2016 REPORT ON ERP SYSTEMS AND ENTERPRISE SOFTWARE

A Panorama Consulting Solutions Research Report
Introduction

Panorama Consulting Solutions developed the **2016 Report on ERP Systems and Enterprise Software** to investigate software selection, implementation and satisfaction trends across industries, organization sizes and geographic locations. This report summarizes Panorama’s independent research into the experiences of software customers with regard to enterprise systems, vendors, consultants and overall implementations.

To ensure that our findings reflect the current conditions as accurately as possible, polling for the **2016 Report** was conducted on Panorama’s website ([Panorama-Consulting.com](http://panorama-consulting.com)) during a recent twelve-month period (March 2015 - February 2016). A total of 215 respondents completed the surveys upon which this data is based.
## Data Summary by Year

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COST</th>
<th>% COST OVER RUNS</th>
<th>DURATION</th>
<th>% DURATION OVERRUNS</th>
<th>% RECEIVING 50% OR LESS BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$3.8M</td>
<td>57%</td>
<td>21.1 Months</td>
<td>57%</td>
<td>46%</td>
</tr>
<tr>
<td>2014</td>
<td>$4.5M</td>
<td>55%</td>
<td>14.3 Months</td>
<td>75%</td>
<td>41%</td>
</tr>
<tr>
<td>2013</td>
<td>$2.8M</td>
<td>54%</td>
<td>16.3 Months</td>
<td>72%</td>
<td>66%</td>
</tr>
<tr>
<td>2012</td>
<td>$7.1M</td>
<td>53%</td>
<td>17.8 Months</td>
<td>61%</td>
<td>60%</td>
</tr>
</tbody>
</table>

According to Panorama’s independent ERP research over the past four years, overall project cost has decreased while the percentage of respondents experiencing cost overruns has increased. Duration overruns, on the other hand, are becoming less common, while overall duration has increased. The duration increase is not necessarily a bad sign as organizations appear to be planning for longer durations and have more realistic expectations about what it takes to achieve ERP success.

While costs, durations and benefits realization fluctuate year-to-year due to economic conditions, implementation trends and dataset makeup, the facts remain:

**FACT:**

The majority of organizations do not have the internal expertise necessary for achieving ERP success. When they don’t hire an experienced third-party, they limit their level of benefits realization and reduce their potential ROI.
Respondent Overview

81% of organizations are either in the process of implementing ERP software or have completed implementation.

14% of organizations are in the process of selecting software.

5% are in the process of upgrading software.

Compared to last year, a smaller percentage of organizations are implementing ERP across multiple sites. Last year, 85-percent of respondents implemented ERP at two or more locations. This year, only 80-percent of respondents implemented ERP at two or more locations. However, there has been no decrease in the percentage of organizations reporting that they are multinational (55-percent).

While manufacturing still represents the most common industry among respondents, there has been a decrease in the percentage of manufacturing organizations represented in our survey (from 43-percent to 37-percent).
REASONS FOR IMPLEMENTING ERP:

- **49%** Replace out-of-date ERP software
- **16%** Replace homegrown systems
- **15%** Replace accounting software
- **20%** Replace non-ERP systems / had no true system

Compared to last year, more organizations are focused on making employees’ jobs easier and fewer are focused on integrating systems across locations.
Total Annual Revenue of Respondents

Respondent organizations represent a similar range of company sizes to last year. The most noticeable difference was the increase in the percentage of small- to mid-sized organizations. Last year, approximately 43-percent of organizations reported annual revenues under $300 million, while this year, 59% of organizations reported revenues under $300M.

On average, organizations spend 6.5-percent of their annual revenue on their ERP project. This is an increase since last year where organizations spent 5.9-percent of their annual revenue on their ERP project.
ERP Software Satisfaction Levels

During the past few years, satisfaction with selected software has steadily decreased. This year’s data, however, shows an increase in satisfaction levels.

74% of respondents report that they would select their chosen software again if required to start over.
Interestingly, the data shows a 1-percent decrease in success rates since last year. There was also a decrease in the percentage of respondents that view their project as a failure – from 21-percent last year to 7-percent this year. There was a corresponding increase in the percentage of respondents claiming neutrality in regard to project outcomes – from 21-percent last year to 36-percent this year.

**FYI:** Confusion or neutrality is typically an indicator that organizations did not invest adequate time in software selection, business case justification, benefits realization measurement or post-implementation audits.
**ERP Vendors**

**MOST FREQUENTLY SHORTLISTED:** SAP (41%) continues to be the vendor most frequently shortlisted by the organizations, followed by Oracle (37%) and Microsoft Dynamics (27%). Epicor and Infor are also frequently shortlisted. These data points are nearly identical to the previous year.

**MOST FREQUENTLY SELECTED:** After being shortlisted, Microsoft (32%) is the vendor most frequently selected, followed by Oracle (23%), SAP (20%) and Epicor (7%). Other ERP vendors in our dataset included IFS, NetSuite, Plex Systems, QAD, Sage, SYSPRO, Tyler Technologies and Unit4, to name a few.
So Many Options

There has been no other time in history when organizations have had so many enterprise software options.

Niche solutions, best-of-breed software and two-tier deployment models are just a few examples of the variety available to enterprise software buyers. Along with this proliferation of options comes lower costs and more financial flexibility that translates to a better ROI.

46% Functional fit
25% Great value
13% Common for particular industry
Overall, organizations are reporting increased levels of satisfaction with their choice of ERP software. As seen in the graph below, 54-percent of respondents are satisfied or very satisfied with their overall ERP vendor experience, which is an increase of 9-percent over last year.

Additional vendor-specific research and analysis is available in Panorama's 2016 Clash of the Titans Report.
Deployment Options

Consistent with previous years, the majority of respondents chose to implement on-premise ERP software. Both last year and this year, 56-percent of organizations chose this option.

While the implementation of cloud ERP has increased since last year, the implementation of software as a service (SaaS) has slowed.

The significant increase in the use of cloud ERP, from 11- to 27-percent, makes sense considering the increasing number of vendors providing this option. Both SAP and Oracle are investing more research and development in cloud technology than in on-premise software, and other vendors are quickly following.
Cloud Usage

A commonly cited benefit of cloud ERP is reduced implementation costs. This year’s respondents reported significant cost savings when implementing cloud ERP software. In fact, more than half (56-percent) of respondents deploying cloud technology reported implementation cost savings of at least 20-percent. Compared to SaaS, cloud is generally a less expensive option over time.

Cost Savings From Cloud Usage

- 0-20%: 44%
- 21-40%: 27%
- 41-60%: 13%
- 61-80%: 11%
- Over 80%: 4%

Source: Panorama’s 2016 ERP Report
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Why Not Cloud?

- **29%** Perceived risk of security breach
- **16%** Insufficient information about cloud offerings
- **9%** Perceived risk of data loss

**MISCONCEPTIONS:**

In our experience, we have found that the above concerns are misconceptions. In fact, **a number of cloud providers are enhancing their security to meet customer needs**, especially in the financial sector.
Software Customization

The ideal level of customization that we recommend to clients is 10- to 20-percent. According to survey results, the majority of organizations stayed within this range. While 90-percent of organizations reported some level of customization, fewer organizations are choosing extreme customization when compared to last year.

IDEAL CUSTOMIZATION: 10 - 20%

Q: Do lower levels of customization explain why cost overruns are becoming less common?

A: Yes. When organizations clearly define their business processes before selection, they can build customization into their budgets and encounter fewer unforeseen costs.
ERP Consultants

As enterprise solutions continue to saturate the marketplace, and the number of viable software options continues to increase, organizations persist in hiring ERP consultants. However, compared to last year, fewer are doing so.

Since last year, the use of ERP consultants dropped from 77-percent to 68-percent.

The organizations that do work with ERP consultants, rely on these consultants throughout the entire lifecycle of their ERP projects:
Why Consultants?

32% Help manage implementation
23% Serve as strategic partner from planning to implementation
14% Help conduct an unbiased software selection

In comparison to last year, there has been an increase in the percentage of organizations engaging consultants for planning and implementation, and a decrease in the percentage of organizations engaging consultants to assist in software selection. In Panorama’s experience, many ERP failures are caused by improper software selection, lack of expertise and inadequate focus on people and processes. All of these risks can be mitigated by engaging the right ERP consultants.
Project Budget

While organizations continue to experience significant budget overruns, organizations’ average implementation cost decreased from $4.5 million last year to $3.8 million this year.

57% Exceeded budget (slight increase over last year)

26% On budget (4% decrease from last year)

79% Under budget, on budget or less than 25-percent over budget

By building in a budget contingency of 20-percent, organizations can avoid significant budget overages. In general, organizations seem to be staying within the recommended 0- to 20-percent contingency range for cost overruns.

### Implementation Costs

- **>76% over budget**: 7%
- **51-75% over budget**: 2%
- **26-50% over budget**: 12%
- **<25% over budget**: 36%
- **On budget**: 26%
- **Under budget**: 17%

Source: Panorama’s 2016 ERP Report
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On average, organizations spend 6.5-percent of their annual revenues on their ERP projects.
Although increased consulting fees and underestimated consulting fees are often viewed as common causes of budget overruns, these were

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Initial project scope expanded</td>
<td>24%</td>
</tr>
<tr>
<td>Unanticipated technical or organizational issues</td>
<td>21%</td>
</tr>
<tr>
<td>Project staffing issues</td>
<td>19%</td>
</tr>
</tbody>
</table>

Compared to last year, the percentage of organizations experiencing **scope expansion increased** as did the percentage experiencing **unanticipated technical or organizational issues**. A lower **percentage** of organizations reported **unrealistic budgets or underestimated consulting fees** compared to last year.
Our data shows that a significant percentage (35-percent) of organizations dedicate ten or more full-time employees (FTEs) to their ERP projects, and 73-percent dedicate three or more FTEs.

When making recommendations regarding the ideal number of FTEs, our team considers each organization’s size, complexity and number of locations to ensure sufficient resource allocation and backfill.
Project Durations

57% of projects exceed their initial estimated timeline. The average implementation duration was 21 months, which is a 48% increase over last year.

While on-schedule and under-schedule projects only account for 43-percent of responses, this is a significant increase over last year when only 25-percent of projects were on-schedule or under-schedule.

On-schedule ERP projects may continue to become more and more common as more organizations turn to ERP consultants for planning and implementation guidance.

The percentage of respondents reporting on-schedule projects (39-percent) is significantly more than the percentage of respondents reporting schedule overages of 25-percent or less (26-percent). Last year, nearly half of respondents ran over-schedule by 25-percent or less, while on-schedule projects only accounted for 22-percent of responses.
Schedule Overages

TOP TWO REASONS:

15% DATA ISSUES
14% EXPANDED SCOPE

Compared to last year, more respondents are pointing to data issues as the reason for schedule overages. In Panorama’s experience, organizations that spend the time developing a data migration plan and strategy well before implementation are less likely to experience data issues that lead to extended implementation durations.
Benefits Realization

Q: How do you quantify the potential business benefits of a future ERP implementation?

A: You must understand your organization’s vision and have foresight into the ways technology can help drive higher revenues and lower costs.

Benefits realization continues to elude the majority of organizations. This year, only 35-percent of respondents realized more than 50-percent of anticipated benefits, which is a 5-percent decrease from last year.

While 81-percent of respondents realized measurable business benefits, 46-percent of these respondents realized less than half of the benefits they anticipated. 10-percent of respondents stated that they did not realize any measurable benefits, and 9-percent did not develop a business case to measure benefits realization.

Compared to last year, the percentage of organizations realizing a high level of benefits decreased, while the percentage realizing lower levels increased – this included a 6-percent increase in organizations reporting that they had not developed a business case.

Source: Panorama’s 2016 ERP Report
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Types of Benefits Realized

**MOST COMMON BENEFIT FOR 2014 AND 2015:**
AVAILABILITY OF INFORMATION (14%)

**OTHER COMMON BENEFITS:**
- 11% IMPROVED PRODUCTIVITY
- 11% IMPROVED DATA RELIABILITY
- 10% INCREASED INTERACTION AND INTEGRATION

Compared to last year, the percentage of organizations reporting improved customer interaction doubled from 4-percent to 8-percent, and the percentage of organizations reporting increased interaction and integration decreased from 14-percent to 10-percent.
Benefits Realization Timeframe

Nearly one-quarter of respondents realized business benefits within 6 and 12 months of go-live, which is an increase over last year.

As more organizations are realizing benefits sooner, fewer organizations are waiting long periods of time to realize benefits.

In fact, the percentage of organizations realizing benefits in the timeframe of 61+ months decreased 8-percent since last year.

<table>
<thead>
<tr>
<th>Months Until Benefits Realized</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;61 post go-live</td>
<td>4%</td>
</tr>
<tr>
<td>36-60 post go-live</td>
<td>4%</td>
</tr>
<tr>
<td>24-36 post go-live</td>
<td>9%</td>
</tr>
<tr>
<td>19-24 post go-live</td>
<td>9%</td>
</tr>
<tr>
<td>13-18 post go-live</td>
<td>16%</td>
</tr>
<tr>
<td>6-12 post go-live</td>
<td>23%</td>
</tr>
<tr>
<td>4-6 post go-live</td>
<td>17%</td>
</tr>
<tr>
<td>0-3 post go-live</td>
<td>18%</td>
</tr>
</tbody>
</table>

While certain benefits take longer to realize than others, organizations should, in general, **aim for benefits realization within 18-24 months of go-live.**

Taking the time to carefully define expected business benefits will ensure that your ERP project is one of the few that delivers quantifiable business results in a reasonable timeframe.
Time to Recoup Costs

There are many roadblocks that prevent organizations from achieving the ROI they expect. Some organizations are so overwhelmed by the task of implementation that they overlook the importance of quantifying short- and long-term returns.

Last year’s report revealed that 11-percent of organizations had not yet recouped the costs of their ERP projects. This year, that segment of respondents increased to 18-percent. This year also revealed that 8-percent of organizations were unsure of whether they had recouped costs. Despite these figures, many organizations still recoup costs relatively quickly. In fact, 41-percent of organizations recouped project costs in two years or less, which is an increase of 14-percent over last year.

HOW TO MAXIMIZE ROI: Take the time to document future state business processes, address employee resistance to change and develop a benefits realization plan.

HOW TO MITIGATE RISK: Work with the right ERP consultants.
Operational Disruption

When they finally go-live with their ERP system, many organizations experience a significant disruption to their business. This could involve anything from difficulty shipping products to inability to close the books at the end of the financial quarter.

Considering the metrics throughout this report, it is not surprising that nearly half of organizations experience some type of material operational disruption at go-live. However, this is lower than last year where 52-percent experienced an operational disruption.

While many organizations experienced an operational disruption, 44-percent experienced this disruption for one week or less, which is an increase of 14-percent over last year. In general, there has been an increase in the percentage of organizations experiencing relatively short disruptions and a decrease in the percentage of organizations experiencing longer disruptions.

HOW TO MITIGATE RISK:

Conduct due diligence and testing in the form of training and conference room pilots.
Organizational Change Management

Panorama advises organizations to put more focus on the business aspects of implementation and less focus on the technical aspects.

“At the end of the day, the success of your project won’t have anything to do with technical features, but will come down to how well you handle business process reengineering and organizational change management – the two most important success factors for any ERP implementation.”

According to our data, few organizations are investing in organizational change management. Only 20-percent of respondents reported an intense focus on this critical aspect, while 80-percent reported either a moderate focus or little to no focus on change management.
Business Process Management

While organizations are not dedicating enough focus to organizational change management, they seem to be dedicating adequate focus to business process improvement. As seen in the graph below, 82-percent of respondents improved either key business processes or all of their business processes.

Many of your organization’s current business processes are likely broken or inefficient, and the cost of inefficiency is very tangible – your employees, customers and executives are all feeling these costs in the form of time and inconvenience.

Never underestimate the importance of business process management.
Conclusion

Panorama’s research continues to reveal the challenges that organizations face during all phases of ERP implementation. More than half of respondents report cost overruns, and even more respondents report low benefits realization. In addition, a large percentage of organizations continue to experience unanticipated technical or organizational issues. This is true despite the increasing percentage of organizations engaging consultants for planning and implementation.

The relatively low percentage of organizations investing in organizational change management, provides at least some explanation for the increase in organizational issues, but why aren’t all consultants recommending organizational change management?

While many consultants fail to address the people-side of ERP, they do seem to be successful in keeping organizations’ budgets in check. There appears to be a correlation between the increasing use of consultants for planning and implementation and the reduction in overall project costs. The question is: are these consultants saving money the right way or are they cutting corners by omitting change management from the project budget?

Although organizations’ use of ERP consultants for planning and implementation has increased since last year, the use of consultants overall – as well as for selection in particular – has decreased. This further explains the increase in technical and organizational issues. Organizations that forgo consultants and take a do-it-yourself approach are more likely to overlook success factors such as organizational change and business process management, which should both begin before software selection.

The good news is the majority of organizations dedicate at least some focus to business process improvement. This could explain why more organizations are quickly realizing benefits and recouping costs, and reporting on-schedule or under-schedule projects.

**It all comes down to ROI.** While fewer organizations consider their project a failure, more organizations are claiming that they “don’t know” how to classify their project’s outcome. They also report absolutely no recouped costs – which essentially equates to no ROI. Instead of calling this an ERP failure, organizations may find it easier to hide behind the euphemism of uncertainty.

To avoid disappointing executives with low ERP ROI, organizations should ensure an intense focus on organizational change and business process management by finding a consultant with the right expertise.
About Panorama Consulting Solutions

Panorama Consulting Solutions specializes in the enterprise consulting, enterprise resource planning (ERP) and IT market for mid- to large-sized, private and public sector organizations across the globe. One-hundred percent independent of affiliation, Panorama helps firms evaluate and select ERP software, manages the implementation of the software and facilitates all related organizational changes to ensure that each of its clients realize the full benefits of their ERP implementation.

We also offer our clients IT strategy, business process reengineering, ERP staffing, sales assessments, energy fueling assessments, emergency/disaster fund management, independent verification and validation, project management oversight and expert witness testimony.

Panorama maintains a global presence with current offices in Denver, Chicago, Boston, San Francisco, Lima, Dubai, Houston and New York.

More information can be found on its website, Panorama-Consulting.com and Twitter feed, Twitter.com/PanoramaERP.