CLASH OF THE TITANS

An Independent Comparison of SAP, Oracle and Microsoft Dynamics



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Introduction and Summary

Panorama Consulting Solutions, an independent and vendor-neutral enterprise resource planning (ERP) consulting firm, developed the **2011 ERP Report: Clash of the Titans** to compare the three Tier I "titans" of the ERP industry. Although past issues of the report have focused exclusively on SAP and Oracle, it has been newly expanded this year to include the Microsoft family of ERP solutions.

The report is based on surveys of more than 1800 respondents that have either selected or implemented ERP solutions over the last six years. The survey was open to all participants via our website at <u>www.Panorama-Consulting.com</u>.

Panorama Consulting Solutions uses a number of quantitative analyses to compare leading ERP software vendors. The **2011 ERP Report: Clash of the** *Titans* provides findings on detailed project factors such as implementation costs, durations, and payback periods summarized by vendor. Also included in this report are metrics regarding selection trends, satisfaction and benefits realization.

SAP and Oracle, the two software giants in the ERP market, have competed with each other ever since Oracle vigorously expanded its share in the software applications market two decades ago. Since then, both ERP vendors have demonstrated their ability to adapt to the dynamic economy and changing needs of customers. They are both Tier I vendors and have historically targeted large organizations but, in recent years, they have begun to attract an increasing number of small and mid-size companies via simplified deployment options and financial incentives.

Microsoft Dynamics continues to be viable for a multitude of well-known customers of all sizes. The vendor also offers several solutions specifically targeted for different industries and their specializations. Although Microsoft has been traditionally focused on the smaller companies, it has the product offering acceptance and functionality necessary for mid-size companies as well. Success in this market has catapulted Microsoft into the Tier I category, where it now competes against Oracle and SAP for market share.

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 onpremise and on-demand. Examples include E-Business Suite On-Demand, PeopleSoft Enterprise On-Demand and JD Edwards EnterpriseOne On-Demand. All of those 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 that was 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 smallto 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

SAP, Oracle and Microsoft have different strengths, weaknesses, and tradeoffs. Different clients have different needs ranging from functional requirements, technical maturity, tolerance for risk, budget, and a host of other factors. These variables influence not only the choice of vendor, but also the choice of specific solution offered by the vendor.

This report compares the high-level characteristics of the vendors and details their competing products and technologies. The analysis was summarized based on all solutions offered by these vendors, and does not target specific industries. The intent of this report is to provide an independent and balanced comparison of the ERP market's leading software providers. Panorama is in no way affiliated with SAP, Oracle, Microsoft Dynamics, or any other software vendor or reseller.

An Analysis of Market Share



Panorama's benchmark study provides market share statistics based on the frequency each vendor was selected by organizations in our annual survey. It analyzes the overall market share distribution for the time period from 2005 to 2011.

The strong branding, overall market share and variety of products offered by SAP, Oracle and Microsoft make these companies undoubtedly the top three ERP vendors. SAP ranks highest by capturing 24-percent of total market share, followed by Oracle with 18-percent of total market share and Microsoft with 11-percent. Tier II solutions represent 11-percent of the market and Tier III and others represent 36-percent of the market. It is significant to note that these statistics reflect the increase in Tier II and Tier III vendor participation in the ERP arena over the past several years, though their combined totals still do not equal the totals of SAP and Oracle combined.

Among small- to mid-sized companies, which are targeted by all three software "titans," the statistics maintain similar ratios. SAP has 18-percent of the market, Oracle has 14-percent, and Microsoft has 7-percent.

LISTING AND SELECTION COMPARISONS

One of many key findings from our report is that certain ERP systems have higher rates of being short-listed and selected than others.

The data revealed that SAP is the most commonly short-listed ERP system, (short-listed by 38-percent of the organizations in our study). SAP is followed by Oracle at 32-percent and Microsoft Dynamics at 24-percent. The following table outlines the top ten vendors ranked by their frequency of being short-listed by organizations who participated in our study.

Rates of Being Short Listed			
Vendor	Frequency		
SAP	38%		
Oracle	32%		
Microsoft Dynamics	24%		

Similar to the study results in our 2010 analysis, Oracle continues to gain a higher percentage of share among ERP vendor selections after being short-listed. A review of the top three vendors and their selection rankings reveals that Oracle was chosen 22-percent of the time, SAP 19-percent and Microsoft 14-percent.

Selection Rates When Short-Listed			
Vendor	Frequency		
Oracle	22%		
SAP	19%		
Microsoft Dynamics	14%		

Interpretation of the above data offers a number of potential conclusions. First, the fact that SAP is short-listed so often suggests that its strong brand name and leading market position could provide ERP buyers with compelling reasons to strongly consider the software. Secondly, the fact that Oracle is selected at a higher rate when short-listed suggests that the product may offer a better functional fit for organizations represented in the study. Microsoft's strong showing in both categories suggests it also has the breadth of products and functionality to cover multiple markets. It is worth noting that there may be any number of extenuating circumstances influencing the choices, such as financial

considerations, vendor sales strategies, or organizations' previous experience with vendors. Although the frequency of short-list or selection may not be the best indicator of how well a particular software package fits an organization's unique business requirements, it can be a useful quantitative and objective data point in assessing market trends among ERP vendors.

ASSESSMENT OF SATISFACTION RATES

ERP users achieve high satisfaction levels through advanced operational processes and robust functionalities, of which all three vendors are very capable. The reasons cited for less than satisfactory results typically are tied to specific issues, such as a lack of functionality in certain areas, or problems in a singular area such as reporting.

Both SAP and Oracle have high satisfaction levels. Nearly 40-percent of companies surveyed who implemented SAP are satisfied with their software, and 83-percent would purchase the software again. Eighty percent of Oracle customers are satisfied and 100-percent of those surveyed would purchase the software again. Microsoft's satisfaction numbers are lower than the "big two," at a 33-percent satisfaction rate.

Microsoft, Oracle and SAP all offer robust software with great flexibility. But with that flexibility comes complexity. In the small-to-mid-sized markets, organizations have less resources and IT staff to implement ERP projects. As Oracle and SAP further penetrate small and mid-sized companies, it will be interesing to follow the trends on satisfaction ratings.

IMPLEMENTATION DURATION

Duration of an implementation project is related directly to the scope of a company's implementation and the type of solution purchased. All three vendors provide solutions ranging from small, targeted product offerings to global systems.

The average time to implement a Microsoft Dynamics project is 14 months with a high implementation time of 24 months and a low implementation time of one month. The wide range of implementation time of Microsoft Dynamics is attributed to the wide range of product offerings in smaller markets. SAP and Oracle solutions were implemented in less (but similar) time with an average implementation time of 13 months and 11 months respectively.



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.

Extended Durations

Nearly two-thirds (61-percent) of respondents indicated that their implementations had gone over schedule, while only 8-percent completed implementation earlier than scheduled.

Duration Findings				
Earlier than scheduled	8%			
Over-schedule	61%			
On-schedule	31%			

The main reason for delayed implementation noted in this analysis is the expansion of initial project scope (17-percent), followed by organizational issues (14-percent) and data issues (14-percent). Regardless of software vendor chosen, companies need to effectively manage all components of the project from the start. Poor planning can result in project scope expansion and employee resistance to change.

The table below provides an analysis of reasons cited by respondents who had an extended duration with SAP, Microsoft or Oracle ERP projects:

Reasons Behind Extended Durations				
Initial Project Scope was Expanded	17%			
Organizational Issues	14%			
Data Issues	14%			
Resource Constraints	13%			
Conflicts in Priority of Project	10%			
Training Issues	10%			
Unrealistic Timeline	8%			
Vendor Functionality Issues	8%			
Technical Issues	7%			

Oracle implementations take longer than expected 75-percent of the time, although 13-percent of Oracle implementations actually were implemented in less time than allotted. Sixty one percent of Microsoft projects took longer than expected. Microsoft customers indicated that they experienced problems in

implementation for a wide variety of reasons, most of which were personnelrelated problems rather than functionality. Although SAP implementations have similar risk mitigation and organizational change management issues, SAP customers are typically larger and thus have more resources to manage the complexity of the applications.

Regardless of the size of the company, strong organizational risk mitigation and change management can address these issues, minimize the effects of change and increase the success of implementations. Again, it is even more critical for smaller organizations (which have fewer resources and staff) to make determined organizational change efforts in order to meet their implementation schedules.

PAYBACK PERIODS

Panorama's research shows that most organizations that implement ERP software have a payback period of two to three years, or an average of 2.5 years.

Oracle has a higher than average payback period (3-4 years), with 40 percent of its customers not realizing payback on their projects until three years after implementation. This suggests it takes longer for Oracle customers to recoup their software investment compared to users of other solutions. Fifty-one percent of Oracle's payback occurs between one and three years after implementation. Only nine percent occurs less than one year after implementation. Thirty-one percent of SAP customers realize payback more than three years after implementation and 57-percent of SAP customers realize their payback between one and three years after implementation and 57-percent of payback exceeding the three-year timeline (16-percent). Seventy four percent of Microsoft customers realize their payback period between one and three years. Although this percent is significantly higher than other software vendors, Microsoft offers small business solutions that contribute to this shorter payback period.





PROJECT COSTS AND OVERRUNS

Based on the analysis of responses related to ERP projects that have been completed, the total cost of SAP far exceeds the total costs of either Oracle or Microsoft. The figures in the table below represent the average project costs and overruns of the projects represented in our survey.

Project Costs and Overruns (Average)					
	Planned	Actual	% Increase		
SAP	\$19,003,667	\$20,615,350	8%		
Oracle	\$1,364,269	\$1,573,152	15%		
Microsoft	\$407,938	\$463,667	14%		

These costs should in no way be used to determine the cost of your project. Both the size of the companies reporting and the global reach of the projects affect the total costs. In addition, all three vendors offer multiple solutions, all of which have varying costs.

Implementations of each of the three vendors' solutions report costs overruns. SAP has the lowest average variance between actual and planned budget (8percent), while Oracle is the highest (15-percent) and Microsoft is close behind (14-percent). A graphical analysis of the reasons associated with the overruns is presented below. Higher than expected costs can be a result of miscalculation by either the vendor or the customer. Insufficient knowledge and unrealistic expectations prior to setting budgets can also be a factor.

The two most frequent responses for cost overruns were: "initial project scope was expanded" (32-percent) and "unanticipated technical or organizational issues created additional costs" (19-percent). These responses account for 51-percent of the total responses for cost overruns. A solid software selection process and strong organization change management can control these types of overruns. These responses also point to the complexity of the software offered by all three vendors and the lack of resources needed to effectively manage the project.



BENEFITS REALIZATION

Benefits realization statistics reflect the measurable benefits experienced versus what was 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.



Seventy six percent of Microsoft Dynamics customers realized less than 60percent of the benefits, while 24-percent of the customers realized greater than 60-percent of the benefits planned. No Microsoft Dynamics customers realized more than 90-percent of the benefits planned.

Sixty three percent of Oracle customers realized less than 60-percent of the benefits planned, while 37-percent of customers realized greater than 60-percent of the benefits planned.

Sixty seven percent of SAP customers realized less than 60-percent of the benefits planned, while 33-percent of the customers realized greater than 60-percent of the benefits planned.

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 total implementation cost
- Lowest average variance between actual and planned budgets
- Highest short-listing rate
- Second highest satisfaction rate

Oracle

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

- Second largest share of the market
- Highest average variance between actual and planned budgets
- Shortest implementation duration
- Longest payback period
- Highest satisfaction rate

Microsoft Dynamics

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

- Smallest share of the market
- Lowest total implementation cost
- Longest implementation duration
- Shortest payback period
- Lowest satisfaction rate

CONCLUSION

As outlined in this report, choosing between SAP, Oracle and Microsoft is not always easy. Depending on a company's business circumstances and IT strategies, each solution has distinct strengths, weaknesses, and tradeoffs. The complexity and flexibility in the software packages can cause serious problems during software implementation. The best way to choose the appropriate software for your organization is to objectively assess these strengths and weaknesses relative to your unique business requirements. Independent ERP consulting firms such as Panorama Consulting can help provide this expertise.

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.

Panorama is a MWOB (minority- and women-owned business) and is certified as a disadvantaged business enterprise (DBE), a women's business enterprise/woman-owned business (WBE) and a minority business enterprise (MBE).

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