CLASH OF THE TITANS

An Independent Comparison of SAP, Oracle and Microsoft Dynamics
Introduction

Panorama Consulting Solutions, an independent and vendor-neutral enterprise resource planning (ERP) consulting firm, developed its annual *Clash of the Titans* publication to compare the three “titans” of the enterprise software industry.

*Clash of the Titans 2012* includes analysis of responses collected via the Panorama Consulting website from February 2006 to May 2012. The data set includes more than 2000 respondents from 61 countries who have selected or implemented SAP, Oracle or Microsoft Dynamics ERP solutions. The survey was open to all participants via our website at [Panorama-Consulting.com](http://Panorama-Consulting.com).

Panorama Consulting developed *Clash of the Titans 2012* by analyzing quantitative data regarding SAP, Oracle and/or Microsoft Dynamics ERP implementations. The report includes findings on a variety of important project factors such as market share, implementation durations and payback periods summarized by vendor. Also included in this report are metrics regarding selection trends and business benefits realization.

SAP and Oracle are the two biggest names in the ERP market. The companies have competed head-to-head with each other for decades and both have demonstrated keen ability to adapt to the changing demands both of their clients and the economic environment. Although Microsoft Dynamics is not quite of the same scale as SAP and Oracle, the three together comprise the entirety of the Tier I ERP market. Each have grown to offer solutions to suit clients outside of their historical target market; SAP and Oracle now are becoming more viable for small and mid-sized businesses while Microsoft Dynamics is now more viable for mid- to large-sized businesses.

As the market flattens, and the three vendors continue to adjust deployment options, financial incentives and functionalities to increase attractiveness to a broad array of clients and industries, there is no question that the three will continue to battle each other for dominance. There also is no question that there will continue to be competition from a number of smaller companies, and that one or more eventually will upset the pecking order.
Brief History of the Big Three

Oracle

Oracle was originally known for its database systems rather than its ERP systems. The company expanded its share in the ERP market through organic growth and a number of high-profile acquisitions including JD Edwards, PeopleSoft, Siebel CRM and the like. Given this particular growth model, Oracle has become a configurable and flexible option and offers a best-of-breed option for its customers.

Oracle has grown primarily through acquisition of best-of-breed point solutions and has made considerable progress merging the JD Edwards Enterprise One functionality into Oracle EBS. Oracle EBS is comprised of over ten product lines, each of them with several modules that are licensed separately.

Oracle’s other key ERP offerings include JD Edwards and PeopleSoft. JD Edwards supports the manufacturing industry especially well. It is an integrated applications suite of comprehensive ERP software that supports a wide variety of business processes with one common database. JD Edwards EnterpriseOne has an open platform, which provides for a broad support for different operating systems, databases, and middleware from Oracle and other vendors.

PeopleSoft targets large organizations, especially in the public sector and financial services sector. PeopleSoft has eight different application solutions such as financials, supply chain, HR, CRM and so on, among which HR and CRM solutions are the most desirable. Before being acquired by Oracle, the PeopleSoft suite was based on a client-server approach with a dedicated client. The current PeopleSoft version is based on a web-centric design, which allows all of a company's business functions to be accessed and run on a web browser.

Oracle offers its solutions with different deployment models, including both on-premise and on-demand. Examples include E-Business Suite On-Demand, PeopleSoft Enterprise On-Demand and JD Edwards EnterpriseOne On-Demand, all of which are hosted applications but are not true SaaS applications. There is a move to provide “virtualization,” which is Microsoft terminology for the cloud environment.
Oracle’s best-of-breed approach sometimes allows for more flexibility to accommodate changing business needs, but this strength can become a weakness when it becomes harder to enforce standardized processes across a larger organization.

Based on qualitative input from our clients, some of Oracle’s functional strengths include:

- Strong finance and accounting functionality
- Advanced pricing module supports complex pricing scenarios
- E-portal provides for easy interaction with customers and suppliers
- Well-built IT architecture
- Better product configurator
- Good functionality for production operations

**SAP**

SAP began as an ERP software provider and today is the leading player in the ERP market. SAP developed close relationships with a variety of alliance partners, which fueled its growth through the 1990s and 2000s. There are an abundance of third-party developers who supply numerous add-on programs that work in conjunction with SAP products. SAP also offers ERP solutions appropriate for all sizes of companies.

Based on SAP’s technology platform NetWeaver, SAP Business Suite is a set of integrated business applications that provides industry-specific functionality and scalability. Although very powerful, SAP can be more difficult to change as a business evolves. This is both a strength and a weakness: on the one hand, it is tightly integrated and helps enforce standardized business processes across an enterprise, but it can also be more difficult to modify the software to adjust to evolving core processes and requirements.

SAP’s core offerings include SAP Business All-in-One and SAP Business One. SAP Business All-in-One is a comprehensive, integrated enterprise software that offers industry-oriented solutions. All-in-One focuses on small- to mid-sized organizations with up to 2,500 employees. SAP Business All-in-One is template-based, and a configurable derivative of SAP Business Suite. It offers more than
700 industry-specific solutions by deploying their “best practices.”

SAP Business One is a single, integrated application designed for small companies with less than 100 employees. It mainly supports retail, wholesale, services and manufacturing. With third-party add-ons, SAP Business One is able to support a variety of industries and functions.

In order to meet the needs of small or mid-size businesses, SAP offers SAP ByDesign. Available in United States, Germany, France, the United Kingdom, India, and China, SAP ByDesign supports companies with 100 - 500 employees. As a SaaS-type on-demand system, SAP ByDesign has low upfront costs and may require fewer IT resources than traditional ERP software.

Some of SAP’s functional strengths include:

- Strong product development functionality
- Ease in supporting Make-To-Order processing
- Integrated retail module
- Clear visibility to goods-in-transit orders
- Good quality control and quality assurance functionality
- Good compliance with SOX and tax regulations
- Strong cash management functionality

**Microsoft Dynamics**

Already established as the premier supplier of operating systems and business software, Microsoft Corporation entered the arena of ERP software through acquisition. In 2000, Microsoft acquired Great Plains, one of the first accounting packages in the USA that was designed and written to be multi-user and to run under Windows as 32 bit software. This was soon followed by the 2002 acquisition of Navision, a Danish software company who offered an accounting and ERP solution offered for Microsoft's Windows 2000 Professional operating system. Navision had merged with Damgaard Software in 2000. Damgaard's product was Axtapa, a highly respected accounting system and ERP solution originally brought to the United States from Europe by IBM in 1996. Written completely in Java, Axapta was designed to be a complete ERP solution which included advanced distribution, process and discrete manufacturing, built-in CRM
capabilities, and within an integrated development environment. The products maintained their own identities under Microsoft and were originally marketed as Microsoft Business Solutions, until being changed to Microsoft Dynamics ERP in 2006.

Microsoft Dynamics GP, the former Great Plains product, is designed for small- to mid-sized business desiring a simple, out-of-the-box software solution. Microsoft Dynamics NAV, the former Navision product, is designed for small- to mid-sized businesses that need broader functionality and the ability to customize their software solution. The former Axtapa product, now marketed as Microsoft Dynamics AX, is the flagship of the Microsoft Dynamics offerings, and is geared toward larger, enterprise-wide implementations. Other products within the Microsoft Dynamics product line include SL (formerly Solomon), which is designed for project-oriented businesses, and CRM.

Microsoft Dynamics has historically relied upon its large network (10,000+) of partners to develop extended and industry-specific functionality beyond the core products. However, the recent AX 2012 release incorporates into the core offering industry-specific functionality for manufacturing, public sector, service industries and distribution. Additionally, this release incorporates significantly improved “cloud” capabilities.

Microsoft Dynamics offers several technical strengths, including:

- Ease of customization
- High flexibility
- Ease of integration
- Familiarity of user interface

Functional strengths include:

- Strong inter- and multi-company support
- Strong multicurrency and localization capabilities
- Data dimension-enabled tracking of physical moves (inventory, etc.) and financial transactions
- Strong MRP and trade capabilities
Comparing the Three Software Vendors

When comparing the offerings of SAP, Oracle and Microsoft Dynamics, it is immediately clear that each has both strengths and weaknesses. It is important to remember that the suitability of a particular ERP solution for an organization is wholly dependent on the specific needs and requirements of that organization. Factors that should affect purchasing decisions include functional requirements, risk tolerance, budget, complexity, resource availability and project scope, to name just a few. In addition to weighing all of the vendors, companies also must examine the variety of specific packages, modules and deployment options offered by each vendor to determine the “best fit” solution.

Clash of the Titans is developed and written each year to help organizations get a “quick read” on the high-level characteristics of each vendor, as well as provide insight into respondents’ experiences with the chosen software. The analysis is based on all solutions offered by the three vendors and is not segmented by industry. The intent of this report is to provide an independent and balanced comparison of the ERP market’s Tier I software providers. Panorama is in no way affiliated with SAP, Oracle and Microsoft Dynamics or any other software vendor or reseller.
Market Share

*Clash of the Titans 2012* provides market share statistics based on the frequency each vendor was selected by organizations represented in our annual survey. The graph below shows the overall market share distribution for the time period from February 2006 to May 2012, which is when the survey was open on Panorama’s website.

The collected data conclusively shows that SAP ranks highest of the three vendors, with more than one-fifth (22-percent) of total market share. It is followed by Oracle with 15-percent of total market share and Microsoft with 10-percent of total market share. Tier II solutions (including Infor and Epicor) represent just 16-percent of the market while Tier III and others represent a commanding 37-percent of the market.
Listing and Selection Comparisons

Among the key data points in the report are the rates SAP, Oracle and/or Microsoft Dynamics has of being short-listed and the selection rates of the three vendors following short-listing.

The survey data reveals that SAP is the most commonly short-listed ERP system (short-listed by 35-percent of the organizations in our study). SAP is followed by Oracle at 24-percent and Microsoft Dynamics at 17-percent.

<table>
<thead>
<tr>
<th>Rates of Being Short Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor</td>
</tr>
<tr>
<td>SAP</td>
</tr>
<tr>
<td>Oracle</td>
</tr>
<tr>
<td>Microsoft Dynamics</td>
</tr>
</tbody>
</table>

After being short-listed, the popularity of the top three vendors flips. Oracle has the highest percentage of selection following short-listing (34-percent). Microsoft Dynamics follows closely with 32-percent and SAP with 28-percent.

<table>
<thead>
<tr>
<th>Selection Rates When Short-Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor</td>
</tr>
<tr>
<td>Oracle</td>
</tr>
<tr>
<td>Microsoft Dynamics</td>
</tr>
<tr>
<td>SAP</td>
</tr>
</tbody>
</table>

There is no question that the interpretation of the above data creates a number of potential conclusions. First, the fact that SAP is short-listed at such a high rate points to the fact that its name recognition, use by a large number of “blue chip” organizations, and overall product offerings each or all could incentivize buyers to take a long, hard look at its software. However, the fact that its actual selection rate is lower than the other two vendors in the study suggests that after assessing the available information, organizations are not easily convinced that
SAP is the best option.

Although Microsoft and Oracle are not as frequently short-listed as SAP, their selection rates are higher when they are. This suggests that those vendors likely offer products that are simply a better fit for the needs of the organizations represented in the study.

In Panorama’s experience, many organizations simply do not have the proper methodologies or knowledge in place to effectively assess ERP software packages. Therefore, while the selection rates are strong for Microsoft Dynamics and Oracle, there is no evidence that organizations made the “right” decision by choosing them. Rather than considering this data to be indicative of the suitability of the product offerings, it is useful to consider it as a broader data point regarding trends in the sales cycle experienced by the three vendors.

**Implementation Duration**

Panorama typically finds that the duration of an implementation project is related directly to the scope of a company’s implementation, the resources provided, the fit and functionality of the software chosen, and the type of solution purchased. All vendors represented in this study provide a variety of solutions for different organizations and industries. The level of customization an organization wants or needs to make the ERP solution work “best” also affects implementation durations.

As one can easily conclude from the graph on the following page, actual times of implementation rarely matched planned times. The biggest discrepancy was found in Oracle implementations, which average 18 months – four months longer than expected. Both SAP and Microsoft Dynamics run an average of two months over the planned implementation time. Microsoft Dynamics has the shortest overall implementation time (13 months), followed by SAP (17 months) and Oracle (18 months).
Please note that implementation duration periods begin at the time of purchase of the software and end upon full functionality. Several variables affect implementation duration, including scope, size and complexity of the company implementing the software as well as the specific solution and deployment model chosen.

**Extended Durations**

While it is distressingly common for ERP implementation to go over-schedule, it is not a forgone conclusion. While nearly two-thirds (61-percent) of respondents indicate that their implementations went over schedule, 28-percent completed the project on-schedule and 11-percent completed implementation earlier than scheduled. This is a positive finding and shows that organizations’ increased realism about implementation durations is beginning to be reflected in their planning strategies.
## Duration Findings

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earlier than scheduled</td>
<td>11%</td>
</tr>
<tr>
<td>On-schedule</td>
<td>28%</td>
</tr>
<tr>
<td>Over-schedule</td>
<td>61%</td>
</tr>
</tbody>
</table>

The key reason for delayed implementation noted in this analysis is the expansion of initial project scope (29-percent). This is a common issue suffered by organizations that rush into implementations without taking the time to properly plan or understand fully the impact and/or the organizational change management tactics necessary to achieve a successful implementation. As follows, organizational issues are a component that one-fifth of respondents (20-percent) indicate extended their durations. Data issues and resource constraints each garnered 17-percent of the “vote,” while training issues and technical issues affected 15-percent and 14-percent of respondents, respectively.

The table presented on the following page provides an analysis of reasons cited by respondents who had an extended duration with SAP, Oracle or Microsoft Dynamics ERP projects.
The frequency of the challenges increased in seven out of eight categories from 2011 to 2012, suggesting that companies are having increased difficulty implementing their ERP software.

Regardless of the size or needs of an individual company, strong organizational risk mitigation and change management can address many of the issues cited above. Project planning, resource deployment, segmented communications, targeted training, strong data conversion plans, and so forth serve to minimize the negative effects of change, decrease the durations and increase the success of implementations. Because of the resource and staffing constraints most small or medium-sized businesses face, it is critical that they recognize the great impact organizational change efforts – both in the executive suite and among end-users – have on implementation success. Regardless of which software package is chosen, a company that does not devote the time and effort to ensuring its staff is aligned and trained, and that its leaders are clear on the project priority, timeline, staffing needs and so forth needed for ERP success, is apt to see an ERP project stretch well-past the initially projected timeframe.
Payback Periods

Payback is defined as a period of time when the organization recoups its initial investment on the project. This metric can only be determined if key performance indicators (KPIs) and baseline measurements were put into place prior to implementation.

Panorama’s research shows that, of the organizations that receive payback from ERP software implementations, the average payback period is 2.4 years. It is important to note, however, that 31-percent of respondents indicated that they had yet to recoup their costs. Nearly a third of respondents (30-percent) also indicated that it had taken them three or more years to receive payback.

In our experience, organizations can have a somewhat misguided approach to payback by assuming that the project will begin generating financial benefits the second the “switch is flipped.” While this can indeed occur, it is critical to accurately assess this risk and build the findings into a business case prior to implementation.
The majority of SAP implementations took greater than three years to provide payback (36-percent). Interestingly, SAP also had the highest rate of implementation paybacks that took less than a year (nine-percent).

Oracle and Microsoft Dynamics implementations had very similar rates of payback across the board. Fifteen-percent of respondents had a Microsoft Dynamics implementation that provided payback in one to two years and 15-percent had a Microsoft Dynamics implementation that provided payback in a time period of greater than three years. With Oracle, these rates were 17-percent and 20-percent respectively. It took less than a year for five-percent of Oracle users and six-percent of Microsoft Dynamics users to receive payback.
Benefits Realization

Benefits realization statistics reflect the measurable benefits experienced versus the benefits projected in each respondent’s business case. The following chart depicts the levels of satisfaction as reported by organizations that had a business case and were able to measure against their expected results.

SAP implementations were “all over the board” in terms of benefits realization. Nearly half of respondents (44-percent) realized 50-percent or less of anticipated benefits from their SAP systems, 23-percent realized between 51- and 80-percent of benefits and ten-percent realized between 81- and 100-percent of benefits.

One-fifth of Oracle users (21-percent) realized 51- to 80-percent of anticipated benefits from their solutions, while just three-percent realized between 81- and 100-percent of anticipated benefits. Although two out of five (39-percent) of Microsoft Dynamics users realized 50-percent or less of anticipated benefits, Microsoft also had the highest percentage of users (13-percent) who realized between 81- and 100-percent of benefits.
## Types of Benefits Realized

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of Information</td>
<td>60%</td>
</tr>
<tr>
<td>Increased Interaction Across Business</td>
<td>13%</td>
</tr>
<tr>
<td>Decreased Labor Costs</td>
<td>7%</td>
</tr>
<tr>
<td>Improved Lead Time</td>
<td>7%</td>
</tr>
</tbody>
</table>

Two-thirds of respondents indicate availability of information as a benefit their organizations received from their ERP implementations. Less than one in five (13-percent) of respondents indicate they had increased interaction across their business as a result of the implementation, and only seven-percent indicate decreased labor costs or improved lead-time.

Other types of benefits realized that respondents could have chosen included improved interaction with customers, reduced IT costs, integration of business processes/operations, reduced direct operating and labor costs and improved interaction with suppliers. The response counts on these were too small to warrant mentioning in the table. The very lack of their selection points to a distressingly small percentage of potential ERP system benefits being realized.

These results are disappointing for a number of reasons. If, as the survey respondents indicate, organizations have more access to information and data as a result of their ERP implementations, then why hasn’t that information led to better results? While speculative, the answer is likely that organizations simply don’t know what to do with all of the data that an ERP system captures. They don’t know how to use it to improve performance, increase productivity, operate more efficiently, drive down costs, integrate business processes or, likely, truly realize most any other benefit that data access can provide. The delta between information access and true business improvement shown in these results indicates that organizations that implement ERP solutions without changing their
business processes to take advantage of their new visibility into data stagnate when it comes to business benefit realization.

Summary

SAP

Below are some of the highlights of SAP’s suite of solutions as they relate to Oracle and Microsoft Dynamics:

• Largest share of the market
• Highest short-listing rate
• Lowest selection rate when short-listed
• Longest payback period

Oracle

A summary of Oracle’s strengths and weaknesses as they relate to SAP and Microsoft Dynamics:

• Highest selection rate when short-listed
• Longest implementation duration
• Largest delta between planned and actual implementation duration
• Lowest percent of users who realized between 81- and 100-percent of benefits

Microsoft Dynamics

Below are some of the highlights of Microsoft Dynamics as it relates to SAP and Oracle:

• Smallest share of the market
• Lowest short-listing rate
• Shortest implementation duration
• Highest percentage of users who realized between 81- and 100-percent of benefits
Conclusion

It’s clear to anyone in the ERP market that SAP, Oracle and Microsoft Dynamics have built strong reputations as the powerhouses of Tier I enterprise software. But the market is shifting; enterprise solutions are being commoditized, cloud and SaaS ERP vendors are gaining traction, and companies are looking for more than a marquee name on their ERP software. They are looking for true ROI.

While SAP, Oracle and Microsoft Dynamics continue to enjoy enviable market share and selection rates, the extended durations, long payback periods and lack of true benefits realization points to trouble on the horizon. Although the “blame” for these issues likely lies more in the implementing organizations than in the software itself, perception is the name of the game. If the market begins to perceive that this (or any) software simply isn’t bringing the returns necessary to justify its price, a significant drop in market share will soon follow.

While an analysis of ERP selection and implementation trends is always interesting, it is critical that any organization looking to implement an ERP system assesses the software and vendors through the lens of its own organization’s specific requirements. Because the process is so complicated and arduous, it is best practice to engage the services of an independent ERP consulting firm to help the best choice for your organization. Call Panorama today to discover how we can help your organization through the ERP selection, implementation and benefits realization processes.

About Panorama Consulting Solutions

Panorama Consulting Solutions, a division of The Prescott Group, LLC, is an IT consulting firm specializing in the enterprise resource planning (ERP) market for mid- to large-sized organizations around the world. Independent of affiliation, Panorama facilitates the evaluation and selection of ERP software, manages ERP implementation, and expedites all related organizational change to ensure that each of its clients realize the full business benefits of their ERP systems.

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