - as outlined earlier - few organizations are realizing expected business benefits.

We tend to be very sensitive to our clients' budgets, and our approach is not to fish for you but to teach you how to fish. Our most successful engagements are those where we train organizations to implement best practices in project management, change management and training. When the engagement ends, all the documentation and training stays with the management team, and they are able to deploy tools to execute continuous improvement initiatives so the organization continues to realize benefits.

## A Lesser-known, but Important, ERP Service Offering

Few organizations in our study are seeking guidance on software contract negotiations. This service offering is less common within the ERP consulting industry, so many organizations do not know it exists. However, our clients have achieved significant cost savings through our ERP Contract Negotiation services. Our independent ERP consultants provide apples-to-apples comparisons of ERP contracts. We also provide a workbook that enables "what if" scenarios and helps organizations understand contracts based on their unique requirements.



# People & Processes

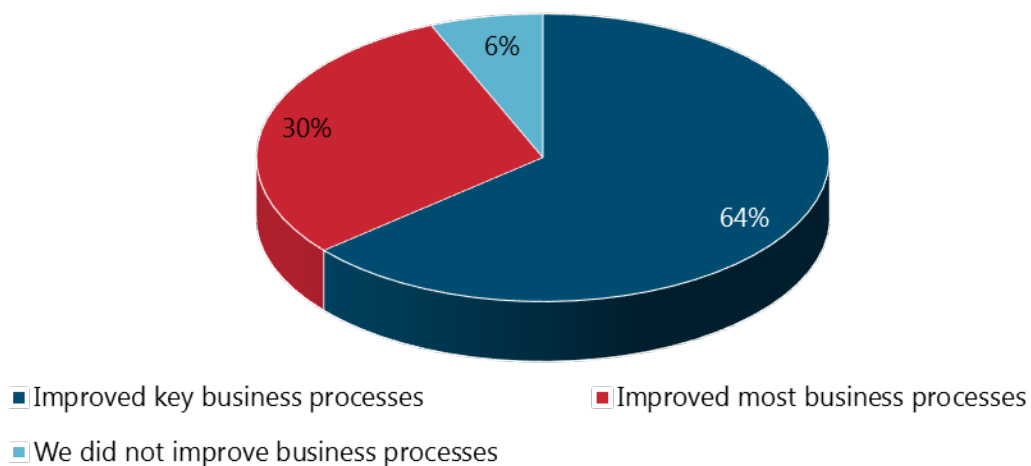
As discussed earlier, the people and process aspects of implementation are more difficult than the technology aspects. Employees determine the success of an ERP implementation because their use of new technology drives business benefits. Business processes also influence ERP success because carefully-designed processes ensure new technology aligns with organizational goals.

## Business Process Management Focus

Business process management involves the mapping of current processes, the identification of pain points and the design of future state processes. We use a top-down approach to business process management, known as value chain mapping. This approach focuses on breaking down functional silos and providing end-to-end process understanding, visibility and control.

Of those organizations that have completed implementation, almost all of them improved business processes as part of their implementations. Improving only key business processes is more common than improving all business processes:

### Focus on Business Process Management



Percentages do not always equal 100% due to rounding.

Many organizations do not have the time and resource commitments to transform every business process. Instead, we are seeing more of our clients express interest in defining new ways of working to support innovation and competitive advantage.

## Business Process Management Best Practices

When improving processes, it's important to involve employees from across the organization. If employees are reluctant, emphasize that streamlining does not mean job loss but often means job creation. As the organization develops new capabilities, new roles can be created with higher-level responsibilities.

When helping organizations improve their processes, our team starts by meeting with employees from across the organization to document pain points. One of our clients, a \$100M supplier, found this method particularly useful for helping executives understand the need for improvement.

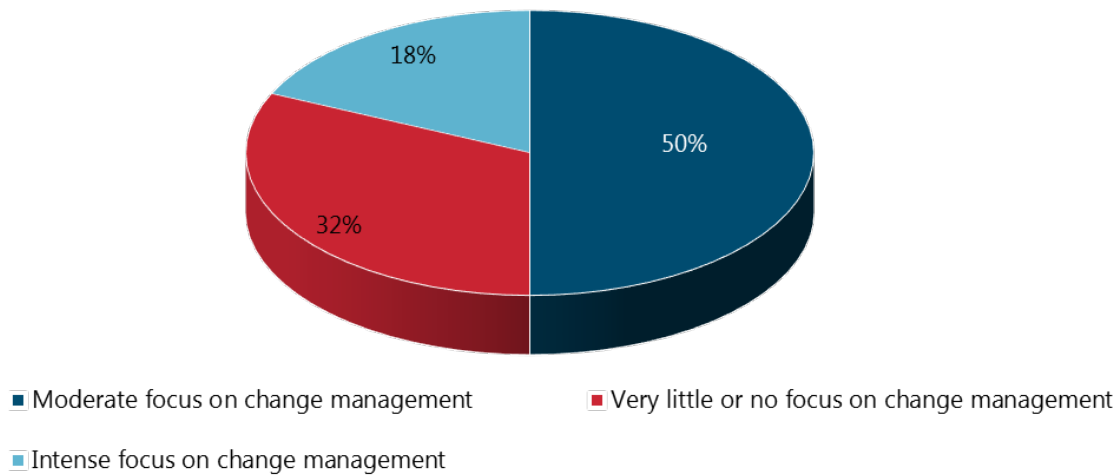
## Change Management Focus

Organizational change management is an important aspect of ERP implementation. Communicating with employees before changes occur mitigates change resistance. However, change management is much more than a communication plan; it also is the framework for successful workforce transition and training.

As organizations pursue digital transformation initiatives, they are finding the integration of people, processes and technology to be challenging. As a result, change management principles have become more pervasive among organizations. While some of these organizations are using traditional change management programs, others are adapting traditional approaches to fit today's digital era. The change management needed today is not just focused on software and workflow training but also on teaching employees to "unlearn" old habits and practices.

As seen on the following page, of those organizations that have completed implementation, most dedicated a moderate focus to change management. Unfortunately, few organizations intensely focused on change management.

## Focus on Change Management



Percentages do not always equal 100% due to rounding.

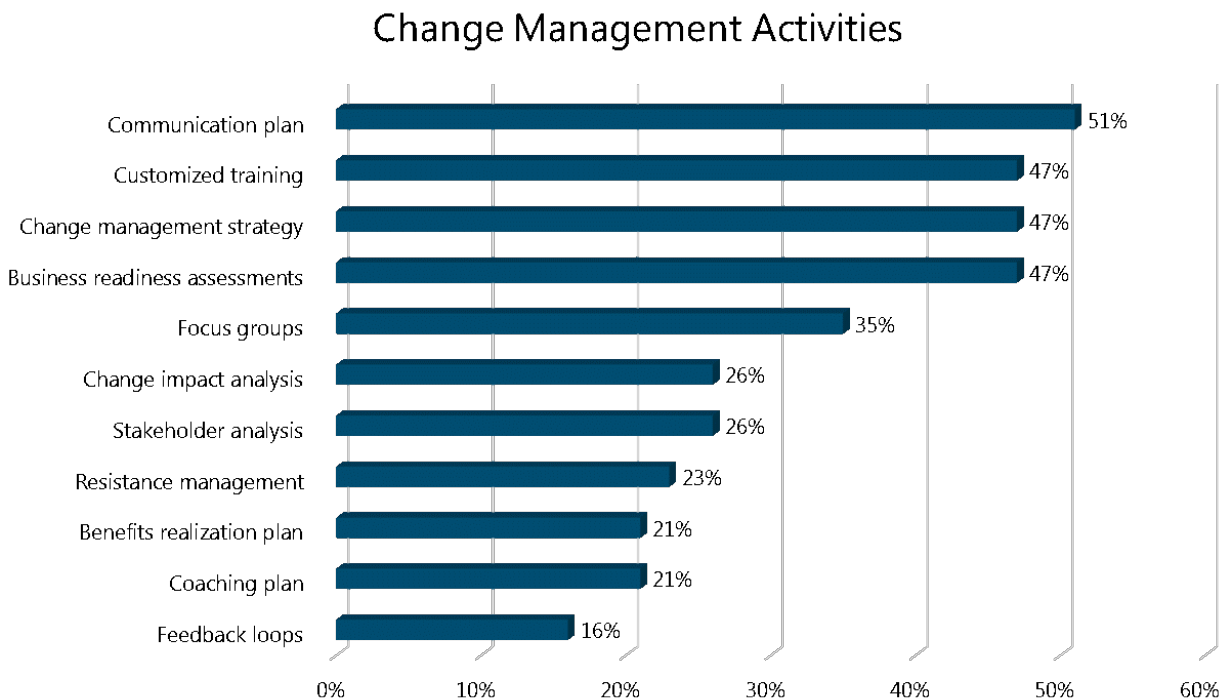
## Change Management Best Practices

In our experience, most ERP projects require an intense focus on change management. This means conducting several business readiness assessments and/or focus groups to understand employees' pain points and using creative tactics to engage employees throughout the project. Many of our projects are branded with a fun name that employees have decided represents the project goal.

The most important change management best practices are those that are able to digitize the workforce. This mixes traditional change management activities with a modern approach that is focused on driving successful business outcomes. For example, organizations should develop a digital transformation charter that articulates necessary strategy, goals and tactics. They also should develop realistic and measurable KPIs for change management success.

## Change Management Activities

The most common change management activity respondent organizations are focusing on is developing a communication plan:



## Communication Plans on Their own are not Change Management Plans

A communication plan outlines the timing and messaging necessary to communicate with employees regarding the nature of the project, the reason for change and the specific processes that will be changing.

Before hiring Panorama, most of our clients use communication plans as their only change management activity. System training is not prioritized and is entirely handled by the system integrator.

While communication plans are important, they should accompany a full change management plan that incorporates a holistic approach. The change management plan should view organizational changes from the perspectives of culture, structure, workflows, processes and digital awareness.

# The Importance of Modern Change Management Techniques

An ERP initiative or digital transformation initiative fundamentally changes an organization's key processes and operations. It changes the way the organization delivers products and services. Performed correctly, it improves the organization's way of working and thinking. Enabling these changes requires a change management plan that addresses culture, as much as technology.



# ERP Implementation Results

A successful ERP implementation not only requires a focus on people and processes, but it also requires full participation by the technical team, core team, subject matter experts and software vendor. Without participation from all of these parties, the ERP implementation is at risk of being delayed or overbudget. Organizations in our study are experiencing duration and cost overruns for a variety of reasons.

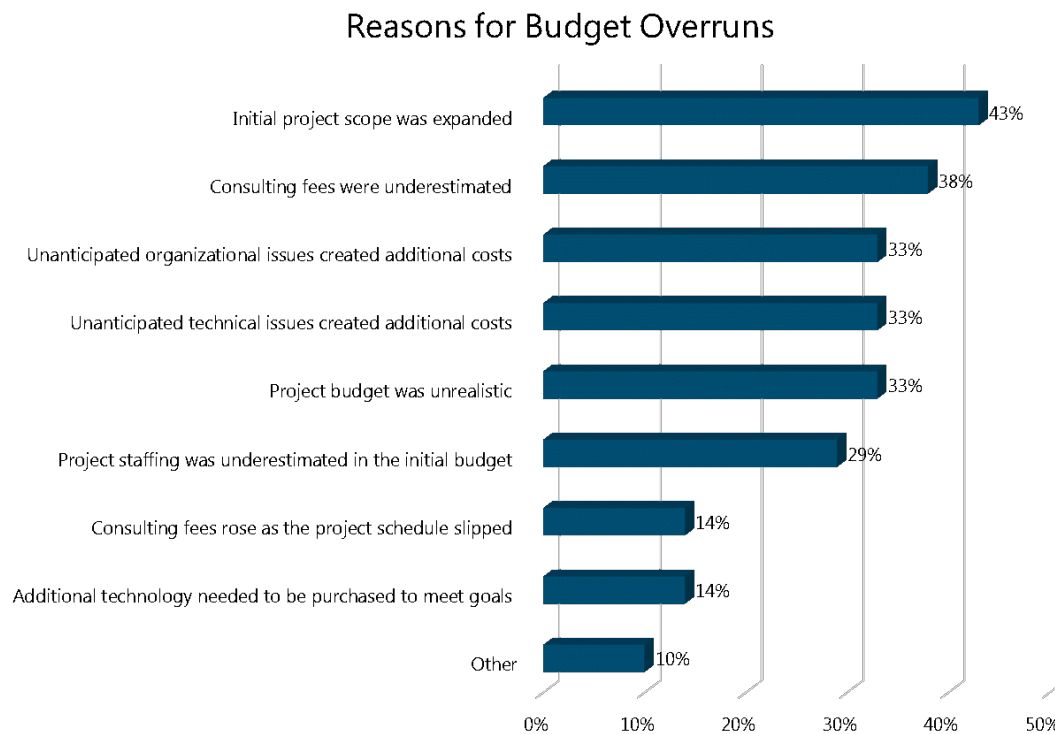
## Project Costs

The costs associated with an ERP project can be difficult to estimate. There are many activities organizations do not consider upfront, and this can lead to unexpected costs and budget overruns.

## Budget Overruns

Of those organizations that have completed implementation, less than half (45%) experienced budget overruns. However, those that did experience overruns were an average of 24% over budget. When you're talking about an implementation budget, 24% is a lot of money. On average, organizations reported an expected budget of \$1,007,767 and an actual budget of \$1,247,859.

Why are these budget overruns happening? The most common reason for budget overruns among respondents was scope expansion:



## How to Control Project Scope

The first step to avoiding scope expansion is to clearly define the project scope. It is wise to limit the scope but plan future enhancements after the initial implementation. Once the limited scope is implemented, the project team will have a much better understanding of how the system works and how it can be enhanced.

Many times, overenthusiastic teams specify customizations and complex configurations that would be unnecessary if they better understood the software. If the project team or employees are making requests that challenge the project scope, the project manager should not give in to these changes unless they truly add value. Following a strict process for handling change requests and establishing strong project governance can prevent scope expansion.



*SMBs use an average of 7 full-time internal resources.*

*Large enterprise use an average of 24 full-time internal resources.*

## Setting Realistic Expectations

In our experience, organizations often underestimate license costs because ERP vendors typically do not set realistic expectations. Organizations considering a user-based pricing model should ensure the vendor is accounting for the actual number of users they'll have. They also should consider the fact that new functionality may require additional people to have access to the ERP system (such as mobile devices, workflow, electronic approvals, additional manufacturing or quality data.)

It's also important not to underestimate the number of internal resources necessary for project success. Our report reveals that SMBs that have completed implementation used an average of 7 full-time internal resources, and large enterprises used an average of 24 full-time internal resources.

## Underinvestment in Change Management

In our study, organizational change management accounted for the smallest portion of organizations' budgets. In general, organizations should increase their change management budgets. Of course, this depends on the scope of change, but the trend we've seen in our expert witness engagements with failed projects has been a lack of focus on change management.

It is natural to underestimate the need for something that seems intangible, but the costs of underinvesting in change management are very tangible. These include low system adoption, reduced productivity and low benefits realization.

“The increasing pace of change in enterprises and the surge of competing priorities are leaving employees suffering from change fatigue and with an aversion to making any more changes.” - Garnter<sup>7</sup>

Even if an organization has competing priorities, it should invest time and money in change management to reduce change fatigue and resistance to change.

## Negotiating With ERP Vendors

Despite the cost overruns organizations experienced, many organizations in our study saved a significant amount on their software purchase by negotiating with their ERP vendor. Our study shows that organizations saved an average of 22% on the vendor’s initial cost estimate.

Of course, cost savings are relative to the size of the organization. This is what our study found relative to organization size:

	Cost Savings	Licenses Purchased
<b>SMBs</b>	21%	263
<b>Large Enterprises</b>	24%	1,174

During the selection process, organizations may struggle to understand and compare vendors’ statements of work. This is why many hire ERP consultants, like Panorama. Our ERP Contract Negotiation service offering is instrumental in helping organizations navigate the cost variables and negotiate favorable terms.

# Project Duration

Like the project budget, the project timeline is influenced by a variety of factors that many organizations do not consider when developing their project plans. "Projects often commence based on service provider proposals that are high-level estimates against a vaguely defined aspiration, leading to significant overruns and disputes once the project is underway." - Garnter<sup>8</sup>

## Timeline Overruns

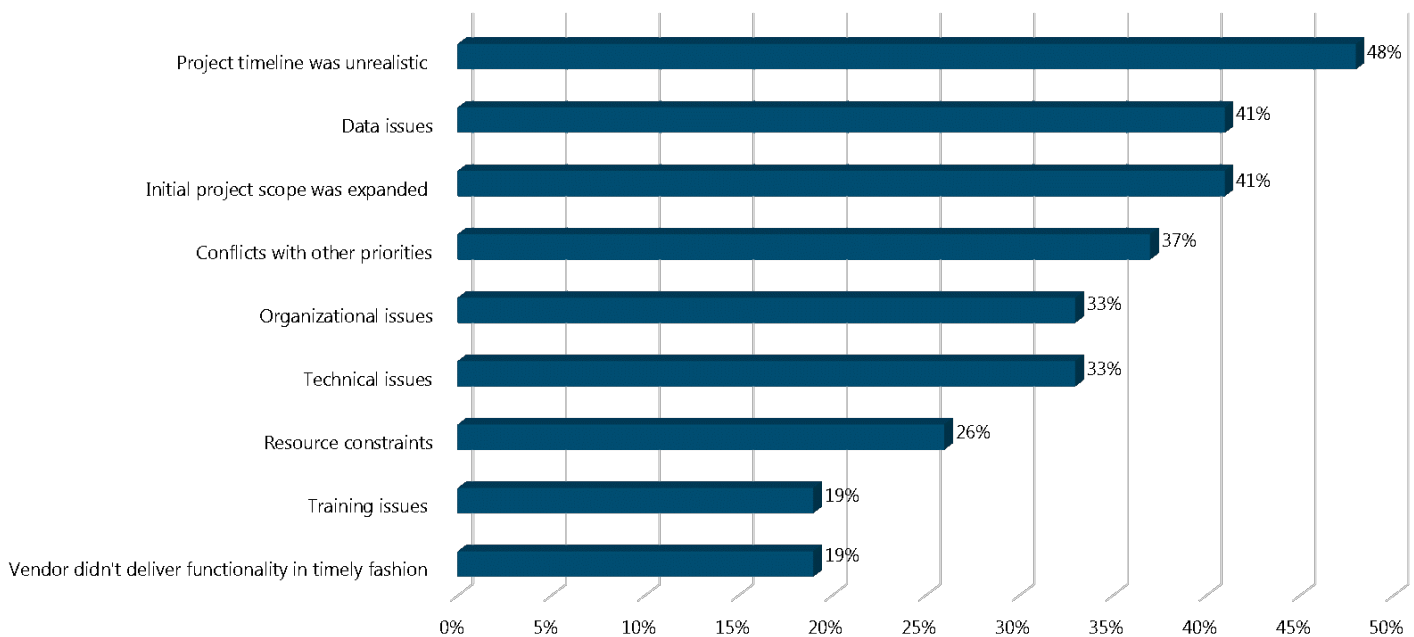
Of those organizations that have completed implementation, more than half (58%) experienced timeline overruns. These organizations were an average of 11% over their expected timelines.

***Expected Timeline 12.7 months***

***Actual Timeline 14.1 months***

The most common reason for timeline overruns was setting an unrealistic timeline. Major conflicts are not always the cause of timeline overruns. Sometimes, even minor issues can increase the project timeline by bringing organizations to the realization that they need to include additional activities in their project plans. These additional activities can delay a project if they are not accounted for upfront.

### Reasons for Timeline Overruns



## Avoid Timeline Overruns by Focusing on Data Migration

To avoid timeline overruns, be sure to set a realistic timeline by accounting for all essential activities, such as data migration. In our experience, data migration is one of the most frequently overlooked project activities. Most organizations have their data scattered across several systems. This is often the result of attempts to buy or create subsystems to overcome the deficiencies in a legacy system. Early in the project, all of these data sources must be identified. If the new ERP system is to deliver benefits, it must have clean, complete data.

Once all of the data sources have been identified, a careful process must be initiated to clean it. When multiple systems are involved there are often duplicate data, conflicting data, obsolete data, and incomplete data.

It is often beneficial to engage a data migration expert in this process. Subject matter experts (SMEs) from the internal organization also should be involved. Only SMEs are able to establish the business rules, determine which duplicate is the “master” and fill in missing fields.





*88% of organizations consider their ERP implementation a success.*

## Success & Failure

We asked organizations whether they would consider their overall ERP implementation to be a success or failure. More than three quarters (88%) of organizations consider their ERP implementation a success. This is interesting considering the high occurrence of duration overruns and the low benefits realization of some important business benefits.

This question on the survey was purposefully ambiguous in order to capture organizations' perceptions of success and failure. Based on the conflicting results, it appears that organizations have lower standards of success than they probably should. While they might have achieved some benefits, did they achieve even half of the benefits they expected?

## How to Define ERP Success

The best way to define ERP success is to create a business case prior to implementing ERP software. The business case should include key performance indicators (KPIs) that are specific, realistic and actionable to ensure stakeholders are held accountable for achieving results. Organizational alignment between people, processes and technology is easier to achieve with a strong business case.

# Conclusion

This year's report tells a predictable, though interesting, story. Less than half of organizations are using ERP consultants for either change management or business process management services. As a result, few organizations are realizing expected business benefits. This is further evidence that technology-focused implementations are less successful than people-process-technology focused implementations.

Technology-focused projects typically only include a software initiative and no budget for fixing processes and integrating people. We have found that the tendency to pursue a technology initiative often comes from technology constraints to growth or the need to integrate digital tools.

While most organizations are using ERP consultants, organizations are still struggling with their projects in terms of budget and timeline overruns. This may be because of the lack of focus on change management and business process management or the fact that many ERP consultants are not fully independent when it comes to financial ties with ERP vendors. Some of these consultants are audit and accounting firms not fully specializing in the ERP market. They'll recommend a system that may be more accounting-focused and less supply chain-focused. It satisfies the organization's short-term technical needs, but in the long term, it does not help the organization achieve its business goals.

Looking at the reasons for budget and timeline overruns, it seems that these ERP consultants are not setting realistic expectations regarding the organizational and process challenges that inevitably occur. We have seen many ERP consultants underbid a project and then issue change orders to bring a project to completion. This is because most firms deploy single consultants that do not have a breadth of experience and have limited skillsets.

Data issues also cause project overruns. We recommend investing in data strategies and migration initiatives early, especially because database performance will be a KPI for ERP in 2019. The way a database handles big data warehousing and querying is important as you implement artificial intelligence (AI) tools. In 2019, ERP will increasingly become a fully-integrated information and data analytics tool using AI to inform decision making at all levels – from the CEO to the shop worker.

Overall, organizations should step back and focus on preparing their people and processes before selecting technology. The few organizations and CIOs leading the pack are moving their organizations through groundbreaking business and digital transformations to meet the customer needs.

## Key Takeaways

If you're considering ERP selection, implementation or digital transformation, here are some key takeaways:

- While technology is a powerful contributor to business benefits, technology by itself does not create benefits. Organizations should first define and/or review their strategy and objectives, then prepare their people and processes to achieve those key objectives, and finally, determine what technology is necessary to enable transformation.
- While technology-related reasons are good reasons to replace ERP software, they should be accompanied by business-focused motivations – such as improving customer service – if the organization hopes to maximize business benefits.
- Before selecting software, you should define how your business operates by mapping your current processes and focusing on working smarter, not harder. Carefully-designed processes ensure new technology aligns with organizational goals.
- It's important to begin business process management activities as early as possible. This will help stakeholders understand scope of change related to anticipated business impacts moving from a current stated to a desired future state.
- Employees determine the success of an ERP implementation because their use of new technology drives business benefits. As such, most projects require an intense focus on change management.
- Gaining strong executive buy-in takes time and effort. You should ensure your appeals are business-focused rather than technology-focused.
- One way to reduce the risk of budget overruns is effectively managing project scope. Investing upfront during the selection phase can reduce implementation costs.
- To avoid timeline overruns, be sure to set a realistic timeline by accounting for all essential project activities. Ensure you have a clear vision for how you are implementing processes and digitizing the workforce.
- Creating a business case can help you define ERP success and ensures you realize expected business benefits.
- Don't get so consumed with the technical aspects of implementation that you neglect the people and process aspects, which tend to be more challenging.

**Click the Button Below to Schedule Your Free 30-minute Consultation With an ERP Systems Expert!**

**Free Consultation**



## About Panorama Consulting Solutions

Panorama Consulting Solutions is an independent, niche consulting firm specializing in business and digital transformation and ERP system implementations for mid- to large-sized private- and public-sector organizations worldwide. One-hundred percent technology agnostic and independent of vendor affiliation, Panorama offers a phased, top-down strategic alignment approach and a bottom-up tactical approach, enabling each client to achieve its unique business transformation objectives by transforming its people, processes and technology. Panorama's services include ERP Selection, ERP Implementation, ERP Contract Negotiation, ERP University, Digital Strategy, Technology Assessment, Change Management, Human Capital Management, Business Process Management, Business Process Reengineering, Value Stream Mapping, M&A Integration, IT Staffing, Project Auditing, Project Recovery and Software Expert Witness Testimony.

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