Oracle Corporation et al v. SAP AG et al
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EXHIBIT 2

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BRIAN S. SOMMER EXPERT REPORT

Oracle USA, Inc., et al v. SAP AG, et al

In the United States District Court

For the Northern District of California

Case No. 07-CV-01658 PJH

Brian S. Sommer
Chicago, Illinois
March 26, 2010

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I. SCOPE OF ENGAGEMENT

I have been retained by counsel for the Defendants in the matter of *Oracle USA, Inc., et. al., v. SAP AG, et. al.,* Case No. 07-CV-01658 PJH (EDL).

I understand that this case concerns an area of technology known as Enterprise Resource Planning ("ERP") application software, which, generally speaking, is software used to run businesses.

Counsel for Defendants asked to me review the report of Mr. Paul Meyer (the "Meyer Report") and provide my opinions in response to his assumptions, implicit and explicit, about the ERP software and support industry and market.

This rebuttal report, in response to the Meyer Report, covers the general dynamics of the ERP software industry and market including: (1) how companies market, sell and support such software; and (2) the factors that explain how and why customers make decisions to buy, maintain and replace ERP application software and support services. The Meyer Report failed to adequately define the class of software in question, the state of the market for that software and related support and the relationship between software vendors (companies that create and sell ERP application software), their customers and third-party support providers (companies that provide support services for application software sold by ERP software vendors). Thus, this rebuttal report provides substantial context that the Meyer Report should have, but did not provide.

This rebuttal report identifies the general factors that should be considered in determining how and why customers make ERP purchasing decisions, which is necessary to place into context the alleged damages claimed in the Meyer Report. I understand that Defendants' expert, Mr. Stephen Clarke, has conducted an analysis of the customers at issue in this case as part of his rebuttal damages analysis in response to the Meyer Report and that, in so doing, he has considered information and opinions presented in this rebuttal report.[1]

I reserve the right to modify or supplement this rebuttal report or to consider new information, if and when more information is made available to me, including information provided by Plaintiffs' experts.

II. QUALIFICATIONS

I understand that Defendants' counsel has already provided my resume and a list of my publications. They are also attached to this rebuttal report as Appendices A and B.

I have spent a considerable portion of my career assisting clients in evaluating, choosing, implementing and modifying application software products and negotiating software purchases. I have been a direct participant in dozens of application software selections, including many by Fortune 500 firms. By way of example, I have advised clients such as Novartis Pharma,

[1] Separately, I assisted Mr. Clarke by collecting documents related to TomorrowNow customers and their ERP license and support services choices. Additionally, I interviewed one former TomorrowNow customer, Computer Associates, to assist Mr. Clarke.

Tenneco, McDonnell Douglas, AstraZeneca and Boise Cascade on their ERP software selection efforts. I recently negotiated an ERP agreement for a large higher education entity, and I am currently in discussions with an even larger higher education entity to negotiate their ERP agreement. During my tenure at Accenture (formerly known as Andersen Consulting), I negotiated ERP software agreements on behalf of the firm.

I have written and spoken extensively on the ERP industry. As examples, I have written for or been quoted in the Wall Street Journal, InformationWeek, and have provided online commentary for the website ZDNet.com. Additionally, I have given presentations on these matters in public forums (*e.g.*, SoftSummit, Accenture Software Spectaculars, and Sandhill's Software 2005) and was recently interviewed for an in-flight magazine on key software negotiation points.

In 1999, I launched a company called IQ4Hire that provided estimating templates for users of SAP, Oracle, PeopleSoft and Siebel software. These templates generated detailed statements of work for software implementations that would follow recent customer software purchases. These statements of work would be combined into a request for proposal that would be forwarded to a number of systems integrators and other service providers for estimates.

I have designed, edited and published numerous application software selection and implementation methodologies. These include a Finance and HR software selection methodology, a PeopleSoft Rapid Implementation methodology, a compendium of software selection business case scenarios and a buyer's guide for selecting an HR-BPO provider.

I am the founder and President of TechVentive, Inc. TechVentive predominately serves the sales, channel and marketing departments of application software vendors. Its customers represent a wide cross-section of the application software space from small start-ups to large, global software companies. TechVentive has developed custom sales training, marketing events, publications and other resources to help software companies succeed. TechVentive also publishes a number of research reports, buyer's guides, newsletters and blog content.

III. COMPENSATION

I am being compensated at the rate of $250 an hour for my work in connection with this engagement, and in no way is my compensation contingent upon the opinions I offer herein.

IV. INFORMATION CONSIDERED

My opinions in this rebuttal report are based upon the experience I have gained during the course of my career in the ERP software industry and the documents I reviewed to prepare this rebuttal report. I reviewed the Meyer Report submitted on behalf of the Plaintiffs. I, and staff members working at my direction, also considered certain case pleadings, deposition transcripts and documents produced by the parties during fact discovery, and publicly available documents we gathered. A complete list of those materials is provided in Appendix C. I have also conferred with Stephen K. Clarke, another expert retained by the Defendants, in preparing my report.

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V. SUMMARY OF OPINIONS

This rebuttal report addresses a number of omissions and assumptions, explicit and implicit, in the Meyer Report. In particular, the Meyer Report lacks sufficient analysis of how and why software buyers make purchasing decisions for new or replacement ERP software or ERP software support, and is based on incorrect assumptions about these purchasing decisions.

I have briefly summarized my opinions below:

(1) **Software customers do not select their future ERP software vendor simply because of a lower-cost support offering on their existing ERP software**. Mr. Meyer's assumption that a reduction in support costs of a customer's pre-existing ERP software would likely trigger a large-scale replacement with a competitor's ERP software is inconsistent with software-buyer behavior and economically unsound. These replacement decisions are large capital projects that often require the approval of numerous executives within the company. ERP software implementations are expensive and risky endeavors for the businesses and for executives who approve them because these solutions can have a major impact on a company's information technology ("IT"), operations and the overall business of the customers who implement them. As a result, companies change ERP solutions only when there is a compelling business or strategy reason for doing so.

(2) **At some point in a customer's relationship with its ERP software vendor, the customer will evaluate its support options**. ERP software customers, especially those with stable products and no intention of upgrading and/or those in difficult economic circumstances, have an incentive to evaluate third-party maintenance solutions or self-support options. In this rebuttal report, I have identified general classes of third-party and self-support options available to customers as a substitute for vendor-provided support. I show that the self-support option (which should have been, but is not, mentioned in the Meyer Report), is a vibrant alternate support option, given the maturity of the vendors that help customers with tax and regulatory updates. Mr. Meyer incorrectly assumes that all ERP customers want the same level of vendor-provided support throughout the useful life of the software. That assumption is incorrect as it does not take into consideration those customers that have little or no interest in future product upgrades or new product versions. I provide a general overview of alternatives to Oracle-provided support. I understand that Mr. Clarke has conducted a detailed market survey of third-party alternatives.

(3) **Competitive switching marketing programs are not unusual in the ERP industry and generally do not produce significant gains, especially among well known competitors with large market shares.** A number of ERP vendors and systems integrators have created competitive switching programs. However, these marketing programs generally are not the drivers of customers' decisions to switch from one ERP vendor's products to another. If Mr. Meyer had correctly considered and evaluated what industry analysts and other knowledgeable observers had predicted for these programs, he would have reached the same

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conclusion: these switching programs in and of themselves generally fail to offer enough economic incentive to overcome the massive switching cost and risk involved in the implementation of new software.

(4) **ERP vendors' one-size-fits-all approach to support creates incentives for customers to consider alternative support solutions**. The Meyer Report does not adequately account for the fact that ERP customers have varying support needs, and as such, have varying software and support selection motivations. For example, customers on stable software releases may wish to stay on those same releases. Such customers may not need product upgrades and may have little, if any, need for break/fix support, but their vendor may not be able to reduce the cost of their support services commensurate with the customer's diminished needs. In such a situation, an ERP vendor's lack of an à la carte offer for support services can drive customers to alternatives.

(5) **ERP software license and support contracts tend to charge customers ever-greater sums of money regardless of the direction of the customer's business**. The Meyer Report did not consider, but should have considered, the fact that customers pay for support for applications they have licensed but do not use (shelfware). Changes in user counts, corporate revenue or server processor counts, among other factors, can result in customers being required to pay incremental license fees as well as increased maintenance charges on those incremental license fees. ERP vendors frequently raise the price of support without regard for the inflation rate or the usage the customer has made of the vendors' support services. These contracting practices can cause customers to face escalations in their software support costs, and only in limited instances can customers successfully renegotiate their software support contracts to reduce their costs. These factors can drive customers to consider alternatives to vendor support.

(6) **Corporate acquisitions and consolidations in the ERP industry frequently result in fear, uncertainty and doubt in the minds of customers and can cause customers to question their long-term commitment to using a vendor's software and support.** In situations where ERP companies acquire or merge with other ERP companies, customer concern about the extent to which their installed software and related support services will be disrupted inevitably follows. The Meyer Report failed to adequately consider this factor in its analysis.

VI. DISCUSSION

A. Overview of the ERP industry

1. ERP industry: definitions and terminology

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This case concerns a class of computer software known as ERP software. The term "ERP" is a widely used descriptor of a broad class of business application software products. ERP is more of a marketing designation than a universally agreed upon definition.

An ERP software provider is a company that provides functionality in the financial accounting, human resources, supply chain and manufacturing disciplines. In recent years, vendors have added functions such as customer relationship management, services procurement, talent management, supplier relationship management, sales force automation, partner relationship management, GRC (governance, regulation and compliance) and other modules. All of these are marketed as pieces of a broader ERP solution.

In this rebuttal report, I have adopted the definition of "ERP" that is offered by ERPsoftware360.com, a portal dedicated to the review, analysis and commentary of and about the ERP marketplace:

> Enterprise Resource Planning (ERP) software applications act as the central company-wide information system. ERP systems integrate all of an organization's departments, divisions, lines of business and geographical locations into a single, shared, unified and enterprise-wide information system.
>
> […ERP] software includes the five integrated business software suites of:
>
> - Financial or accounting software, general ledger, cash management, accounts payable, account receivable and fixed assets;
> - Distribution or supply chain management software, procurement, sales order, e-commerce, inventory management, product configuration, supply chain planning, supplier management and claims processing;
> - Manufacturing software, bill of materials, work orders, engineering, capacity planning, capacity scheduling, quality control, requirements planning, and manufacturing flow;
> - Human resources and payroll software, HR management, payroll, employee self service, time and attendance, commissions calculations, benefits administration;
> - Customer relationship management (CRM) software, sales force automation (SFA), marketing, customer support, call center.[2]

Additionally, in my discussion of ERP software, I understand and use the following terms as described below:

[2] "ERP 101: The ERP Go To Guide," ERPsoftware360.com. http://www.erpsoftware360.com/erp-101.htm (accessed on February 15, 2010).

ERP Software vendor: This is a company in the business of creating and selling ERP software. These companies may also be referred to as software companies or solution providers.

ERP Software customer: This refers to a company or business that has licensed software from a software vendor.

License: ERP software is often licensed to, not purchased by, a software customer. Licenses are generally perpetual in nature. For purposes of this rebuttal report, I use "purchase" and "license" interchangeably.

Module or application: An individual software application may be known as a module or application. For example, a vendor may sell modules called accounts payable, general ledger, payroll, shop floor control, etc. Software vendors often sell individual applications. However, customers may have to buy multiple modules along with other software tools and infrastructure before getting a fully functional solution. In this rebuttal report, I use the terms module, application or software package interchangeably.

Reporting/query tools: Application software products may require the use of a reporting or query tool. These products enable the printing or display of information. The use of these tools may be important in the production of needed management and regulatory reports. In this rebuttal report, I refer to these products generally as reporting tools.

Infrastructure or platform technologies: A software application may not work or work correctly if additional technology components are not also licensed. These infrastructure technologies may be called middleware, platforms or other proprietary names. For example, SAP's platform is called NetWeaver, and Oracle recently developed Fusion Middleware as its platform. These platforms provide a number of integration and other services that multiple applications can utilize. In this rebuttal report, I refer to these products as infrastructure technologies or middleware.

Enhancements: Over time, software vendors make changes to given software modules. Software vendors usually claim that these changes "'enhance"' the product with new functionality, improved system reliability or improved performance. After testing these changes, the software vendor will make them available to customers. Enhancements are generally available to customers that are paying vendor-provided maintenance.

Support services: Commonly referred to as "software support" or "software maintenance," this includes a number of services and possible product enhancements delivered by the software vendor or a third-party support provider. These services may include, but are not limited to, rights to access the maintenance provider's support desk and knowledge base, break/fix support, access to software, security, and technical patches from the ERP software vendor, access to tax and regulatory updates and rights to future product releases or upgrades (though often limited). In this rebuttal report, I refer to this simply as "support."

Vendor-provided support: This refers to software support provided by the software vendor from whom the customer initially licensed the software. The terms and conditions for the support can be specified in the initial software license contract executed between the software customer and the software vendor or can be part of a separate support contract.

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Third-Party support: Third-party support refers to companies that provide an alternative to vendor-provided support. The exact collection of services each firm may provide varies from company to company, as do the prices the firms' charge. Third-party support can offer access to the support provider's support desk, break/fix support, tax and regulatory updates, and limited software, security, and technical patch support. Third-party support providers do not, as a general rule, provide new upgrades or versions of software products.

Self-support: Software customers may choose to provide their own software support. These customers may have their own technical staffs to diagnose and develop patches. In some cases, they leverage service providers like Vertex, Sabrix, or Taxware for tax table and regulatory updates.

Release or version: When an application or a group of software applications and/or infrastructure has been tested and approved for release to customers, it is usually assigned a release or version number. This designator enables software vendors to more rapidly and correctly diagnose customer support problems.

General availability: This refers to the date when an application (or group of applications) has been sufficiently tested and deemed market ready by a software vendor. Software products are often kept in a general availability status for several years until subsequent versions of the product have also been made generally available and older versions are retired.

Upgrade: Customers that are running on one release or version of a software application may take advantage of a new release and its enhanced functionality or performance by undertaking an upgrade. An upgrade may be fairly straightforward and simply require some program or table maintenance. Other upgrades may require a complete re-installation or re-implementation of the application. The degree of difficulty involved in an upgrade varies based on the amount of functional, database and technology changes found in the new release.

Tax/regulatory updates: Some software applications will be impacted by changes to local, state, federal or other governmental actions. These changes can result in new tax rates that must be applied to sales and use tax, payroll and other calculations. Other changes may result in new reporting requirements. These updates may be provided by a software vendor or a third-party. They may only require table updates and not new software code.

Stable release: A stable release refers to an installed software application that is essentially performing the capabilities demanded of it by the customer in a relatively trouble-free manner. The application is considered stable and does not warrant much, if any, changes to keep it working well.

Customized software: Some software customers make changes to the software they license from a vendor. They do so to meet the unique needs of their business or industry. Some of these modifications can be achieved via table changes or other non-programming methods. Usually these modifications can be transferred to newer versions with minimal effort. Other modifications, especially those that require the customer to modify the software vendor's programming or data structures, will be difficult and expensive to transfer to a new release. Modified applications are often referred to as customized software.

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Patch: Not every application works perfectly for every customer in every technical environment. From time to time, software vendors will issue patches or fixes to customers. These are often only applied by a customer on an as-needed basis. Patches or fixes are not as extensive as a new version or release.

Shelfware: This refers to application software that a customer has purchased but not implemented. Typically, customers pay maintenance fees for shelfware, regardless of whether the software has been implemented.

Shared services: A business may choose to centralize key users, application software and computer hardware to one or a few shared service centers. From these locations, employees can provide common functions such as accounting, payroll processing, recruiting, etc. With shared services, a company can achieve economies of scale and process efficiencies while also improving business outcomes. In shared service environments, the software customer usually eliminates redundant software applications.

SaaS (Software as a Service): SaaS refers to a type of ERP or other software that is delivered to users via the Internet with the application and data resident on a "cloud." A "cloud" is often a datacenter managed by a software vendor.

Break/fix support: This describes a type of support a software customer may need when their licensed application malfunctions materially or ceases to work. Break/fix support may be accomplished via on-site or remote methods.

Level 1 support: Level 1 support describes a collection of support activities a software customer can perform itself. The purpose of Level 1 support is to quickly screen common or customer-specific issues and resolve them internally. Level 1 support is usually provided by a help-desk and helps eliminate a number of repetitive or trivial support requests being logged with an ERP software vendor's help desk.

2. Major ERP software vendors

IT Business Edge profiled major vendors in the ERP market as of 2009. It created the table below as a quick reference guide to the current ERP marketplace. Its assessment of the market is consistent with my research and observations of the marketplace.

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	Infor	Microsoft	Oracle	SAP	Other
ERP Functionality	Over 20 "brands" with widely diverse functionality	Four basic brands; all but AX with basic functionality	Four primary brands, two with deep functionality* Oracle e-Business Suite PeopleSoft Enterprise* JD Edwards (EnterpriseOne* and World) Siebel	Two brands, one with the deepest functionality available** **ERP (ECC) Business Suite	Lawson - Two Sage - Multiple Intuit - One
Market penetration/ activity, ERP	With its many brands, probably third largest but heavily maintenance- revenue- and AS/400-based	Would rank somewhere between Infor and Lawson	Gaining on SAP, especially in North America, but still significantly behind SAP in ERP market share	Holds wide lead in ERP market share (SAP is also gaining in middleware behind IBM, Microsoft and Oracle)	Sage and Intuit in particular have many more installations than Infor, Microsoft, Oracle and SAP but are aimed totally at small- and medium-size enterprises
Market penetration/ activity, standalone	Also has a widely diverse mix of standalone application brands	Leads based on Office; also actively pushing CRM capability as a service; will use the experience to market ERP as a service	Large lead over SAP in standalone applications market share, primarily through acquisition	SAP does not really compete in standalone applications market but has a few offerings	Thousands of examples
ERP Partnership strategy	Partners heavily with IBM and IBM distributors	Partners heavily with Microsoft developer community; looking for 100,000	About 4500 middleware partnerships that should be transferable to applications	Has been trying unsuccessfully for 10 years to build a program; looking for over 1,000	Tend to partner with IBM and Microsoft (but rarely both); many newer ERP suppliers partner within open source community
ERP Industry applications strategy	Wide span but primarily product supply chain	Covers breadth of the industry classification codes	A lot of standalone, unintegrated industry-centric point products	Integrated industry centricity of its ERP offering in 25 major codes is key to SAP success in ERP	Thousands of examples from companies such as Agresso, Compiere, HotWax, IFS, OpenBravo, Syspro and XTuple
ERP Platform	Heavily AS/400-based	.NET	Different platform under each brand	Solid modern middleware base for both brands	Primarily use IBM or Microsoft middleware or LAMP/WAMP stack
ERP/SaaS Strategy	Through partners	Trying to build into major delivery method	Not a major market goal of Oracle's according to public statements; may be counting on NetSuite "off the books"	Will take another run at NetWeaver-based SaaS, probably under the BusinessOne brand (given the failure of the Business By Demand service).	Others have shied away from direct SaaS, most notably Lawson (whose CEO was not shy about it)

[3]

Generally speaking, the companies identified on this table and the companies that they have acquired (*e.g.*, Oracle's acquisition of PeopleSoft) encompass the major players in the market during the period 2002 to the present.

3. Product offerings of ERP software vendors and business needs of customers

The Meyer Report failed to adequately analyze the factors that drive ERP customers' decisions to replace one vendor's software with that of another. Evaluating whether an ERP vendor's software will meet a customer's needs is time-consuming. This is one reason why customers do not make decisions to replace one vendor's software with that of another lightly.

(a) Comparing ERP products between vendors

Some ERP software vendors sell their applications with differing degrees of functionality. For example, some vendors may have many different types of manufacturing applications, each of which is designed to work best in a specific manufacturing environment (*e.g.*, pulp and paper mills). A number of unique applications may exist for some of these highly specialized vertical niches. Thus, even if two vendors claim to provide manufacturing software capabilities in their ERP suite, it does not mean that the products serve the same functionality or vertical industry sector. Likewise, these different manufacturing solutions may be targeted for different kinds of software buyers. One buyer could be a small, local, single-site U.S.-based business while the other could be large, multi-site global firm. An ERP solution designed for one industry/segment could be overkill in another and vice versa. These distinctions are

[3] "ERP Supplier Comparison, 2009," IT Business Edge. http://www.itbusinessedge.com/info/erpTable1239.aspx (accessed February 18, 2010).

important to software buyers and therefore important in understanding customer buying patterns and behavior.

Some ERP software vendors sell many different variants of the same application. For example, PeopleSoft marketed a payroll application for North America and different payroll applications for other countries around the world. Some vendors may have three or more of the same application (*e.g.*, accounts payable) that are marketed as part of different ERP suites. Some ERP software vendors may sell one process solution that has much of the same functionality as two or more modules possess in another vendor's product suite. For example, SAP offers a module called FI that contains much of the functionality found in other vendor's General Ledger, Accounts Payable and other applications.

Different ERP software vendors have different underlying software product architectures, data models, reporting tools, analytic tools, integration technologies, and other product infrastructure and product extension technologies. As with the applications, these infrastructure tools may not have a one-to-one counterpart in a competitor's product line.

(b) Evaluating the needs of ERP customers

The Meyer Report fails to adequately address how the variety in the range of ERP offerings influences ERP customers' behavior. First, customers have to take time during the software selection process to understand the components available within each vendor's potential solution set. Second, the customers must take time to identify which components, at the application and infrastructure levels, will be required to meet their particular business needs. Third, customers must define their business requirements in a way that allows the respective software vendor to propose a solution that meets them.

Even when a customer can find and identify a solution that meets their specific business needs, it may nonetheless not work with their information technology. Specific ERP solutions are often designed and optimized for narrow technology niches. A software product that was designed and optimized to run on the IBM AS/400 or iSeries minicomputer will generally not compete with products designed for other technology platforms. For that reason, a customer with the J.D. Edwards World product, a solution that runs on the IBM AS/400 or iSeries minicomputer, is not likely to buy additional software applications from vendors who do not support this same technical environment. Customers often look for vendors who have solutions running on the same computer hardware, operating system, database management system or file access method. Generally, the only time customers would look at other vendors with alternative technology requirements is when they are considering replacing or upgrading their entire technology stack (*i.e.*, their hardware, system software and application software).

This is a complicated and time-consuming process and the consequences can be significant. As a result, customers generally do not switch ERP vendors without a compelling business reason.

4. The market consolidation trend

The Meyer Report lacks analysis of the changes in the ERP vendor landscape. A significant number of software companies have been acquired by larger companies. Some of this

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merger and acquisition activity closed functional gaps in individual vendor's product lines. For example, Oracle acquired customer relationship management (CRM) software vendor Siebel. PeopleSoft acquired the CRM vendor Vantive. Baan acquired the CRM vendor Aurum. J.D. Edwards acquired CRM vendor YOUcentric.[4] Likewise, ERP software vendors have acquired sourcing solutions (*e.g.*, SAP's acquisition of Frictionless), manufacturing applications and services procurement solutions just to name a few.

A few of the prominent transactions within the ERP industry were:

- Geac

In the 1990s, a major mainframe ERP software vendor, McCormack & Dodge, merged with its leading competitor, Management Science America, to create a new entity, Dun & Bradstreet Software. That firm was subsequently acquired by a Canadian software company Geac which was in turn acquired by Infor.[5]

- Computer Associates

Computer Associates purchased a number of application software vendors. They bought Software International, Pansophic, ASK/ManMan and Consco. Computer Associates' post-merger vision for its acquired product lines allows customers to "right-size" their computing environment with the best mix of hardware platforms and provides the "freedom to integrate and automate" applications across the many proprietary, closed environments in a customer's portfolio.[6] Computer Associates pioneered the applications software consolidation strategies being used more recently by firms such as SSA, Infor, BMC and Oracle.[7]

- Infor

Infor has also made a number of acquisitions in recent years. One of their largest was to acquire SSA, a firm that had also made a number of application software acquisitions. Infor acquired financial accounting software from Infinium (nee Software 2000), Elevon (nee Walker Interactive), Baan and SSA. They acquired manufacturing software from SSA, Baan, Mapics and Marcam.[8]

- Oracle

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[4] Jerry Rosa, "J.D. Edwards is 'dead serious' about CRM," CRM Magazine, May 2002. http://www.destinationcrm.com/Articles/Older-Articles/The-Edge/J.D.-Edwards-Is-Dead-Serious-About-CRM-45522.aspx (accessed February 15, 2010).

[5] "The ERP Evolution Continues," ERPSoftware360.com. http://www.erpsoftware360.com/erp-software.htm (accessed February 18, 2010).

[6] Advertisement, "No Fences. No Boundaries. No Limits. That's the Freedom of CA90s," CIO Magazine, August 1992, 7.

[7] William Aspray and Martin Campbell-Kelly, Computer: A History of the Information Machine, New York, Basic Books, 1996, 184.

[8] Paul Hamerman and Ray Wang, "Acquisition Of SSA Moves Infor To Number Three In ERP," Forrester Research, June 12, 2006.

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In January 2005, Oracle acquired PeopleSoft, Inc., thereby acquiring PeopleSoft's Enterprise and J.D. Edwards World and EnterpriseOne product lines. Additionally, PeopleSoft had purchased J.D. Edwards in July of 2003 and was in the process of integrating the two organizations when the Oracle acquisition was completed.

The Oracle acquisition of PeopleSoft was the beginning of an acquisition period for Oracle that also included the purchase of Retek retail solutions in 2005, Siebel CRM in 2006, Hyperion in 2007, and BEA Systems in 2008, among other technology and point solutions.

B. The nature of an ERP software and support sale

The Meyer Report acknowledges, but does not adequately consider, that the purchase and sale of ERP software is a complex and important transaction for a software customer. As a result, software customers typically take these decisions seriously and consider a number of relatively well understood factors in making their decisions.

1. The typical ERP software deal

The Meyer Report implicitly acknowledges that ERP software is bought and sold in a unique manner. The Meyer Report fails, however, to provide a context for the uniqueness in a way that the average citizen could fully appreciate. For example, the process differs greatly from the software purchase that most people are familiar with: a software purchase made by consumers for their home personal computer. When consumers buy personal software products, they usually pay a fixed price to acquire a perpetual license to use a given software product on a given computer. Some products, like antivirus software, generally provide new virus definitions on a daily or more frequent basis for the first year of the license. However, most personal software products simply require an initial license payment, and no additional monies need be spent for service or support. Should a consumer decide to upgrade to a new version of the product, it usually requires the customer to purchase a new license.

ERP software products are sold quite differently. Generally, a customer will agree to license one or more application modules, reporting tools and architectural technology products under a single license agreement. The ERP license generally provides for a perpetual right to use the technology. The typical ERP software deal provides for a software support contract.

2. The software license agreement - pricing

The Meyer Report analyzes Oracle's alleged damages related to Oracle's alleged lost profits associated with Oracle's support revenue stream. The Meyer Report lacks, however, an adequate context for the support revenue pricing component of Oracle's alleged damages. To understand the pricing of an ERP software deal, one must understand how ERP software and support is typically sold.

ERP software vendors have used a number of pricing methods for software licenses over time. Vendors have attempted to base pricing on a variety of factors, including, but not limited to:

- The number of users;

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- The revenue of the customer's business;
- The number of full-time equivalent students enrolled in that institution of higher learning;
- The number of computer servers that will run the software;
- The number of processors running in the computer server; and,
- The number of machine instructions per second the processors are capable of executing.

Some ERP licenses distinguish between user types. These contracts differentiate between casual, one time, full-time and "power" users. Some vendors differentiate between regular and professional users of the software. These distinctions look at either how much time the users spend with the application, or alternatively what parts of the application he or she is using.

Software customers rarely need all of the vendor's products or need them all at the same time. For example, both Oracle and SAP have specialized applications that serve specific vertical applications (*e.g.*, retail point-of-sale solutions, process manufacturing solutions, or pulp and paper mill solutions) that are only of interest to businesses with operations in those industries. Likewise, companies may only need a specific application or process solution (*e.g.*, supply chain management or procurement) and not an entire ERP suite. Finally, some companies may have a staggered implementation schedule. This would mean that the company will implement certain processes or functions in a given sequence over a period of often many years. In that scenario, a company may replace its core financial applications first, its human resources and payroll applications second and its manufacturing systems last.

The typical ERP software license contains provisions for "incremental license fees" ("ILF"). An ILF is required whenever a customer has exceeded the pricing caps or limits within the license agreement. For example, if a customer has a company revenue-based license, it will have to pay an ILF should the firm have higher revenues than the contract provisions permit.

ILF pricing can be expensive. A vendor may require that the ILF be calculated in certain blocks. For example, suppose a company had a license to use ERP software modules at its current revenue level of $5 billion annually to a maximum of $6.5 billion annually. Once revenue crosses that threshold, the customer must acquire an ILF for the next revenue block. Vendors often use language in these ILFs such that the incremental license will be valued at some discount from "then-current" pricing. "Then-current" pricing is similar to a retail list price. This value is not the same as the customer's original negotiated pricing. That difference is often substantial as some ERP software vendors have granted discounts of up to 90% off of current pricing to lock up a new sale. If the then-current pricing for ILF has increased (which it usually does every year), then the customer's ILF will often cost more per user than the comparable per user costs did during the initial contracting phase.

An ILF cost trigger could be user count-based, revenue-based, computer-server size based or based on other metrics. Customers may find that the metric base increases even though

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the overall business climate has not. For example, an ILF may get triggered because the IT department moved the software to a newer, more powerful server that has a quad-processor instead of a single processor. Although the business still has the same number of users accessing the software, the customer may have to pay an ILF.

Many software customers have shelfware. Shelfware results when customers sign large multiple application deals, but, as time goes by, business circumstances or economic forces cause the company to defer implementation of some of those products. Rather than providing refunds for these unused application products, the ERP software vendors often take the position that entire contract needs to be re-priced. As part of the re-pricing, the ERP software vendor will price the applications being used at either the then-current pricing or against a discount that is less generous than what was originally provided in the license. This reduced discount, especially when applied at the higher "then-current" pricing in effect, often results in a higher license cost to the customer.

3. The maintenance agreement – pricing and services

Vendor software support usually begins at or shortly after the customer enters into the license agreement. Consequently, the first support payment is often due months before the new product is actually installed and in productive use by the customer. A vendor support agreement typically provides:

- Access to the maintenance provider's support desk and knowledge base;
- Break/fix support;
- Access to software, security, and technical patches;
- Access to tax and regulatory updates; and,
- Options to upgrades or future product releases.

(a) The price of support

For the time periods relevant to this case, ERP maintenance agreements generally were priced approximately between 18% to 25% of the then-current software license price. Many customers negotiate that price down to 18% to 25% of a lower, negotiated license price, subject to some annual cost adjustments.

For the time period relevant to this case, many vendors could raise the cost of the maintenance 3% to 10% annually. While often discussed during contract negotiations as a proxy for cost of living adjustments, some vendors may apply the maximum 10% increase every year regardless of the state of the economy or the inflation rate affecting the customer. The compounding effect of 10% increases on maintenance means that within seven years the customer's maintenance cost could effectively double. Further causing concern to some customers, these maintenance costs can be increased on older, stable unchanged releases of the product. The customer, in that situation, is making few calls to the vendor's support desk but paying more for the relatively little service they need.

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Support pricing is often based on generalized schema. To illustrate, some vendors offer a 5-1-2 pricing schedule. The vendor provides support for five years after the product is placed into general availability or after the customer's license is executed, and the annual support cost will be, for example, 18% of either the negotiated or then-current license price of the product for the first five years. After the first five years, the vendor might increase the price of support from 18% to 20%-28% for one year, sometimes considered an extended support period. This price increase creates pressure for the customer to upgrade from an unsupported or reduced support product to a newer version of the product that is fully supported. If the customer does not make this upgrade in the sixth year, the next two years of support costs may move back down to a more normalized support price (*e.g.*, 18%). However, all the customer is getting at this point is the reduced level of support outlined above. Some vendors offer continued or unlimited support after the 5-1-2 time period. That type of extra-extended support generally only grants the customer access to known patches and solutions to known problems. That is, the vendor stops creating new patches and fixes and simply allows the customer access to whatever already exists. Any other new or previously undiscovered problems will not be solved by the vendor unless the customer is willing to pay consulting service time to have the vendor's personnel research and resolve the problem.

Support services are lucrative for ERP software vendors, but are a source of discontentment for many customers.

(b) Services provided

The Meyer Report does not adequately consider the fact that ERP software vendors generally offer tiered support. While the names vary by company, these generally follow a high, medium and low level of support or similar type of classification with customers paying higher prices for increased levels of support. The difference between these levels can be significant. At the lowest level, the vendor may simply agree to take a customer's support call between 9 a.m. to 5 p.m., Monday through Friday. Those customers may face problem resolution time frames of a week or more. If a customer and the ERP software vendor do not agree on the severity of the problem, problem resolution times may be extended beyond customer expectations. The highest levels of support, obviously, carry with them the highest cost. In that situation, vendors may provide 24/7 access to their support desk and offer same-day resolution of critical problems.

Most ERP support agreements specify definitions for problem severity. In general, the most severe problems are ones that have caused the customers' application systems to crash or become inoperable, with the potential of adversely affecting business productivity. At the lowest level of severity are problems that cause cosmetic issues, slightly degrade performance or other minor inconveniences.

Customers on older but stable releases of a product frequently encounter a situation where a fix or repair is available for the problem they are experiencing but this fix is only available to customers using the latest or newer release of the product. From the ERP software vendor's perspective, they have solved the problem, albeit only for the subset of customers on the most current release. This can be a source of frustration for ERP customers on older releases.

(c) Software upgrade options

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As the Meyer Report acknowledges, generally, some customers with valid licenses and vendor-provided maintenance agreements are provided with product upgrades. These new and/or revised programs may enable the software to support new business functionality, fix prior bugs or improve the performance of the software (*e.g.*, make the system run faster or use less disk storage space).

ERP software upgrades are often released to clients every 12-18 months. Some upgrades may come out more or less frequently. Generally, vendors issue a major functional upgrade (*i.e.*, an upgrade that provides software customers with new and/or enhanced functionality and capabilities) and then follow that up with a technical upgrade a few months later. The technical upgrade may include some performance improvements that are needed to make the functional improvements work better. Some vendors may issue minor functional upgrades or optional upgrades that can apply to specific product lines or to customers in specific vertical industries.

The Meyer Report did not adequately consider the fact that when customers receive a software upgrade, they need to decide if they want to make the upgrade, when they will do so, and whether or not they possess the time, personnel and change management willingness to implement the upgrade. Upgrades can consume a lot of time from the customer's IT staff as this group will need to:

- Create a test environment for the upgraded version of the product;
- Re-apply prior modifications, workflow/process configurations and table settings from the prior version to the test environment; and,
- Design or modify testing scripts.

Despite what the term implies, upgrades are not without their downsides. Upgrades can be disruptive to the business, especially upgrades that materially change specific product functionality. Users of the upgraded software may require training on the new product capabilities. Processes and workflows may need to be re-designed to work optimally with the updated software.

The Meyer Report does not adequately consider that:

Not every customer upgrades its licensed software. Typically, customers will choose to upgrade to newer versions when they see significant business value in doing so. A customer may see significant business value in an upgrade if it: contains needed or long-awaited functional improvements; fixes problems or limitations that a customer has been struggling with for months; contains important technological enhancements; or, contains important support for new regulatory requirements, tax updates and other essential processing capabilities. Not every upgrade or release meets these criteria. Some new upgrades' added capabilities are not sufficient for a customer to undertake the cost and risk associated with an upgrade. In this situation, where the incremental benefits are less than the incremental costs of implementing the upgrade, the customer may defer the upgrade or never upgrade.

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Customers upgrade on their own schedule not the vendor's. Some customers may have higher priority IT projects that take precedence over a software upgrade or may have undertaken costly upgrades recently and do not have the budget, personnel or change management willingness to put their organization through another upgrade. Some companies modify a prior version of their software to the point that it makes the cost to upgrade to a newer version unacceptable, financially or otherwise. The more disruptive or revolutionary an upgrade, the more difficult it will be for customers to make the upgrade. Likewise, the more evolutionary or straightforward the upgrade is, the more likely existing customers will apply the new release. In any case, the timing for an upgrade is driven by the customer's needs.

Upgrades take a lot of time to complete. Even when the customer anticipates upgrading, the timeframe may be protracted because the customer tests the new functionality, tests the new release in a test environment that simulates the production systems, re-applies previous user settings and enhancements, measures the impact on integration with other third-party software in use, and tests any proprietary or customized solutions in the new environment. The customer may also attempt to measure the effect on operating performance and ascertain if additional computing power, disk space or systems software are necessary for optimal performance. Additionally, many customers carefully evaluate whether the new features conflict with functionality found in other applications in their production IT environment.

(d) The continuing relationship: reinstatement of support

The Meyer Report does not adequately account for the fact that sometimes, ERP customers may cancel or not renew their vendor support agreements. Should a customer do so, they commonly lose the following:

- Access to the vendor support provider's support desk and knowledge base;
- Break/fix support directly from the vendor who developed the software;
- Access to software, security and technical patches from the vendor beyond those the customer obtained while they were on support;
- Access to additional tax and regulatory updates from the ERP vendor, if any, beyond those the customer obtained while they were on support; and
- Access to future product releases or upgrades released after the date the customer's vendor-provided support agreement lapsed.

Should a customer decide to reinstate support, ERP software vendors often apply significant penalties. Frequently, ERP contracts require customers to pay back all support fees for the elapsed time period. The back support fees may include any contractually agreed-upon annual cost escalators and ILF-triggered increases in support fees. The ERP software vendor may assess a penalty of 50% of the back support fees, which is on top of the payment for back support fees. The ERP software vendor may re-price support, calculating it with the then-current price of the software instead of the previously negotiated price.

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Not every vendor approaches reinstatement fees in the same manner. Oracle, for example, currently has set up a timeframe of six months without covered support to determine which reinstatement policies and fees apply.[9] I agree that this is an appropriate timeframe for both the vendor and the customer to determine whether a new or revised support agreement can be completed or reinstated. Alternatively, if a customer goes beyond a six month window without reinstating, it is a strong indication that the customer has decided to go off support altogether or forgo vendor-provided support for a multi-year period.

4. Implementation services

The Meyer Report does not adequately consider that another major component of an ERP deal involves implementation services. Software implementation can be very expensive, and this is another reason why customers do not lightly change their ERP provider from one ERP vendor to another.

Typically, the services provided include:

- End-user training;
- Program/project management;
- Workflow and process design;
- Data cleansing;
- Data migration;
- Integration;
- Software installation;
- Creation of testing data and testing environments;
- Unit, process and system testing;
- Report/query development;
- Data base tuning/optimization;
- Custom coding/modifications; and,
- Business case development and monitoring.

These service components of the software purchase can be quite expensive and consume a considerable amount of negotiation time. Services costs are a material component in

[9] "Support Reinstatement and Pricing Calculations," Oracle. http://www.oracle.com/support/collateral/tsp_support_reinstatement_and_pricing_calculations.pdf (accessed February 9, 2010).

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calculating the total cost of ownership ("TCO") for ERP software. Service fees can be a significant multiplier above the cost of the initial license.[10] These service fees are usually encountered during a new ERP installation or a significant product upgrade (*e.g.,* when a customer moves to a major new release of the product).

Regardless of whether these services are provided by the ERP software vendor's employees, the customer's internal personnel or by third-parties, they are a required step for getting the ERP solution up and running.

There is no single metric or guideline to predict what it will cost to implement an ERP package. This is because no two companies have the same IT strategy. The single biggest cost-driver of a software implementation is the overall complexity of the business implementing the new solution. The most straightforward firms have the simplest projects. These companies often have only one line of business, operate in one country, have top executive support and have a strong centralized decision making structure. On the other end of the spectrum are decentralized firms, with global operations and a diversified portfolio of different products and services they market. Shared services projects often represent some of the most difficult ERP projects as they have an enterprise-wide scope and require considerable process changes to existing business practices.

The Meyer Report does not adequately consider the following non-exclusive list of complexity/estimating factors that can impact ERP projects:

- Large number of legal entities involved;
- Large number of countries with an operational or tax presence;
- Software customer is a diversified conglomerate and not a single, homogeneous organization;
- The company has different owners of some parts of the business (*e.g.*, a joint venture);
- The customer is a publicly traded firm (and not privately held);
- The solution must operate in multiple countries with multiple languages;
- The implementation involves the installation of a large amount of the ERP suite;
- The version of the software applications to be installed is not generally available (*i.e.*, the software may still be undergoing testing by the vendor or beta customers);
- Package software will replace custom applications;
- Multiple legal entities will be using different charts of account and fiscal calendars;

[10] Sarah Jane Johnston, "ERP: Payoffs and Pitfalls," HBS Working Knowledge, October 14, 2002.

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- The software customer is in a heavily regulated industry;
- The software customer is a governmental entity;
- Fund-accounting is required;
- The software customer wants to heavily modify or customize the applications;
- The software customer is unwilling to change many of their business practices or processes to accommodate the package software;
- The software customer wants to implement solutions from several different ERP providers simultaneously;
- The software customer lacks adequate IT expertise internally to assist in the project;
- The software customer will acquire or divest business units during the implementation;
- The software customer is simultaneously centralizing decision making and IT systems within the firm;
- A large number of interfaces must be designed, developed and tested;
- The software customer is implementing the software on a new technical environment with which they have limited or no experience;
- A significant amount of data cleansing will be required;
- A large number of users will require training;
- The software customer has hundreds of work locations that will use the solution;
- The company re-organizes during the implementation; and,
- The software will trigger or coincide with a significant re-organization of executives and responsibilities.

The more prevalent and significant each of these factors are, the larger the implementation effort and the need for vendor and/or third-party services.

Costs of implementation can remain high in the presence of the above complexity factors. So, while service estimates as a factor of the initial license cost may be as little as 1 -2.5x today for the simplest of installations (and 6-10x a few years ago), software services costs for moderate

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to complex implementations can be many multiples of the software license cost.[11] One research paper summarized:

> Implementation of ERP systems requires a substantial investment in time, money and internal resources (Bailey, 1999; White, Clark and Ascarelli, 1997) and is fraught with technical and business risk (Austin and Cotteleer, 1999). A typical ERP installation has a total cost of about $15 million (O'Leary, 2000, p. 6) and costs can be as high as 2-3% of revenues (Escalle, Cotteleer, and Austin, 1999). Installation takes between 1 and 3 years (21 months on average), with benefits starting to accrue in an average of 31 months (McAfee, 1999; O'Leary, 2000). ERP implementations are also known to be unusually difficult, even when compared to other large-scale systems development projects. Part of this difficulty is due to the pervasiveness of the changes associated with ERP, the need for simultaneous process redesign of multiple functional areas within the firm, and the need to adapt processes to the capabilities of the software.[12]

ERP implementation projects frequently go over budget, often by a significant factor. I discuss this in more detail later in this rebuttal report. To illustrate, The Western Australia Department of Treasury and Finance saw their original ERP shared services project budget go from $91 million (AUD) to $435 million (AUD). This organization's annual budget is only $315 million (AUD).[13]

5. Discounts

In an ERP software transaction, vendors typically negotiate on the initial license price, the level of vendor-provided support offered (*e.g.*, high, medium and low), the hourly rate for on-site service assistance, the price for future software purchases and potentially other terms. Generally, though, vendors will not negotiate the support percentage. They may instead negotiate the starting time for when the first support payment is due or the minimum and maximum cost adjustment caps that will be applied to annual support increases. Thus, the best method a customer has for lowering its support costs is to negotiate for a discounted initial license.

6. Compounding

Software buyers frequently develop multiyear cost schedules to understand the cumulative impact of ERP ownership costs. This helps a customer understand the compounding costs of the agreement.

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[11] Antony Adshead, "SAP: the climb gets easier," Computer Weekly, December 12, 2002, http://www.computerweekly.com/Articles/2002/12/12/191480/sap-the-climb-gets-easier.htm.

[12] Lorin M. Hitt, D.J. Wu and Xiaoge Zhou, "ERP Investment: Business Impact and Productivity Measures," Journal of Management Information Systems Vol 19, Number 1, Summer, 2002, 71-98. http://opim.wharton.upenn.edu/~lhitt/files/erp.pdf.

[13] Suzanne Tindal, "WA rejigs shared services timetable," ZDNet.com.au, April 6, 2009, http://www.zdnet.com.au/wa-rejigs-shared-services-timetable-339295818.htm.

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As an example of compounding costs, suppose a customer licenses a software application when the then-current price is $100,000. The customer is able to negotiate a 20% discount and only pays $80,000 for the license. The customer must then pay an annual support fee of 22% of the negotiated, licensed price (an additional $17,600). Should the vendor have a support price cost escalator built into the contract of 3 - 10% increases annually, then this support fee will go up even if the customer experiences no other changes in its user count or other contract specific license metrics. Should the vendor take the maximum of 10% annual increases, then the next year's support will be $19,360. The next three years' support fees will increase to $21,296, $23,426 and $25,768, respectively. If the vendor had not discounted its then-current pricing (*i.e.*, $100,000), then the customer would be paying 25.8% of then-current pricing. In other words, the customer is paying more for support than what any new customer would pay without any negotiated discounts, and these price increases will only continue to compound.

The effect of compounding increases when ILFs are added to the calculation. In negotiations with which I have assisted customers, I have seen variables like organic company growth trigger both ILFs and significant support cost increases. When a company must acquire an incremental license, they may also incur incremental support fees. These incremental support fees may be calculated on a different cost basis than the initial support fees were. For example, with one client that I advised, I showed the customer how a 20% increase in their user count would trigger significant one-time ILF costs and would double their annual support bill over the ten year forecasting horizon.

7. The vendor's upgrade plan

Vendors typically want customers to use the current version of the software for a defined number of years and then upgrade periodically to newer releases as they are released by the vendors.

The Meyer Report does not account for the fact that the customer's desires and the vendor's desires may not align. For example, a customer's initial implementation could run many years and consume scarce capital. The result is that a customer may need to delay implementation of new releases of the software. Changing business conditions could also alter the customer's plans for upgrading software.

For example, after eight years a software customer may have hit the end of the 5-1-2 support term. This can be particularly painful to software customers that spent years and a large sum of money implementing a packaged software solution. To illustrate, I attended Merrill Lynch's February 2007 Internet Software and Service conference, where two top executives, one from IBM Global Services and the other from Accenture, each discussed their firm's involvement in a $1 billion ERP implementation. Those large, multi-year ERP implementations could not be something any firm, even a very large firm, would want to undertake again for many years. The years spent implementing one version of the software and the years needed to recover some of the savings opportunities that would justify that expenditure can easily span a decade. A CIO in such a firm might not likely be able to get the funding and approval to move forward with upgrades for years, which would be at odds with the vendor's upgrade wishes.

8. Information resources in software deals

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For buyers of software, there are knowledge sources that help educate a customer about ERP negotiations. Jeffrey Gordon built a very good reference book entitled Software Licensing Handbook.[14] Prospective ERP customers can tap the expertise of firms like Deal Architect,[15] EquaTerra[16] or TPI.[17] These companies will represent software buyers in deal negotiations.

Software customers, and vendors, can take advantage of the expertise of IT research firms and their analysts during a software deal. These firms (*e.g.*, Gartner) sell research reports and provide advisory services to both software buyers and sellers. Much of their work is sold via annual subscriptions. Their reports often include commentary regarding:

- Product specific functionality;
- Opinions about the vision, strategy and execution capabilities of specific software companies;
- Market trends;
- Market share; and
- Market growth rates.

Many IT research firms also cover systems integrators, outsourcers and third-party support providers. Customers of these IT research firms can get access to reports, access to experts, invitations to the research firm's conferences and in-person advice. Virtually all the major IT research firms have covered Oracle, SAP, PeopleSoft, J.D. Edwards and Siebel. Likewise, most of these companies have covered the third-party support market, too.

In developing this rebuttal report, I have considered many of the resources ERP software customers consider when making ERP software and support purchase decisions. These firms include, but are not limited to:

- Gartner Group;
- Forrester Research;
- AMR Research;
- Yankee Group;
- ARC;
- Aberdeen Group; and

[14] Jeffrey Gordon, Software Licensing Handbook, 2nd ed., Raleigh, NC, Lulu.com, 2008.

[15] "Home," Deal Architect Inc. http://www.dealarchitect.com/ (accessed February 24, 2010).

[16] "Home," Equaterra. http://www.equaterra.com/fw/main/home-6.html (accessed February 24, 2010).

[17] "Home," TPI. http://www.tpi.net (accessed February 24, 2010).

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- IDC (International Data Corp.).

C. ERP license purchasing

1. The buyer's motivation

The Meyer Report does not provide any meaningful analysis on the motivation of the buyer when procuring ERP software and support. Businesses buy new ERP software for a variety of reasons.[18] They usually do so for business, technology, business-combination, structural, vendor reasons or to replace old or obsolete solutions. The list I offer below is not exhaustive, but it is sufficient to show that the Meyer Report was inaccurate in emphasizing only support costs on the to-be-replaced software as a factor in a customer's ERP license selection.[19]

(a) Business driven decisions

Some ERP decisions are made simply because a business wishes to acquire new or additional technology capabilities. Some of the earliest ERP buyers could only take advantage of the human resources, financial and manufacturing applications available from their software providers. As time passed, ERP software vendors were able to offer additional functionality in areas like customer relationship management, supply chain management and talent acquisition. Customers lacking software with that functionality may opt to take advantage of it at some point.

Some software purchase decisions are predicated on a desire of the business to achieve new process efficiencies, operational efficiencies and productivity. It is for this reason that businesses replace a number of nonstandard, diverse ERP solutions globally and implement a single ERP solution operating with standard processes. This environment is called a shared service environment and is often typified by the presence of a single global ERP solution running with a single instance and configuration of data processing options.

A business can outgrow its original ERP solution and need a newer, more robust solution.[20]

Businesses may have more ERP capability than they need and may change ERP solutions to something more appropriate for their firm. If a business has contracted for more ERP capability than it needs, the customer is overpaying for the functionality they are underutilizing and may be overpaying for support that they do not need.

Businesses may buy new ERP solutions to reduce their cost of an external audit or to improve their probability of achieving a clean audit opinion. When businesses have a multitude of different ERP systems, they can have a multitude of different accounting rules, charts and accounts, fiscal calendars and other bookkeeping challenges that are expensive to investigate by internal or external auditors. ERP purchases related to these actions can result in

[18] "The ERP Selection Process Survival Guide," 2nd ed., Relevant Business Systems. http://www.relevant.com/pdf/articles/ERP%20Guide.pdf (accessed February 20, 2010).

[19] Meyer Report at page 226, ¶ 361.

[20] Jim Shepherd, "Should You Rehabilitate Your Current ERP System Rather Than Buy a New One?" AMR Research, September 2009. http://www.infor.com/content/analyst/2749234.

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the licensing of a single global solution capable of maintaining a single book of record for the corporation.

Businesses may buy new ERP solutions to achieve a higher degree of insight into internal operations. Those insights into their internal operations can allow them to better utilize existing inventory in fulfilling customer orders, improving customer satisfaction and reducing the working capital requirements of the business. As before, these ERP decisions are often driven by a need for a single global solution for the entire enterprise.

Some ERP purchase decisions are the result of a company's desire to move to a more centralized or decentralized operation. In this situation, the company may wish to move away from a centralized command and control style of computing and distribute technology and decision-making authority closer to individual plants and operations. Likewise, companies with highly distributed decision-making authority and technology may change business strategies to become more centrally managed. No matter the direction, often the ERP systems in use by the business will need to be changed to reflect the capabilities required of the new business operating structure.

(b) Technology driven decisions

Sometimes ERP products are replaced because the underlying hardware technology or systems management technology they utilize has become less dependable, not as productive or even obsolete. In this situation, the business may want to replace the technology before the older system of hardware they are operating puts the company in operational or financial jeopardy.

ERP systems are one of many technologies deployed in a company's data centers. As a result, some changes to ERP systems are driven by changes in other aspects of the company's data center and other data processing technology mix. Should a company standardize on a different database management system, systems management technology platform, hardware platform or other computing architecture component, these actions could trigger the need for a different ERP system that works or works optimally on this new environment.

Sometimes a CIO will decide to reduce the number of application software products in use at the company. This individual may decide to pare the number of redundant applications (*e.g.*, move from three general ledgers to one) or pare the number of application software vendors providing products to that company. In either scenario, the business hopes to reduce the number and cost associated with integrating all of these applications to other applications.

New ERP products may be purchased because previous ones were never fully implemented.[21] Prior products may not be implemented for a variety reasons such as cost, a lack of internal skill to implement them, a change in technology direction and other factors.

[21] Lisa Picarille, "Is it time to defect?" destinationCRM.com, March 2003. http://www.destinationcrm.com/Articles/Editorial/Magazine-Features/Is-it-Time-to-Defect3f-45030.aspx.

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ERP software products may be replacement products for custom software applications. A company may have built custom applications because ERP software vendors previously lacked these applications or possessed applications of inadequate functionality.[22]

ERP software products may be displaced by solutions offered from BPO vendors. These companies can offer preconfigured ERP solutions operating with highly efficient processes. BPO vendors have the advantage of gaining scale economies through offering the same solution to multiple customers.

(c) Corporate decisions

The arrival of a new CEO, CIO, CTO or CFO could trigger the purchase of new or replacement ERP software. One or more of these executives may be more comfortable using a solution other than the incumbent ERP technology. In some cases, a new executive is brought in specifically to drive the adoption of new technologies within the company.

When a business enters or leaves different global markets, they may need to change or supplement their ERP application solution mix. If their current ERP applications do not provide robust functionality needed in specific countries, then the software customer will need to license additional technologies for those locales. Alternatively, if a business shrinks materially and no longer needs extensive global functionality, a software customer may choose to scale back either the quantity or robustness of the ERP technology in use.

Likewise, when a business adds or drops entire product lines or business units, it may have to acquire or drop new ERP software or modules. For example, should a wholesale distributor decide to also manufacture some of the products it sells, it may need to acquire additional ERP functionality to handle production scheduling, shop floor control, product engineering and other applications. Likewise, if a company drops certain business units or product lines, it may want to change its ERP mix.

(d) Business combination driven decisions

Mergers, acquisitions and divestitures can result in significant changes in a company's ERP solution set. In a divestiture, the divested entity may be left without any ERP solution at all. New software must be acquired and implemented often in a very short timeframe. In an acquisition, the combined company may now need software with substantially greater functionality as it now must serve a significantly larger organization with a greater likelihood of more complex business transactions and needs. Additionally, in an acquisition, neither firm's technical architecture may be adequate for a single combined entity. As result, the combined firm may require new computer hardware and software that can run on this new platform.[23]

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[22] Thomas Wailgum, "United Nations' ERP Project: Is SAP the Right Choice?" Enterprise Software Unplugged Blog, September 9, 2009. http://advice.cio.com/thomas_wailgum/united_nations_erp_project_is_sap_the_right_choice?page=0%2C1 (accessed February 17, 2010).

[23] Lisa Picarille, "Is it time to defect?" CRM Magazine, March 2003, http://www.destinationcrm.com/Articles/Editorial/Magazine-Features/Is-it-Time-to-Defect3f-45030.aspx (accessed February 24, 2010).

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Parent companies of subsidiaries can dictate changes in the ERP software in use by a subsidiary. These mandated solution changes are determined by top executives in another, related, legal entity.

(e) Vendor driven decisions

Customers may choose to change ERP software vendors because of the issues they have experienced with their current ERP software vendor.

Customers will move to another ERP product should their prior vendor abandon the product or market. In that situation, a customer is no longer receiving product updates and will get few, if any, future product enhancements.[24]

Customers that are litigating with or threatening litigation with their current ERP software vendor may be disinclined to do any additional business with that firm.

Customers that experienced major service issues or product failures with the current ERP software vendor are likely consider solutions elsewhere. Customers who have had critical functional problems that the vendor cannot resolve, or have been slow to resolve, are experiencing an untenable situation that they may have to pay outsiders to fix. This situation makes the customer question why they are paying for support from the vendor and why they are continuing to maintain a relationship with this vendor.

Customers who purchase application software based on the promise of new functionality in the future may change ERP providers if that promised functionality never materializes. Customers are willing to wait only so long before realizing that the vendor has failed to deliver on promised new technical capabilities the customer and their business require.

Customers and their ERP software vendor may have had similar visions for future technology and product direction when they signed a contract. However, as time goes on, these two entities may develop differing directions of where each wants the product line to go. When this divergence reaches a critical juncture, the customer may seek different solutions from a vendor whose vision more closely aligns with its own.

Customers may consider a different ERP software vendor if its previous vendor has been acquired. This particular situation is subject to a number of variables present in individual acquisition deals. For example, if the new acquirer intends to simply sell software licenses without providing any real product upgrades, then customers would see minimal value in maintaining a long-term relationship with this vendor. If the acquirer acts in any way to upset or appear to waver on their plans to support the acquired products, then the customer may choose different ERP solutions. I will discuss more of these situational matters later in this rebuttal report.

(f) Summary

[24] Jim Shepherd, "Should You Rehabilitate Your Current ERP System Rather Than Buy a New One?" AMR Research, September 2009. http://www.infor.com/content/analyst/2749234.

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The Meyer Report failed to analyze all of the reasons a company will decide to buy or replace ERP software and support. As shown above, such reasons are numerous, but they are grounded in logical, fundamental business needs of the company. Business executives will periodically compare and contrast their changing business environment, business and technical strategies and the appropriateness of their prior ERP software vendor and its solution. Whenever significant differences between the customer and the incumbent vendor exist, new solutions will be evaluated and possibly procured.

Customers are likely to consider replacements of an ERP software vendor when one of the previous change drivers is encountered. For reasons which I will discuss later in this rebuttal report, businesses do not take the decision to change ERP software vendors lightly. Those decisions are fraught with risk and expense.

At no time have I seen software buyers select a new ERP software vendor because they could get lower-priced support on their to-be-replaced ERP software from a third-party. A deal like that may trigger the opposite response – the customer uses a third-party to stay on its old ERP software rather than move to a new vendor.

2. How ERP software is bought

(a) Buying ERP is expensive for customers

(i) Purchasing process involves a significant number of people

The Meyer Report also fails to completely consider that an ERP software selection is an expensive undertaking for software buyers. Unlike most consumer purchases, an ERP decision often takes committees of mid-management and top executives to complete the task. An ERP software purchase often includes a core selection team, an executive staffed steering committee, key users affected by the new system and senior executives from finance, IT, procurement, in-house counsel and relevant operations or business units.

This group of individuals, some of which may be dedicated full-time to this initiative, usually document as-is and to-be work processes, technical requirements, key performance requirements, needed interfaces, long-term business strategic goals, acceptable corporate risks, desired service levels expected of the new solution and more. This selection team often crafts the business case for the project. The business case must illustrate the expected return on investment or TCO targets the new software must achieve post-implementation.

The selection team will usually have responsibility for evaluating potential software providers and identifying two or three finalists. The selection team often then engages the finalists in software product demonstrations that may run multiple days each for each of the final vendors.

The selection team may also conduct due diligence on these vendors. This due diligence could require travel to the vendors' offices and written and telephonic reference checks with prior customers of each vendor.

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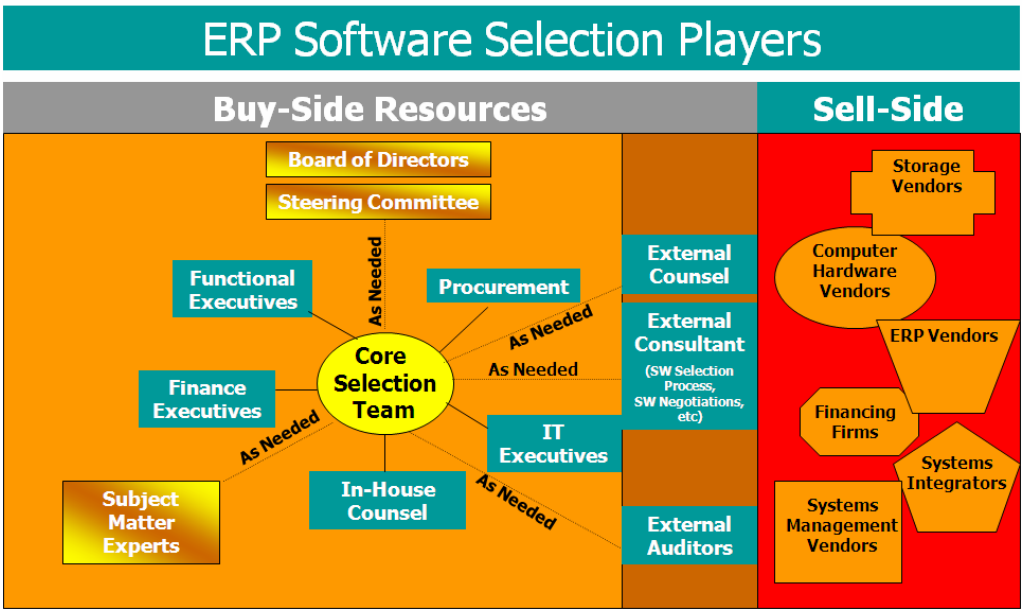
Lastly, the selection team also is responsible for developing implementation plans and obtaining cost estimates from the application software vendor and relevant systems integrators or other application installer consultants.

(ii) Third-parties are often involved in ERP purchasing

The development of these plans and the negotiations themselves may require the customer to hire third-parties on their behalf. Customers may hire negotiators, software product and market experts, outside counsel, computer hardware vendors, computer systems management vendors, financing firms and system integrators. A large number of software vendor personnel may also be involved.

It is my experience that large enterprises routinely spend $250,000 or more with third parties in selecting new ERP software. This expenditure does *not* include any internal costs (such as payroll) the company may incur.

As this graphic demonstrates, the Meyer Report does not adequately address the complexity of the ERP software selection process:



[25]

(iii) ERP purchases are highly disruptive for a customer's business

Software selections are time consuming and should not be rushed. They consume a considerable amount of time from key executives and the users in the affected functional and IT operations. This process takes time because, when a company initially identifies its need for a new ERP solution, it must consider certain other business events and how an ERP software replacement may impact them. For example, should a company want to look at new software in October but their fiscal year-end occurs on December 31, there is practically no time left to contact software vendors, evaluate products, schedule demonstrations and, most importantly

[25] Brian Sommer, "ERP Software Selection Players - Graphic Handout," January, 2004.

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complete the implementation all within a few short weeks. Generally, businesses prefer to implement certain systems like financial applications and payroll systems at their year-end. This makes for easier audits and regulatory reporting for the firm. In this example, the customer would begin the software selection in October with a goal of completing the selection and negotiations in the early part of the following year with an implementation at the end of that year.

Apart from the calendar implications that must be considered for software selections and implementations, there are other practical matters that can drag out software selections for months. First, there is the matter of scheduling vendors for demonstrations. Customers cannot often afford to take long blocks of time away from their current duties just to meet with one vendor after another. Likewise, software vendors often need time to prepare for demonstrations as well. From the moment the first vendor is contacted for a demonstration until the last demonstration is completed, six weeks may pass.

Negotiations may run for several days to many months. Each part of the contract may be extensively negotiated. For example, Helmuth Gumbel wrote in InformationWeek that two software terms around optional packages and rights of rescission alone could drag out negotiations substantially.[26]

More complex transactions usually require more time to complete. For example, a global standardization or shared service initiative will take more time as the number of physical sites involved is significant and each site has its own unique business and technical requirements that must be understood and accounted for. Often these multiple sites cover many geographies, requiring capacity for multi-lingual and multi-currency support, plus the ability to support various employee, compliance, tax, regulatory, and other requirements.

Another example would be a company that is consolidating sixty data centers globally. This company may need to send a selection team to all sixty locations to document business processes, local tax and regulatory requirements and other locations specific data.

Software deals that require a service level agreement can add a material amount of time to negotiations. The language needed to codify acceptable service levels, response times, escalation processes, and remedies is intensive and requires considerable input from legal experts.

The Meyer Report did not, but should have, considered the complexity of the typical software selection process that is exemplified by this graphic:

[26] Helmuth Gumbel, "Global CIO: SAP's Spread Out Payment Plan is Good But Not Enough," InformationWeek, November 13, 2009. http://www.informationweek.com/news/software/erp/showArticle.jhtml?articleID=221601501&queryText=SAP's%20Spread%20out%20Payment.

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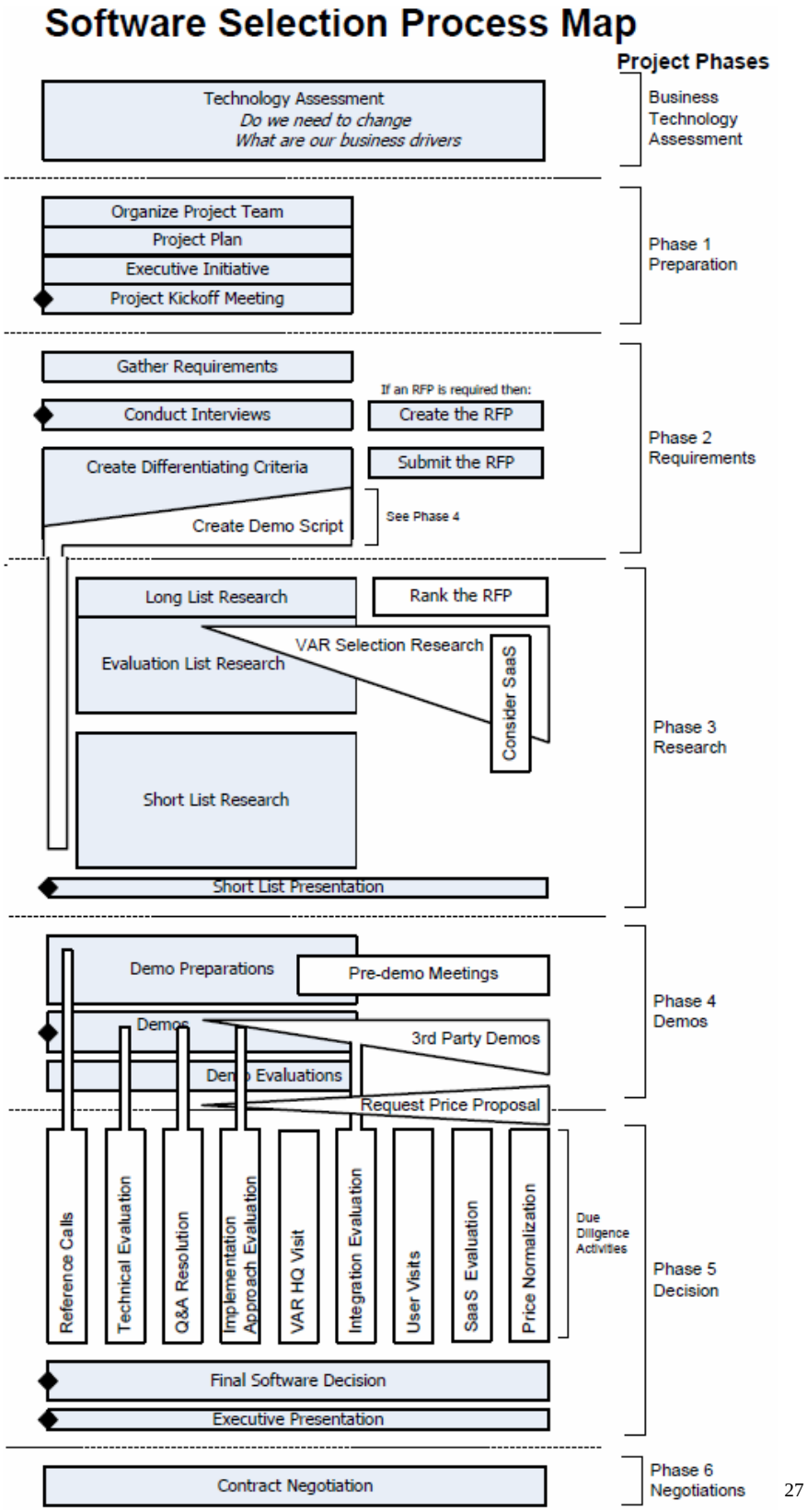

[27]

[27] "Introduction to Software Selection," SoftResources, 10. http://www.softresources.com/files/Phase_0_Introduction.pdf (Accessed February 20, 2010).

Given the impact the decision to purchase ERP software may have on a company's operating expenditures, cash flow, earnings and capital budgets, one can easily understand why these decisions typically require reviews and approvals from a number of in-house executives such as boards of directors, steering committees, functional executives, finance executives, procurement, IT executives, attorneys as well as consulting with internal subject matter experts.

(iv) New implementations are very risky

The Meyer Report ignores the fact that companies can spend millions of dollars and years implementing ERP solutions. Once an ERP system is implemented, going back is extremely difficult; it is often too expensive to undo the changes ERP brings into a company. These are additional reasons why ERP decisions are taken seriously by customers.

Failed implementations are not uncommon. Several failed ERP implementations have resulted in companies losing not only the capital invested in the ERP implementations and millions paid to outside consultants, but also a major portion of their business.[28] ERP implementations go awry so frequently that Internet blogs (such as www.blogs.zdnet.com/projectfailures) are dedicated to the subject. And, these failures can impact customers of any size. Studies show that only 16.2% of projects will be completed on time and on budget and more than 50% of their respondents view their implementation as unsuccessful or failures.[29]

(v) Summary

I have illustrated the process of how ERP software is bought to emphasize that software purchases are carefully considered by both software vendors and software buyers. To embark upon the process of ERP software selection is to commit people and money to the investigation and possible contracting of a large capital purchase. To the customer, the software selection is but the beginning of a very expensive financial commitment that will likely run for multiple years. The customer will license the software, install it on its own or with the help of potentially expensive consultants, acquire additional needed hardware and system software and incur expenses from a range of other sources on a one time and perpetual basis. Moreover, despite undertaking this process, ERP customers must also assume a level of risk that the implementation will not be successful. The Meyer Report did not adequately address these considerations.

(b) Factors that influence ERP software selections

This rebuttal report has so far addressed the Meyer's Report's failure to adequately assess what may prompt a company to consider a new ERP purchase and the process of such a

[28] Prasad Bingi, Jayanth K. Godla, and Maneesh K. Sharma, "Critical Issues Affecting an ERP Implementation," Information Systems Management, 16, no. 3, Summer 1999, 7. http://74.125.47.132/search?q=cache:Fe9w2ekijLcJ:carl.sandiego.edu/gba573/critical_issues_affecting_an_erp.htm+%22much-publicized+SAP+implementation+following+months+of+delay+and+cost+overruns.%22&cd=1&hl=en&ct=clnk&gl=us.

[29] Failure Rate, IT Cortex. http://www.it-cortex.com/Stat_Failure_Rate.htm (Accessed February 9, 2010).

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purchase. In this section, I describe the factors that may motivate such a company to choose one ERP solution over another, which further indicate the incompleteness of the Meyer Report, particularly in its description of cost as the only factor in a license selection.[30]

(i) Political factors

Software selections are also political decisions. In most ERP deals, no single executive can make a decision to license the ERP software without obtaining the support of other affected executives. Rarely could an executive like the vice president of human resources acquire something like a new payroll system without gaining the approval of the chief information officer.

A successful software selection often involves the agreement of all affected executives and the organizations they support. Politically sensitive environments often involve businesses with geographically distributed operations with relatively autonomous leaders in each business unit. Anyone attempting to acquire and implement an ERP technology for the entire enterprise would likely encounter behaviors ranging from cooperation to passive resistance to passive aggressive to outright sabotage of the endeavor. In some politically-charged business environments, sometimes only the CEO can successfully dictate the selection and implementation of a new ERP system.

(ii) Financial/economic factors

The cost of an ERP application and its implementation can be extremely high. Many companies have spent well in excess of $100 million on ERP implementations.

For the purchase of new ERP software, a software evaluation team will typically construct one of two financial analyses. The team may prepare a return on investment ("ROI") calculation which will show the positive economic impact the software will have on the business. For example, the software could permit greater numbers of inventory turns which would substantially reduce the working capital required by the company. The other calculation may be to evaluate TCO. A TCO calculation looks at the costs involved in acquiring the software license, implementing the software and initially, acquiring any needed hardware and systems management technology, use of third-party systems integrators or consultants and the company's internal labor costs to implement maintain and upgrade the application over the next five to ten years or so.

This economic analysis can reveal varying benefits or costs between two different ERP software vendors. Also, this analysis will help the company plan for forthcoming capital expenditures, project expenses and ongoing operating capital needs.

Software selections that cannot meet minimum floors for these financial and economic levers do not get approved. Because of the size of these deals, even those projects with acceptable financial and economic terms may be still rejected by the board of directors or the company's senior executives. These purchases must be consistent with the company's cash management and financial plans.

[30] Meyer Report at page 226, ¶ 361.

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(iii) Technical factors

ERP software vendors make a number of technical decisions when creating their product. They decide things such as:

- Which database management system or systems will the product utilize;
- Which reporting tools will be included with the software;
- What programming language will the user interface be developed with; and
- What other technologies will be easily integrated with a product.

These vendor decisions may conflict with decisions made by customers in their IT organizations. Some of these conflicts may be immaterial while others may be deal stoppers. During the software selection, the customer will evaluate how well each proposed solution dovetails with their existing applications and their long-term IT technology plans. Information technology personnel are heavily involved in assessing these technical requirements.

(iv) Product functionality factors

Software products must have the ability to meet the business functional needs of the users. Software buyers need solutions that meet either current or future business process needs. Solutions are often compared against current business process workflows and/or proposed process workflows. Software vendors and consultants may be involved in designing new process workflows that are more efficient and effective than current ones. A large part of the economic justification behind new ERP software is often based upon the operational efficiencies and improved effectiveness of revised processes. Once these are identified, a software buyer should create a software requirements document as a tool to ensure internal users and software vendors have a clear understanding of what will be required of the new ERP system.[31]

(v) Risk management factors

ERP selection teams often consider a number of risk factors that the company should try to mitigate before moving forward. These factors may include specific risk around the targeted vendor; however, the risks may also include implementation risks, equipment delivery risks, project planning risks, staffing risks, budgeting risks and many other potential short and long-term risks. Unquestionably, ERP decisions and the implementations that follow are risky to the vendor involved, the business implementing the solution and the executives responsible for this transaction. Some customers postpone purchases after they assess the level of effort, risk and cost of the upcoming implementation.[32]

(vi) Vendor/customer relationship factors

[31] "Phase II- Software Requirements Analysis," SoftResources. http://www.softresources.com/software-requirements.

[32] "The ERP Selection Process Survival Guide," 2nd ed., Relevant Business Systems. http://www.relevant.com/pdf/articles/ERP%20Guide.pdf.

ERP software customers know that they will likely utilize an ERP solution for a number of years. Because of this, software customers want a good relationship, or even a partnership, with their vendor.

In many cases, customers experience inconsistent treatment from their ERP software vendor, and the relationship is frequently perceived as being one-sided. Often, during the initial interactions that occur between vendor and customer in the sales process, all manner of promises, commitments and hopes of jointly developing new functionality in the future are discussed between the two entities. However, once the deal has been done, the hoped-for relationship between the two companies may not materialize.

Nonetheless, customers want to believe that they will have a special relationship with the software vendor. Whether a customer ever realizes this level of relationship with a vendor is a different issue, but the fact that they will evaluate different vendors based on the perceived degree of future relationship success is important.

(vii) Third-party support

With the hundreds of clients I have assisted, I have encountered the same software selection factors again and again. Interestingly, there are some subjects that never come up. One of these is third-party support for the product that will be replaced. In no selection that I have participated in has the cost of third-party support for the to-be-replaced product arisen as a software selection factor.

In fact, the only time support, in general, comes up is during the financial cost comparisons between two vendors. Here, the project team will factor in the cost of vendor-provided (not third-party) maintenance over the life of the new software. It is at this time that customers may discuss certain options regarding vendor-provided maintenance with each company. For example, a customer may attempt to negotiate a lower annual maintenance percentage if the customer volunteers to staff its own Level 1 support helpdesk internally.

Third-party support for the product that will be replaced does not come up during these discussions for two important reasons. First, the financial analysis is generally forward-looking and only picks up and reviews costs associated with the acquisition, implementation and operations of the new system and not the costs associated with the wind down of the old system. Second, costs associated with the previous system are already accounted for in the company's current operating budget. Whether the to-be-replaced systems are using vendor-provided support, are self-supported, or are using a third-party support solution, it is largely irrelevant to the choice of a new software product.

D. Support purchasing

1. Post deal decisions

The purpose of this section in this rebuttal report is to place the support purchasing decision into the context of the overall ERP software selection and procurement process. The Meyer Report should have provided this context, but did not.

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After a software customer has purchased and implemented software, it moves to a new stage in their vendor relationship. During this stage, the customer must make several key decisions, some on a one-time basis and some frequently. These include:

- What vendor-provided upgrades, fixes and/or patches they will install;
- Whether the customer will remain on this release/version of the product or do an upgrade to a more current version of the software;
- When these vendor-provided changes will be implemented;
- How long they will utilize vendor-provided support; and
- What other support options they may avail themselves of should they decide to do so (*e.g.*, self-support or third-party maintenance).

Vendor-provided support is but one of the options customers will consider during the life of their application software. For various reasons, and certainly for many more than the two identified in the Meyer Report, a customer will re-assess the value of vendor provider support and consider other support options.[33]

2. Why a customer will reconsider its maintenance offering

Software customers will reevaluate their need for vendor-supplied support when any of the following events occur:

- The customer believes they are not receiving the level of service they should get. Customers will feel this way if they are forced to upgrade software to get access to needed fixes because the vendor will not make any fix for the older version of the software the customer is currently using. Customers may also find the service lacking if they are unable to get problems resolved in a timely fashion, cannot get the attention of a dedicated or expert resource or find the vendor's personnel unable or unwilling to understand the customer's modifications to the product.
- The customer has not finished capturing value (*i.e.*, viewed as an acceptable ROI, TOC or otherwise) from an earlier version of the application and is being forced to upgrade to another version. This can be particularly irksome if the new version requires the implementation and/or purchase of additional software products. Forced upgrades are expensive and disruptive to customers.
- The customer is using a stable release. Customers utilize maintenance services more heavily when they are undertaking new software implementations or significant product upgrades. Once a product has been moved into a stable production status by the customer, the number of support calls usually drops off dramatically, resulting in a corresponding decreasing need for maintenance.

[33] Meyer Report at page 226, ¶ 361.

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- The customer believes they are paying too much for maintenance. This can be due to the compound effect of annual maintenance increases or from being forced to pay for maintenance on applications that have never been installed (shelfware). Customers may also feel they are overpaying if maintenance fees are being increased along with incremental license fees. Additionally, customers often balk at high maintenance fees if they are placing few support calls or receiving little support for the stable or obsolete releases they are using.

- The customer is close to the end of life for the current ERP application. In this situation the customer is quite aware that the current application may be in use for only a few more months. The value the customer would receive from an all-inclusive maintenance contract may be overkill for this situation.

- A customer may realize that they are self-supporting the application anyway. In this situation, a customer may be providing essentially full support to the application as it is heavily modified and their IT organization is providing Level 1 support and beyond.

- The customer dislikes the ERP software vendor. This can occur where the customer originally licensed software from a predecessor company and now finds its support being delivered from another ERP vendor after a merger or acquisition.

- The customer dislikes the direction in which the product is being moved. In this situation, the software vendor is enhancing and upgrading the product or product line in directions that are inconsistent with the needs and desires of the customer. As this gulf widens, a customer may question its willingness to fund these efforts.

- The customer cannot afford support due to bankruptcy or other economic hardship.

- The customer's business or IT strategy has changed. If the applications in question are no longer going to be part of the customer's longer-range IT portfolio, the customer will evaluate support options.

- Internal support costs are too high. Some software customers find the internal support costs for operating, patching, testing, and upgrading applications software products to be too expensive.

3. Factors that may influence a support decision

After a customer begins to evaluate whether to keep the vendor-provided support that accompanied the initial license sale, several factors can influence a software customer's decision to move away (or stay with) vendor-provided support. The Meyer Report failed to include an analysis of these factors. Instead, it incorrectly rests upon the assumption that a customer was only motivated by cost considerations.[34]

[34] Meyer Report at page 226, ¶ 361.

(a) Vendor's one-size-fits-all support does not meet a customer's need

ERP software customers have changing support needs during their use of an ERP product. Their newest releases will generate a need for the most support calls and will require more technical patches. As more customers implement the latest version, the number of support calls placed with the vendor should diminish, as should the need for more patches or fixes, because the vendor is able to address most of the bugs in the software. As a result, software vendors encourage customers to use the most current versions of their products as the vendors will redeploy support personnel from older releases to newer releases. Generally, products are most fully supported for a fixed timeframe, often 4-5 years, and then lightly supported thereafter, if at all.

Few vendors give customers the option to adjust the amount of support they are purchasing as support needs change. For example, customers generally cannot choose which support capabilities they want à la carte.

Software vendors like to sell a one-size-fits-all or broadly bundled style of software support to customers. Software vendors assume that most customers will accept this single standardized offering. If vendors offer any customization to their support plans, it is simply to adjust the response times and pricing, which I illustrated above in describing low, medium and high level programs.

By creating these standardized, all-inclusive programs, software vendors inevitably lose some customers to other support options when customers do not believe they are getting full value for their purchase. For example, customers on old, stable software releases may only want tax and regulatory updates and some break/fix support. The fact that their support monies are being used to develop new products or releases that they have no interest in, or have no wish to underwrite the development of, reduces the value the customer receives relative to the price paid for applications software support, sometimes to the point where a customer will consider other support options.

(b) Little perceived value or need for vendor-provided support

ERP vendors often communicate to their customers that the main value, or value proposition, of vendor-provided support is the ability to upgrade to future releases. Some customers do not share this value for a number of reasons.

Some customers have exceptionally stable applications that warrant little or no support. These customers may have chosen to remain on very stable releases and wished to remain on such. As a consequence, they would have had no use for future product releases or upgrades. Since these future releases are a key part of a vendor's offering, a customer who did not value these would be more inclined to either self-support or utilize a lower-cost third-party support option. With a stable solution, companies may choose to forego the cost, potential risk, and disruption that a software upgrade would require. Alternatively, some customers may be small, local firms who experience little or no change to their systems, tax tables or technology platform. These customers may also have a very stable technology environment and would question the need to pay for vendor-provided support.

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Some customers may be utilizing heavily modified applications that a software vendor does not understand and thus cannot support. These heavily modified applications also have the challenge that vendor-provided upgrades or patches cannot be applied directly to the installed product because these software changes may conflict with the customer's own modifications. Some customers may have licensed software applications that rarely ever require any sort of upgrade or patch. For example, a module like production scheduling may almost never require a tax table or regulatory update. Thus in any complete evaluation of the behavior of customers making ERP software and support purchase decisions, one should look for:

- Customers with short support term periods;
- Customers who expressed concern that they received little value in the support they paid for;
- Customers who no longer utilized the vendor's support desk;
- Customers who possess significant internal information technology personnel and resources;
- Customers that have notified their vendor of their lack of desire in upgrading to future versions of the licensed product and are looking for a lower-cost support solution;
- Customers who have identified their technical environment, applications in use or their business environment as being stable and not interested in changing or upgrading these applications;
- Customers who attempted to renegotiate a lower support arrangement with their vendor due to the customer's reduced usage of the software;
- Customers who attempted to renegotiate a lower support agreement with their vendor due to the customer never having installed the product in question (and thus not using the support service for this product); and
- Customers who have modified their licensed software extensively.

(c) Evolving ERP needs

Changes in a business's size or viability may impact its support choice. If a customer's business changes, for example, if it grows or shrinks into another market segment, this may factor into its support choices. I offer examples below.

When an ERP software customer has experienced significant business contractions (and reduced revenues), divested parts of its business, or has suffered a significant economic crisis affecting the firm or its industry, the customer may downgrade from its ERP solution. The converse may be true as well. In either case, however, the customer will reassess its maintenance needs as a result.

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Additionally, if a company has decided to move from an ERP application product or product suite to any another ERP product line, then this company will likely evaluate its need to maintain vendor-provided support for the discontinued products. For example, if a company was three months away from converting to a new system, the company would not need a full year's worth of vendor-provided support. The customer in that situation would determine what sort of risk exposure they had if they chose to forgo support during this short time period. Vendor-provided support in this situation would have limited value to the customer as the customer is only utilizing the support for a short-term risk abatement reason. These customers would not, obviously, need any future product updates or releases of the software as they are well on their way to moving to a different vendor's product line.

In a third example, a customer's shelfware may dictate its support decisions. As discussed earlier, software companies frequently offer to sell customers more applications than they currently require or ultimately actually use, creating shelfware. Customers must pay support fees on these applications even though they are not utilizing them.

(d) The third-party support market may influence a support decision

Customer awareness of other maintenance providers may influence their decisions regarding their support. Software customers have access to a market of non-vendor-provided support options as these providers of these options are frequently present at customer and software events. These providers are well-publicized, appearing in major technology, accounting and business publications.

Software customers will look at third-party support options from vendors they may encounter at software user conferences, software user group meetings or other technology venues. Examples of these activities include:

- Sapientia GmbH conducted a trade show dedicated to third-party support solutions for SAP customers.[35]
- CIBER and CedarCrestone were both public sector user group sponsors of the Oracle Public Sector User Group.[36]
- Hexaware and CedarCrestone were platinum sponsors at the Oracle Southern New England Users Group.[37]
- Reliasys and CedarCrestone were speakers at the 2006 Oracle OpenWorld.[38]

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[35] "Sapience 2009 Conference," Sapientia GmbH, December 8-9, 2009, Boston, MA.

[36] "Home," Public Sector User Group, http://www.psugonline.org/p/st/ld/sid=s1_001 (Accessed February 18, 2010).

[37] "Our Sponsors," Southern New England Users Group Sponsors, http://www.ps-snug.org/our_sponsors.htm (Accessed February 18, 2010).

[38] Quest International Users Group, "Quest Education at Oracle Openworld 2006," Questdirect, http://www.questdirect.org/downloads/news/OOW%20Education.pdf.

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- Andy Klee is listed as a frequent speaker at Quest and SAP events.[39]

- At the Alliance 2007 show, CedarCrestone and CIBER were exhibitors.

- Many of the same third-party support providers appeared at the Alliance 2008 and Alliance 2009 shows.

Third-party support providers can also be found in small local regional user group meetings. For example, CedarCrestone was a sponsor of a PeopleSoft regional user group meeting last year in Ohio. Spinnaker was recently present at a Quest West conference.[40]

Finally, even if software customers could have avoided running into third-party support providers at user conferences and other vendor events, they still could have read about these companies in hundreds of published magazine reports, analyst reports and blog postings on the Internet. The presence of third-party support providers in the applications software market space is not a closely guarded secret — it is a well-known fact.

4. Support options

If a software customer decides that vendor-provided support provides questionable value for their firm, they will likely examine several alternatives, including self-support and third-party maintenance. Because that the Meyer Report failed to sufficiently analyze these alternatives, in rebuttal to that report, I describe below the classes of alternatives a customer has to vendor-provided support below.

(a) Consultants

Customers may, in some situations, supplement or replace vendor-provided support with a more consultative service. These consultants can implement product upgrades, provide break/fix diagnostics and repairs and deal with the product customizations the customer may have made to the base software product. Consulting services like these do not require vendor-provided support in all cases. The licensed applications may have a limited need for tax and regulatory updates. The license applications may also be on a very stable technology platform that is rarely affected by technology changes. Additionally, consultants may find other sources for software patches through technical bulletin boards and not need access to vendor-provided maintenance. As an example, S&I Technologies' services include:

- Full suite implementation using Oracle's J.D. Edwards OneMethodology;

- Customization and Enhancement Development;

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[39] "Pplsft," Questdirect. http://74.125.95.132/search?q=cache:uQ4pp0XIegAJ:www.questdirect.org/Downloads/Conference/Peoplesoft%2520sessions%25202.4.xls+%22andy+klee%22+speaker+quest+J.D.e+%22user+group%22&cd=1&hl=en&ct=clnk&gl=us. Andy Klee, "What's Hot and What's Not with J.D. Edwards," Notes from Quest 2006 Blog, entry posted April 25, 2006, http://it.toolbox.com/blogs/J.D.edwards/notes-from-quest-2006-8965.

[40] Alex Woodie, "Third-Party J.D.E Maintenance Business is Thriving," The Four Hundred 18, no. 31, August 24, 2009. http://www.itjungle.com/tfh/tfh082409-story08.html (Accessed February 24, 2010).

- Localization packs and support;
- Enterprise Reporting;
- Interface to internal and external systems;
- Oracle's J.D. Edwards Managed Services;
- Upgrade Support;
- Technical and Application Support;
- Customer On-going support (bi-lingual); and
- Tailored training for client's internal support staff and end user.[41]

(b) Self-support

(i) Overview

Some customers possess the ability to self-support their ERP software. If this is the case, self-support is a viable alternative to vendor-provided support for that customer. Three general types of customers can do this:

- Customers who possess or are willing to hire significant internal information technology personnel and resources;
- Customers who are themselves software vendors; and
- Customers who are systems integrators or resellers of ERP products.

Medium to large size companies often have IT organizations that have the skills to perform maintenance activities for their ERP software. In fact, their staffs are already organized to support many functions that their support contracts with the software vendors require. Customers that are software vendors or systems integrators are particularly likely to consider other support options. They could choose to utilize the vendor-provided support service, utilize a third-party support service or self-support. In their case, self-support could mean tapping into some of the most talented technology personnel in the world. Their knowledge of software products and what it takes to support them is substantial. These companies would be expected to question whether the cost of vendor-provided support was duplicative of internal resource costs they already incur.

Generally, software customers will seriously consider self-support when one or more of the following is applicable:

[41] "Why S & I Should be Your Preferred Oracle's J.D. Edwards Service Partner in China and Asia," S & I China. http://www.si-china.com/downloads/pdf/ S%20&%20I%20China_Brochure_090421.pdf.

- The customer possesses appropriate IT technical competency within its own organization;
- The licensed software has been heavily customized such that vendor-provided support or upgrades are of little value or use;
- The licensed software is no longer receiving active product updates from the vendor;
- The software vendor no longer supports the application in question; and
- The customer must find ways to reduce its IT operating expenses.

The support and upkeep of application software, whether custom development or licensed from a software vendor, is a major expense item for IT departments in most corporations. The significance of this cost makes it one of the most scrutinized portions of an annual IT budget.

One of the characteristics of a self-supporting software customer is the presence of a strong internal technology team. Generally, the larger the company, the more likely that this firm will possess the internal talent needed to maintain the application software. These larger firms can afford to have specialists in areas such as database administration, database tuning and performance improvements, applications software experts, functional/process experts, or data center operations experts.[42]

Some self-supporting software customers provide their own internal support helpdesk, usually referred to as Level 1 support, to answer a number of support issues internally so as to avoid swamping an applications software vendor with a number of minor, redundant or customer specific support concerns. Customers that provide this Level 1 support have a technology capability inside their own firm that allows them to research and resolve a significant number of support calls that would have otherwise gone to a software vendor's support desk. As a consequence of providing Level 1 support, these customers develop in-depth competency around the software products. Should this installed product remain relatively unchanged over the years, the customer's need for vendor supplied maintenance will likely diminish considerably.

Self-supporting customers can take advantage of other resources to assist them, if needed. These software companies can retain the services of software product experts on a contract or permanent hire basis. The cost to bring these individuals in-house may be substantially less than what a company is paying a software vendor for an annual maintenance arrangement.

(ii) Companies that assist customers with self-support

A number of tax and regulatory information sources have been available for software customers to utilize if they wished to self-support. These firms have been in existence for many years and are well-known in the industry. I have focused on three major providers in the following paragraphs, and I have highlighted their close working connection with ERP products, ERP vendors and ERP customers.

[42] Tony King, "From the Desk of Tony King," Zerion Group, September 2009, http://www.zeriongroup.com/Newsletter/september09.html.

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Vertex is a provider of tax and regulatory updates and services. In 2004, Vertex was providing solutions for: income tax, sales tax, consumer use tax, value added tax, communications tax, payroll tax and property tax.[43] And, in January 2005, Vertex was selling vendor toolkits for Lawson, Oracle, PeopleSoft and SAP ERP products on its website.[44] Currently, Vertex supports many of the leading ERP vendors, providing a number of tax table updates to their customers.[45] [46] [47] [48] These updates are designed so that software customers can either apply new updates directly into software applications or use a Vertex interface and have the changes applied automatically.

Vertex is familiar to many ERP customers. It was a frequent exhibitor at many ERP trade shows, user conferences and user group meetings. In 2005, Vertex was at a large number of these events including Convergence 2005, ASUG (Americas SAP User Group), SAPPHIRE (SAP's user conference), OAUG Connection Point 2005 (Oracle Application User Group), Oracle Open World and PeopleSoft Connect, for example to name but a few.[49] In 2006, Vertex was at Covergence 2006, Oracle/J.D.E Collaborate 06, ASUG 2006, Sapphire 2006 and Oracle Open World.[50] In 2007, Vertex was at Oracle Application User Group, SAP Financials, SAP Sapphire, Microsoft and other events.[51]

Vertex was also very prominent in the trade press, general business press and other channels. Between 2004 and 2008, Vertex was featured in stories in publications such as: Accounting Today, CFO magazine, The Tax Executive, USA Today, Business Finance, Treasury and Risk Management, Wall Street Journal, Accounting Technology, International Tax Review and others.[52] Vertex had a number of relationships with accounting, tax, consulting, and systems

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[43] "Vertex Products and Services Fact Sheet - Archived 2004 website," Vertex, Inc., August 12, 2004. http://web.archive.org/web/20051028182403/www.vertexinc.com/ AboutVertex/NewsAndPress/pdf/Vertex+ products+and+services+fact+sheet+2_04.pdf.

[44] "Company Home Page - Archived 2005 website," Vertex, January 18, 2005, http://web.archive.org/web/20050118090050/http://www.vertexinc.com.

[45] "PeopleSoft Customers Now Have Access to the Most Comprehensive Tax Processing Solution," Vertex press release, August 18, 2004. http://www.vertexinc.com/PressRoom/archive/2004/PeopleSoft-Customers-Now-Have-Access.pdf.

[46] "Vertex Inc. Announces Tax Compliance Support to Siebel," Vertex press release. http://www.vertexinc.com/PressRoom/archive/2001/Siebel%207%20Press%20Release%20final.pdf (Accessed February 16, 2010).

[47] "Vertex Solutions for SAP," Vertex. http://www.vertexinc.com/solutions/erp/sap.asp (Accessed February 17, 2010).

[48] "Vertex Payroll Tax Q Series," Vertex. http://www.vertexinc.com/solutions/indirect/payroll-tax-q-features.asp (Accessed February 17, 2010).

[49] "About Vertex - Archived 2005 website," Vertex, January 18, 2005. http://web.archive.org/web/20050206190116/www.vertexinc.com/AboutVertex/events.asp.

[50] "About Vertex - Events - Archived 2006 website," Vertex, February 2, 2006. http://web.archive.org/web/20070220011939/vertexinc.com/AboutVertex/events.asp.

[51] "About Vertex - Events - Archived 2007 website," Vertex, February 1, 2007. http://web.archive.org/web/20070220011939/vertexinc.com/AboutVertex/events.asp.

[52] "About Vertex - Press Room - Archived 2008 website," Vertex, February 2, 2008, http://web.archive.org/web/20080202110517/www.vertexinc.com/AboutVertex/NewsAndPress.

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integration firms. As far back as 1998, those relationships included Deloitte & Touche, Ernst & Young, PriceWaterhouseCoopers, KPMG, Peat Marwick and others.[53]

Sabrix (now part of Thomson Reuters) is another resource that self-supporting software customers can utilize. Sabrix had, in January 2005, specific solutions for ERP products. They had SabrixConnection for Oracle, SabrixConnection for SAP, SabrixConnection for PeopleSoft EnterpriseOne and several tax specific solutions.[54] By January 2008, Sabrix added solutions for Microsoft Dynamics GP, SAP R/3, SAP All-in-One, SAP Business One, Oracle E-Business Suite, Ariba and PeopleSoft products.[55] Another self-support resource is Taxware. Taxware (now part of ADP) is a competitor of Vertex.[56] Taxware's capabilities appeal to many ERP customers and are useful as an ERP self-support option.

Beyond Vertex, Sabrix and Taxware, software customers can take advantage of less automated resources to keep their software current with evolving tax and regulatory changes. For less than $75, RIA produces guides on sales taxes by state. CCH offers a number of resources, too. One example is their Sales & Use Tax alert. Thomson Reuters RIA produces a number of useful information products and services such as the Payroll Guide (with weekly newsletter updates), which could help a self-supporting customer keep current on changes they may need to make to their software.

(c) Third party support

Another viable option, for some ERP software customers, is the use of a third-party support provider. These firms often provide some combination of break fix, telephone support, on-site support and tax/regulatory updates. As a general rule, these firms do not develop new versions of the application software being supported.

Not all third-party support providers offer the same set of services or serve the same clientele. Some third-party support vendors serve a subset of the application customer world that wants to stay on a stable release. These are customers who do not wish to upgrade to ever-newer product versions or product lines. These companies, in general, are quite content with the applications they are using and would rather focus their IT resources on other technology initiatives instead of low value added product upgrades. In essence, this type of customer is often looking to extend the life of their existing software application. These customers may also have heavily customized products that make the use of vendor-supplied support more difficult to use and less cost effective based on the fact that most vendors provide little to no full support for heavily customized systems. Thus, because these customers are not interested in new product upgrades or versions, these customers may be interested in third-party support options.

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[53] "Consulting Partners - Archived 1998 website," Vertex, November 11, 1998. http://web.archive.org/web/19990203102646/www.vertexinc.com/partners50/consulting_52.html.

[54] "The Sabrix Solution - archived web page of Sabrix," Sabrix, January 6, 2005. http://web.archive.org/web/20041230134851/www.sabrix.com/solutions.html.

[55] "Company Home Page - Archived 2008 website" Sabrix, January 7, 2008. http://web.archive.org/web/20071213033439/www.sabrix.com/sitemap.html.

[56] "ADP Signs Agreement to Acquire Taxware from First Data," Market Wire, October 2006, http://findarticles.com/p/articles/mi_pwwi/is_200610/ai_n16810316/?tag=col1;co-competitors.

(d) Other options

As companies reevaluate their software and software support options, they may also look at substitute products such as business process outsourcing (BPO) offerings. Companies like ADP provide a full range of payroll, benefits administration, retirement savings plan administration, HRMS, and other capabilities to large and small firms on a per employee cost basis.[57] Customers of these firms do not have to license software, apply tax and regulatory updates, pay for vendor-provided application support, or be concerned with technical patches.

Business Process Outsourcing solutions are in more areas than just human resources. Companies like GenPact provide a number of finance and accounting process outsourcing services.[58] Likewise, most large systems integrators have offerings in that same space.[59] A number of BPO providers have solutions for procurement, supply chain, third-party logistics, and other solutions that are encompassed within an ERP suite.

Some customers may decide that all they need is break/fix support only. These companies can choose support from independent contractors, specialty technology services firms, or even some systems integrators. Interestingly, some software resellers of application products may provide this capability.

5. Summary

ERP software customers have substantial alternatives to vendor-provided support. In concluding otherwise, the Meyer Report is wrong.[60] The Meyer Report errs by inferring from the assumption that no third party could provide the same level of support as Oracle or TomorrowNow and that there are no alternatives to vendor-provided support.[61] As I described above, some ERP customers have limited support needs, thus, such a customer may have its support needs met by a company with a limited level of support services. In that situation, a customer has viable alternatives to vendor-provided support, regardless of whether the third party provides the precise level of support services as the customer's ERP vendor.

E. Decision factors affecting both ERP license and support selections

The following decision factors were either not addressed at all or not adequately addressed in the Meyer Report. These factors, combined with the other factors discussed above, provide appropriate context for providing opinions about what software and support decisions Oracle's former customers would have made but-for the alleged actions of the Defendants in this case.

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[57] ADP, "Products And Solutions," ADP, http://www.adp.com/solutions.aspx?itc=hf050916 (Accessed February 23, 2010).

[58] "Home," Genpact. http://www.genpact.com/home.aspx (Accessed February 23, 2010).

[59] "Business Process Outsourcing," Accenture. http://www.accenture.com/Global/Outsourcing/Business_Process_Outsourcing/default.htm (Accessed February 23, 2010).

[60] Meyer Report at pages 223-34, ¶¶ 364-372.

[61] Meyer Report at pages 228-29, ¶¶ 364, 366.

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1. Corporate mandates

An ERP software customer may have a parent company, new acquirer, or equity investor that dictates financial and technology decisions within their organization. This entity may dictate new economic or budgetary constraints that force the customer to not just reduce costs but also evaluate alternatives including third-party support.

Software customers that originally signed licenses with an ERP vendor may be instructed by their parent company, a new corporate acquirer or an equity investor to move to a another application software suite. This decision may have more to do with a larger overall corporate or IT strategy. These decisions may involve a desire by the larger entity to achieve greater operating synergies across the corporation and to reduce the number of diverse ERP solutions in use throughout the organization.

This is fairly common. For example, when the Fosters Group acquired wine producer Southcorp, Fosters forced Southcorp to convert to Foster's Oracle, J.D. Edwards, and PeopleSoft solutions, "despite investing millions of dollars in a SAP ERP system." Michael Brooks the integration director for Fosters was quoted in the wake of the acquisition that "adopting SAP across the business would have involved more risk and time.… It was a choice of migrating two organizations onto a largely new system, mySAP, or migrating Southcorp onto the existing Foster's platform."[62]

When such an event occurs, the software customer will need to reassess how much longer they will be running the original ERP vendor's software and whether the risk/reward trade-off on paying additional vendor support monies is worthwhile. This decision process also opens the door for the customer to evaluate self-support and third-party support options as well.

2. ERP switching programs

I have seen various software companies introduce marketing campaigns that target the customer bases of competitors with a special focus on customers still utilizing old or unsupported versions of competing products. These marketing efforts sometimes focused on software users who have chosen not to remain current with their software versions. Often, these customers are utilizing unsupported products or products that will soon be unsupported. Competitors will target these customers and provide them with some form of incentive to get them to change or switch their applications software provider.

Vendors may offer to match prior discounts from the incumbent vendor. Vendors may even offer to waive the initial license fee in a switching program. Additional incentives may be offered, but switching programs generally center on a license credit.

(a) Many vendors have had similar programs

[62] Rodney Gedda, "Fosters Cans SAP as ERP Turf War Rages," ComputerWorld, November 1, 2005. http://www.computerworld.com.au/article/142960/foster_cans_sap_erp_turf_war_rages/?fp=16&fpid=0 (Accessed February 18, 2010).

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Convincing software buyers to switch from one vendor's product to another is not new. Different software vendors have even created marketing programs intended to stimulate these changes. Some of these programs have been accompanied with marketing and public relations fanfare but in my opinion the marketing campaigns themselves rarely produce the kinds of major changes vendors hope to achieve.

Over the last two or three decades, I have seen many vendors offer competitive switching programs to customers of other vendors. The trigger for these deals is often a change in ownership or financial condition of one vendor. Sometimes, these deals are driven by one vendor's desire to move up or down market into another vendor's market space or by a vendor who possesses a newer technology (*e.g.*, web-based applications or SaaS application suite) and wants to entice customers before the targeted vendor can develop competitive capabilities. I concur with Jim Shepherd, vice president of research at AMR Research, Inc., who said in an interview with Managing Automation that conversion programs have traditionally had limited success because, regardless of how unsatisfied customers are, "they are not unhappy enough to rip out business systems and put in new ones."[63]

There were a variety of switching programs introduced around the time that Oracle acquired PeopleSoft and SAP acquired TomorrowNow. Microsoft, QAD, and Lawson were three firms that introduced competitive migration marketing programs:

- **Microsoft** announced a program in January 2005 to "help PeopleSoft [EnterpriseOne and World] customers and partners respond to business challenges resulting from Oracle Corporation's recent acquisition of PeopleSoft." Program highlights included a financial package for PeopleSoft customers, a 25 percent license discount as well as a 25 percent discount for the first year of participation in Microsoft Business Solutions support and enhancement programs.[64]

- **QAD** introduced a software and services bundle included customized software, fixed-fee implementation services and a license trade-in credit to J.D. Edwards World and EnterpriseOne customers.[65]

- **Lawson** announced a special migration program on January 17, 2005. The program was designed to help customers achieve immediate savings by switching from Oracle support and gain significant life cycle return on investment by rapidly migrating to Lawson Release 8 web-based business applications for iSeries POWER5 and WebSphere-based systems. In addition to product upgrades, the program featured business and technical consulting services offered by Lawson and CIBER, an IBM

[63] Debra Kelly, "QAD Offers Enticements to J.D.E Customers," Managing Automation, February 28, 2005. http://www.managingautomation.com/maonline/news/read/QAD_Offers_Enticements_to_J.D.E_Customers_4179.

[64] "Microsoft Announces New Migration Program for PeopleSoft Customers and Partners," 2020Software, January 10, 2005. http://www.2020software.com/products/news/Microsoft_471.asp

[65] Debra Kelly "QAD Offers Enticements to J.D.E Customers," Managing Automation, February 28, 2005. http://www.managingautomation.com/maonline/news/read/QAD_Offers_Enticements_to_J.D.E_Customers_ 4179.

Premier Business Partner. During the migration period, J.D. Edwards World and OneWorld maintenance support was available at a favorable discount.[66]

Moreover, these switching programs were not the first and I seriously doubt they will be the last:

- **SalesForce.com** announced its own migration offer called SureShot in 2003 after UpShot was acquired by Siebel. This program gave three months of Salesforce.com's service at no cost and then matched the terms of the customer's UpShot agreement.[67]

- **SoitBrands** had a program to move SSA GT/ManMan users to the Fourth Shift product line.[68]

- **NetSuite** introduced their Crossroads Initiative in late 2009 that included NetSuite products, partner services and a special sales promotion to enable mid-size companies and divisions of larger companies to transition from aging SAP software that is losing support to NetSuite OneWorld for SAP.[69]

- **Oracle** introduced its own switching program called "Off-SAP" or Oracle Fusion for SAP in June 2005. In this program, SAP R/3 customers received up to a 100% license credit to switch from SAP to Oracle applications. Additionally, as part of "OFF SAP," Oracle Consulting announced free INSIGHT for SAP Migration offer, which included a discovery workshop for R/3 customers that results in an assessment of the customers' specific migration plan.[70]

(b) SAP's switching program: Safe Passage

(i) Overview of Safe Passage

Following Oracle's acquisition of PeopleSoft, SAP introduced a switching program called Safe Passage for users of PeopleSoft, J.D. Edwards and Siebel products. For my purposes here, I will reiterate that the program's two primary incentives were:

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[66] "Lawson Announces Migration Program for PeopleSoft Customers Seeking Committed Solution for iSeries Servers," Lawson, January 17, 2005. http://phx.corporate-ir.net/phoenix.zhtml?c=129966&p=irol-newsArticle&ID=663228.

[67] Judith Meskill, "Knowledge Management News," Judith Meskill's Knowledge Notes, October 18, 2003. http://www.meskill.net/archives/000352.html.

[68] "Several New Lifelines for ManMan MRP Users," AllBusiness, May 1, 2003. http://www.allbusiness.com/manufacturing/computer-electronic-product-manufacturing/1020070-1.html

[69] Mei Li, "Netsuite Targets End-of-life SAP R/3 Users with New Crossroads Initiative," NetSuite, September 17, 2009. http://www.netsuite.com/portal/press/releases/nlpr09-17-09.shtml

[70] TJ Snyder and Karen Tillman, "Oracle Helping SAP Customers Get 'OFF SAP,'" Oracle, June 14, 2005. http://www.oracle.com/corporate/press/2005_jun/sap.html

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- A license credit of up to 75% on a customer's previous license, and, for a short time in the fall of 2006, a 100% license credit, to be applied against the price of a new SAP license.[71]

- Maintenance support for existing PeopleSoft, J.D. Edwards, and Siebel products provided by TomorrowNow at 50% of the fee previously paid to Oracle or PeopleSoft.[72] TomorrowNow support was optional as part of the Safe Passage program and could be purchased standalone from any SAP license commitment.

(ii) Safe Passage was an ineffectual ERP sales strategy

The Meyer Report devotes a number of pages to a recitation of various statements by the Defendants about the goals of Safe Passage. I agree with Mr. Meyer's opinion that the Defendants likely wanted Safe Passage to be successful. I note, however, that Mr. Meyer offers scant, if any, support for opinions about the merits of Safe Passage and whether the Defendants' goals for Safe Passage were reasonable or realistic. This section addresses what Mr. Meyer neglected.[73]

(1) ERP marketing by large vendors like SAP and Oracle is generally not as effective as the vendors would like it to be

SAP and Oracle have spent decades building their respective brands and have achieved exceptional name recognition inside and outside their customer bases. In mid-to-large enterprises, very few firms would not know these players. As I discuss below, a large percentage of mid-to-large enterprises are already customers of both firms. As a result, new marketing campaigns by either vendor will not generate much in terms of creating new brand name awareness. Nor will these campaigns generate many new mid-to-large enterprise software prospects. Marketing campaigns will only be successful if the respective vendor addresses critical functionality needs (*e.g.*, support for specific industry or regulatory requirements) or can materially reduce the customer's TCO of the new software. A marketing campaign that does not address either of these two needs will be ineffective.

Oracle and SAP are the two largest ERP software vendors. A large percentage of major corporations utilize the products of both Oracle and SAP, not only because of their prevalence, but because recent acquisitions by both over the last decade have expanded their customer bases even further.

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[71] David R. Brousell, "SAP Offers 'Safe Passage' to PeopleSoft, J.D.E Users," Managing Automation, January 19, 2005. http://www.managingautomation.com/maonline/news/read/SAP_Offers_Safe_Passage_for_PeopleSoft_J.D.E_Users_16.

[72] Robert Westervelt, "SAP Acquires PeopleSoft Support Provider," SearchSAP, January 19, 2005. http://searchsap.techtarget.com/news/article/0,289142,sid21_gci1046093,00.html

[73] My opinions are offered on a review of the stated goals and marketing of Safe Passage.

Both companies have a significant penetration within the Fortune 500. Oracle's advertising actually boasts 97% coverage within the Fortune 500.[74] Oracle claims to have the following companies as customers:

- 20 of the 20 top insurers;
- 20 of the 20 top banks;
- 20 of the 20 top telecommunication companies;
- 20 of the 20 top retailers;
- 20 of the 20 top grocers;
- 10 of the 10 top fashion retailers;
- 10 of the 10 top European retailers;
- 20 of the 20 top pharmaceutical companies;
- 20 of the 20 top medical device companies;
- 17 of the 20 top hospitals in the United States;
- 20 of the 20 top high-tech companies;
- 20 of the 20 top airlines;
- 4 of the 5 top ports;
- 10 of the 10 top hotels;
- 10 of the 10 top trucking companies in the United States and Canada;
- 20 of the 20 top oil and gas companies;
- 20 of the 25 top governments;
- 20 of the 20 top utilities;
- 20 of the 20 top media companies in the United States;
- 20 of the 20 top manufacturers;
- 12 of the 15 top engineering and construction companies; and,

[74] Oracle advertisement. http://www.oracle.com/ad/images/IND_GlblFortune500Fct_2248sec.jpg (Accessed February 19, 2010).

- 10 of the 10 top aerospace and defense companies.[75]

Oracle also claims to be:

- Number one in retail;
- A leader in public sector solutions in the U.S. and Canada;
- Number one business software company;
- Number one project portfolio management software company in the U.S. and Canada;
- Number one customer satisfaction in India;
- Number one middleware software provider;
- Number one enterprise performance management provider;
- Number one database provider;
- Number one data warehousing and provider; and,
- And a host of other claims for the mid-market and vertical sectors.[76]

Oracle has, unquestionably, significant account presence in a major portion of large enterprises and in the middle market as well.

SAP has enjoyed a similar degree of market penetration in large accounts and the middle market. While SAP is best known for its large enterprise solutions, it has also enjoyed significant market success with its Business One and All-in-One applications for the mid-market. Currently, SAP has approximately 95,000 businesses as customers.[77]

Oracle also claims that 95% of SAP customers also use Oracle applications.[78] This data point is important as it highlights that many customers have experience with and exposure to the products and sales organizations of both major ERP software vendors. This explains why most marketing programs by either of these two firms have had a limited impact on their customers. The programs generally repackage or re-price what customers have already come to know and expect of either firm.

[75] Oracle advertisement. http://www.oracle.com/ad/index.html (Accessed February 19, 2010).

[76] Oracle advertisement. http://www.oracle.com/ad/index.html (Accessed February 19, 2010).

[77] SAP Factsheet, SAP AG, February 2010. http://www.sap.com/about/investor/pdf/SAP_Factsheet.pdf

[78] Oracle advertisement. http://www.oracle.com/ad/images/APP_OSurroundsSAP_2127.jpg (Accessed February 19, 2010).

(2) Safe Passage offered little, if any, incentive for ERP customers to switch to SAP from Oracle because the program had a minimal effect on a customer's TCO

Safe Passage could not meaningfully lower the TCO for customers that used the program to migrate onto SAP products from Oracle beyond what a customer could accomplish by negotiating with SAP outside of the Safe Passage program. As I discussed earlier, when customers decide to replace their ERP products with another vendor, the decision process includes a detailed review of the TCO of the new product because of the weight it has in a customer's decision. The two offers within Safe Passage that purported to save a customer money did little, however, to lower the customer's TCO of a new ERP purchase from SAP.

One of the two purported cost-savers for Safe Passage customers was a license credit. Shai Agassi, a member of SAP's Executive Board, provided the following example for reporters of how the program would work: "A company that purchased a PeopleSoft application in, let's say the year 2000, for $1 million would get a $750,000 credit and therefore pay $250,000 for a mySAP ERP license. Maintenance, meanwhile, would be calculated at 17% of the $1 million."[79] Mr. Agassi's explanation reveals the minimal effect that Safe Passage had upon a customer's TCO because, as he indicated, the license credit did not affect the price of support for the customer.

In contrast, if the customer forewent the license credit in Safe Passage, and chose instead to negotiate a discount on the license, the TCO would be lower. For example, if the customer negotiated a discount of $600,000 on the same SAP license, then the support fees would be set at 17% of $400,000 (as opposed to the $1,000,000 if the customer chose the license credit). Thus, even in situations where a customer received a discount *less than* the Safe Passage license credit, the customer could leverage a lower TCO with a negotiated discount because of annual savings on support.

The second way that Safe Passage purported to save a customer money was by offering TomorrowNow support services on the customer's old Oracle product during the time period the customer migrated to the new SAP product ("temporary support"). Safe Passage offered temporary support prices at 50% of what the customer paid Oracle. Although 50% off may appear to be significant savings, it was 50% off of the support prices the customer was paying for the small window of time it moved from Oracle to SAP. Given the timeframe for many ERP implementations, I would estimate this to be a 6-24 month window on average. Thus, this savings represents a fraction of the TCO of a new product. I illustrate this by detailing the components of the TCO for an ERP product:

- In on-premise ERP deals I have been involved with, the largest cost is usually the customer's internal cost to maintain the ERP applications over the expected life of the solution. This is often 50% of the 10-year total cost of ownership.

[79] David R. Brousell, "SAP Offers 'Safe Passage' to PeopleSoft, J.D.E Users," Managing Automation, January 19, 2005. http://www.managingautomation.com/maonline/news/read/SAP_Offers_Safe_Passage_for_PeopleSoft_J.D.E_Users_16 (Accessed February 19, 2010).

- Internal IT personnel costs incurred as a result of owning and running ERP software are not incidental for ERP customers. For some IT departments, a significant portion of their staff is dedicated to the operation and support of third-party package software. For example, PeopleSoft conducted an internal study of TCO which was published in January 2003 for its products. Its primary findings were that, on average, respondent customers spend over a five-year period:
    - 48 percent of total PeopleSoft costs on support staff;
    - 34 percent on implementation and/or upgrade;
    - 11 percent on PeopleSoft license and support;
    - 5 percent on hardware; and
    - 2 percent on 3rd-party software license and support.[80]

- After this internal IT cost, implementation costs are usually the second highest cost from a 10-year TCO perspective.

- After these two costs categories, all other TCO components (*i.e.*, hardware, systems software, application software license, ten years of annual application software support, ten years of systems software maintenance, ILFs, etc.) make up the remainder of total costs. All together, these costs may equal 25% or less of the ten year total cost of ownership.

Similarly, CFO Publishing conducted a survey of 157 senior finance executives, representing primarily midsize companies across the US in a wide range of industries on The High Cost of Change for ERP. This study focused on the initial investment companies make in ERP software and then the ongoing costs to maintain and support this software going forward.

> Responses show that a typical company in our survey may spend an average of more than $1.2 million each year to maintain, modify, and update its ERP system. For each of the three components, 20-30% of respondents estimate annual costs at more than $500,000 per year. Over half of the respondents estimate internal costs alone at between $100,000 and $500,000 each year. More than 40% of respondents estimate costs of between $100,000 and $500,000 separately for external costs and for maintenance and support fees.

[80] PeopleTools Product Strategy, "Total Cost of Ownership: Customer Study." ORCL00399402-434.

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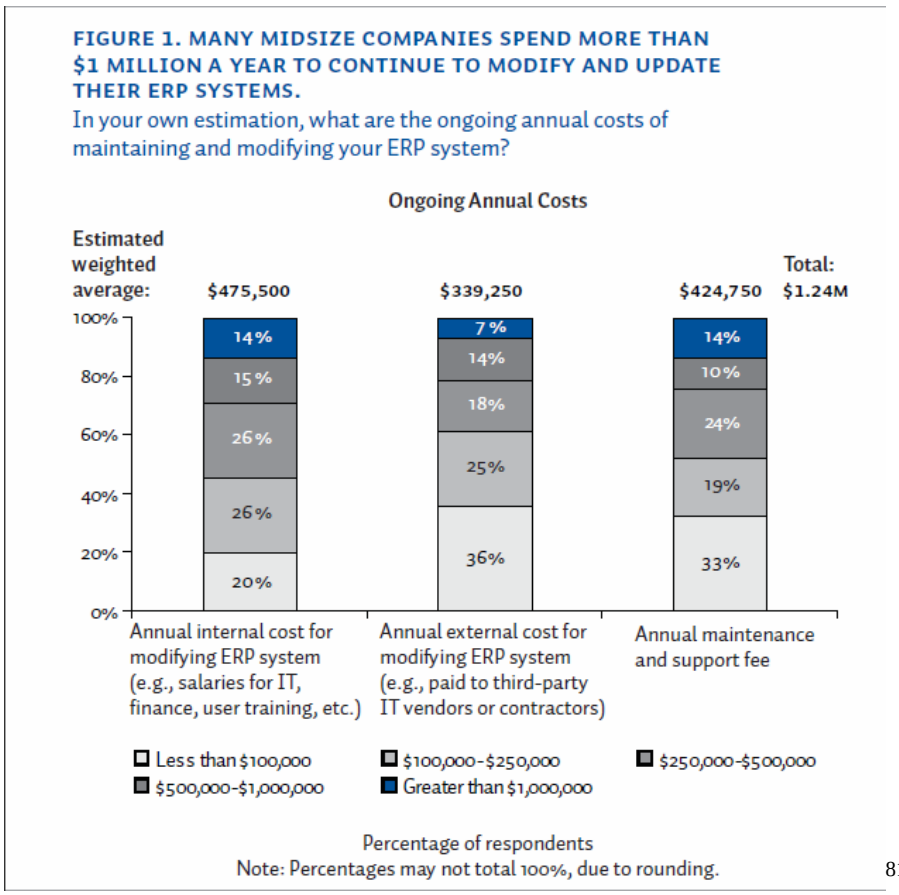

[81]

> Calculating weighted averages for each component shows that the annual combined cost for internal and external resources needed to make changes to the ERP system can be nearly twice the amount of annual maintenance and support fees a company pays. Survey responses indicate that the largest cost component is for internal resources. Surveyed companies on average spend an estimated $475,500 annually on internal resources, compared with an average of $339,250 spent externally. Respondents report an estimated weighted average annual cost of $424,750 for maintenance and support fees.[82]

Thus, a potential savings from a lower-cost maintenance solution for temporary support on to-be-replaced software turns out to focus on very small components of the TCO. Customers understand this, and as a result, businesses are not motivated by such support savings when it comes to ERP replacement decisions. Their decision to change or upgrade ERP decisions is usually predicated on a need to achieve greater operational efficiencies, process improvements

[81] CFO Research Services, "The High Cost of Change for ERP: What Does It Cost to Keep Up to Date?—A report prepared in collaboration with Agresso," CFO, March 2009, 3. http://www.cfo.com/whitepapers/index.cfm/displaywhitepaper/13316056?action=download

[82] CFO Research Services, "The High Cost of Change for ERP: What Does It Cost to Keep Up to Date?—A report prepared in collaboration with Agresso," CFO, March 2009, 4. http://www.cfo.com/whitepapers/index.cfm/displaywhitepaper/13316056?action=download.

and financial returns. And those needs may dwarf any modest savings on support for the replaced product.

(3) A support only option with TomorrowNow would keep customers on old products—not move them to SAP

A standalone TomorrowNow support offering was a flawed strategy. Any sales made by TomorrowNow on a standalone basis were at cross-purposes to SAP's stated goal of using TomorrowNow as an enabler of future SAP license sales. Standalone support offering by TomorrowNow enabled customers to continue utilizing Oracle products at lower costs. Thus, in many instances, TomorrowNow acted as a barrier to the sale of SAP applications to those customers, and in other instances unduly prolonged, if not completely stalled, the normal sales cycle for a customer considering switching from Oracle to SAP. If a customer could be effectively supported on Oracle's products for an extended period, that provided only a longer period in which the customer could make its decision regarding the future path of its ERP systems, which is not necessarily any particular incentive for the customer to switch to SAP. Moreover, the TomorrowNow support option did not require customers to ever purchase SAP software or support. Thus, customers were free to select Oracle or other ERP vendors.

(c) Summary

As a marketing tool for ERP software companies targeting a competitor's customers, switching programs, in my opinion, seldom deliver significant changes in market share that would not otherwise have occurred. Many switching programs fail to address the high costs involved in moving from one ERP system to another. These costs are considerable and often run many times more than the license or maintenance cost will be. Customers will be forced to convert data, develop new interface programs, design and program reports, conduct user training, etc. Similarly, a discount on maintenance for a product the customer is already running does little to offset the TCO of a new ERP license, including the costs of implementing new ERP software. Moreover, I concur with other technology market analysts and market watchers when it comes to the minor market share movements that *any* ERP marketing campaign may generate.[83]

Customers are informed about the functionality of the products they are purchasing and the needs they have, which factor much more significantly into their decision making than a short-lived marketing campaign. No matter what the marketing gloss is behind a campaign, prospects generally only respond when the program contains deep, predetermined discounts and is appealing to a prospect close to the time that they need a new solution. Switching programs generally have little or no appeal to companies that have made significant investments in their ERP solutions in the recent timeframe. Because I and others have observed repeatedly that most software buyers do not replace their solutions until they have been in service a few years, a

[83] Renee Boucher Ferguson, "Oracle vs. SAP: War of Words," eWeek, September 25, 2006, 16. Owen Thomas, "SAP vs. Oracle Battle Gets Bloodier," CNNMoney, January 27, 2006. http://money.cnn.com/2006/01/27/technology/workingtech0126/index.htm. Robert Westervelt, "Pennsylvania Firm Chooses Oracle Over SAP," SearchCRM, September 26, 2005. http://searchcrm.techtarget.com/news/1128819/Pennsylvania-firm-chooses-Oracle-over-SAP.

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marketing campaign targeting individuals with software installed less than five years can be particularly ineffectual.

3. Other factors

(a) The impact of support cost

In contrast to the cost of temporary support on a to-be-replaced product, the cost of support for a product over the entire ownership period is significant. As a result, a customer may be motivated to change ERP vendors when maintenance costs for a licensed product have escalated beyond what is sustainable for the customer. I describe how these costs escalate below.

In many software contracts, software vendors include escalator clauses that allow them to increase their annual maintenance fee based on a cost of living adjustment which may or may not be tied to an official government inflation statistic. These contracts include a percentage range of annual increase amounts that a vendor may use to increase maintenance fees. Often this increase may be in the range of 3%-10% per year. These rates compound and the amount of the increase are often at the sole discretion of the application software vendor.

The compounding effect of annual maintenance price increases discussed above could cause a customer to pay more than 22% of the then-current maintenance price for the software. Customers may expect to pay 22% of negotiated license price for maintenance on a new license but may balk when the maintenance cost climbs close to (or above) 22% of the then-current license price. In that situation, maintenance is cheaper for a new customer paying full price.

In the absence of some form of price relief, customers may hit a threshold where they must seek lower-cost options. Reasonable customers will challenge these price increases. Often, however, attempts to renegotiate maintenance fees result in a "we don't negotiate" response. For example, Oracle's President, Charles Phillips, has been quoted saying that the Oracle pricing model is an up-front software license price, often negotiable, with a 22% annual maintenance fee that's never negotiable. "We are sticklers on that," Phillips said.[84] Manjit Singh, CIO of Chiquita Brands, has been reported as stating that he's been watching maintenance fees for the software vendors he uses creep up from an average of about 18% a few years ago to 21% or 22%. In her article reporting Singh's reaction, Mary Hayes Weier states "What bothers Singh most is how many software vendors don't negotiate on maintenance rates. For example, why can't he pay, say, a 12% rate for some applications and get only the bug fixes but bypass the upgrades? 'As I talk to Oracle and Microsoft, I'm telling them I'm moving toward SaaS, and why I'm such a proponent of it is that I'm sick of paying maintenance and not getting any results."[85]

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[84] Mary Hayes Weier, "Software Maintenance Fees: Time for This Model to Change?" InformationWeek, January 24, 2009. http://www.informationweek.com/news/software/erp/showArticle.jhtml?articleID=212902014&pgno=1&queryText=&isPrev= (Accessed February 19, 2010).

[85] Mary Hayes Weier, "Software Maintenance Fees: Time for This Model to Change?" InformationWeek, January 24, 2009. http://www.informationweek.com/news/software/erp/showArticle.jhtml?articleID=212902014&pgno=1&queryText=&isPrev=

It is my experience that the attempt to re-price maintenance contracts often results in an unsuccessful outcome for the software buyer. Furthermore, vendors tend to re-price contracts based on the then-current pricing, not the negotiated price from the contract signing timeframe. That price differential can be quite significant because customers generally obtained a sizeable discount in the initial license agreement.

Because re-pricing efforts generally are unsuccessful for customers, customers may have no other recourse than to look beyond the vendor and its maintenance program for cost savings opportunities. The inability or unwillingness of vendors to re-price maintenance agreements during the life of a software license can present significant economic hurdles for their customers. It is the nature of these re-pricing calculations and contract terms that act as the trigger or causation factor for pushing customers into examining third-party maintenance options.

Business circumstances for customers may change materially over time. Demand for that customer's products may have fallen, for example, or the customer's industry may have undergone permanent structural changes. In each of these situations, the customer may no longer need as many software applications or licensed users as before. As a result of this reduced ability or desire to pay the outsized maintenance fees, the customer may investigate lower-cost maintenance options such as self-support or third-party maintenance.

(b) The impact of poor service

Virtually any company of any size or magnitude will have customers who have experienced products or services not to their liking. Customers that are experiencing a declining level of service from the vendor would be predisposed to look elsewhere for improved maintenance services. Software customers that cannot get their support issues resolved in a timely fashion, if at all, are motivated to seek other maintenance providers as software disruptions can be devastating to the customer and their business. This is especially true when critical systems such as accounting, inventory, sales order entry, financial applications, etc. are compromised or disabled.

(c) The impact of mergers and acquisitions: fear, uncertainty, and doubt

Consolidation among ERP vendors has been common in the last fifteen years, as I described earlier. The effects of these consolidations reverberate across the marketplace, reaching far enough to be an influence in a customer's choices regarding its ERP vendor or maintenance provider. These effects follow despite whatever best-intentions the merging ERP vendors may have.

Post-acquisition announcements often carry a familiar and repeated set of promises to the acquired customers. These statements usually indicate that the acquiring vendor will:

- Continue to invest in the acquired product line;
- Re-platform the acquired product line to another pre-existing technology architecture (often called a "stack") or to an all-new technology architecture; and,
- Continue to provide support for the acquired products.

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Software acquisitions rarely provide short term benefits to the customers of the acquired products. The acquired customers may face product or release delays as the acquiring firm may move their old technology to a new architectural or code base. These architectural or code base changes can be highly disruptive to the acquired customers as these changes may require upgrades to, or even a complete reinstallation of the product.

After a merger, not every customer from the acquired company will be satisfied with the acquisition decisions. When Oracle acquired PeopleSoft, some customers openly stated their dissatisfaction with Oracle. PeopleSoft and J.D. Edwards users were opposed to the acquisition. The presidents of both user groups went on record to oppose the deal.[86]

In some cases, the customers of the acquired product had undertaken detailed product evaluations between Oracle's software solutions (*e.g.*, E-Business Suite) and those of PeopleSoft or J.D. Edwards. At the conclusion of that evaluation, the customer decided that the PeopleSoft or J.D. Edwards solution was superior to other vendors' products or a better fit for their company and its IT infrastructure. One can imagine the reaction of an executive upon hearing that their firm may have to "upgrade" from the product they dubbed to be a better fit for their firm to another product they had previously rejected for its shortcomings.

Software customers whose products have been acquired by other software companies are often concerned about the future of their products. In particular, they are concerned about:

- Will their products be orphaned and no longer actively supported?
- Will they be forced to migrate to a completely different product line as their current product will be de-supported?
- Will the application's original product roadmap being discarded and replaced with a different one from the acquiring vendor?

In an uncertain product feature environment, customers may choose to stay on the version of the product they are currently running. That decision has the effect of reducing the customer's dependence on vendor supplied support as they are utilizing a very stable version of the product. When software users cease to be interested in future product upgrades or releases, their interest in paying top dollar for vendor supplied product support should diminish and their interest in lower-cost third-party options or self-support should increase.

Additionally, two specific product directions that may follow a merger between vendors may alienate customers. First, in some cases, multiple re-implementations may be required if the architectural changes are both significant and phased. Some software vendors purchased other vendors' products in hopes of converting the existing customers to their flagship products. AMR Research analyst Jim Shepherd said as much when he stated: "When the larger ERP vendors

[86] Todd R. Weiss, "PeopleSoft User Panel Opposes Oracle's Offer," Computerworld, June 20, 2003. http://www.computerworld.com/s/article/print/82608/PeopleSoft_User_Panel_Opposes_Oracle_s_Offer?taxonomyName=Desktop+Applications&taxonomyId=86. Martin LaMonica, "J.D. Edwards users oppose Oracle," CNET News, June 23, 2003, http://news.cnet.com/J.D.-Edwards-users-oppose-Oracle/2100-1014_3-1019960.html?tax+txt.

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began buying up the smaller companies, they expected to be able to migrate these acquired customers to their flagship products".[87] For example, Taleo did this with its acquisition of Vurv.[88] Kenexa's acquisition of WebHire and their planned conversion of those customers to a Kenexa product platform triggered two Kenexa competitors to launch competitive replacement programs.[89] This type of deal can sometimes result from one company desiring to take out a competitor and acquire the competitor's customer base.[90] Other software vendors like Computer Associates, Infor, and SSA became portfolio companies that took the maintenance revenue stream from acquired customers and invested minimally in product enhancements.[91]

An additional perceived negative product direction for customers that may result from some ERP acquisitions is the vendor's concept of a single, unified application software product line. The idea is that the vendor will offer a new product that combines the best aspects of all the acquired products. Oracle's Fusion is perhaps the most notable example, but it is not the only one. In the earlier part of this decade, Microsoft launched an initiative called Project Green. The concept was to merge four ERP product lines that Microsoft possessed (via acquisitions) into a single code base. The Microsoft products (*i.e.*, Navision, Great Plains, Axapta and Solomon) would be re-platformed and re-written to a single product line. Microsoft launched Project Green in 2003 and essentially dropped the initiative in 2007. Frank Scavo then reported that Microsoft would re-brand the products with the Dynamics name.[92] CA90s was the name of similar application software initiative launched by Computer Associates a decade earlier. It, too, did not result in its promised unified product line.

From a customer's perspective, the news that an existing product would be re-written or combined with aspects of another to create an amalgamated solution would not always be welcome news. CIOs would get a new version of the product that may require:

- A complete re-installation of the affected applications;
- New systems software purchases;
- New hardware purchases;

[87] Jim Shepherd, "Should You Rehabilitate Your Current ERP System Rather Than Buy a New One?" AMR Research, September 2009. http://www.infor.com/content/analyst/2749234.

[88] Mike Gregiore, "Talent Management in a Changing World," Taleo, July 16, 2008. http://files.shareholder.com/downloads/TLEO/0x0x307148/ABBFDC2D-3EFA-472A-BA52-7D2D9331399F/Taleo_2008_Analyst_Deck_IR.pdf

[89] "Workstream Unveils WebHire Trade-in Program; Workstream Exchange Program Offers Displaced WebHire Customers Free Migration and Integration to Workstream Recruitment and TalentCenter Suite", BusinessWire, December 22, 2005, http://www.businesswire.com/portal/site/google/permalink/?ndmViewId=news_view&newsId=20051222005292&newsLang=en.

[90] Jarmo J. Ahonen, "Three Case Studies on Common Software Process Problems in Software Company Acquisitions," Springer, 2006. http://www.springerlink.com/content/cp4k68481p827m0r/.

[91] Mary Hayes Weier, "Software Maintenance Fees: Time for This Model to Change?" InformationWeek, January 24, 2009. http://www.informationweek.com/news/software/erp/showArticle.jhtml?articleID=212902014&pgno=1&queryText=&isPrev=.

[92] Frank Scavo, "Oracle Shuts Down Free Support Blog," The Enterprise System Spectator, February 15, 2010. http://fscavo.blogspot.com/2010/02/oracle-shuts-down-free-support-blog.html

- Training for the affected users; or
- Training for the IT staff that must implement and support the new product line.

These combined product lines could also introduce other issues. For example, the new product line might:

- Initially (or permanently) contain less functionality than the current version;
- Be less stable and have more bugs (or defects) than the current version;
- Focus on vertical industry or other functionality of little use or benefit to some customers; or,
- Have a product development roadmap that is different than previous roadmaps.

Software customers can also find these product line convergence initiatives to trigger long delays in expected new functionality. For example, if the acquired company had previously announced it was going to deliver some advanced functionality in an upcoming release, those plans may get tossed aside as the new owner re-focuses the software developers to work on the product line merger activity. From a software customer's perspective, the post-merger product line integration does not seem to generate any real short-term benefits for them. The benefits may occur in the long-term. The vendor receives cost-savings benefits in the short-term as it can rationalize additional, redundant development efforts on the acquired products and its own.

END OF REPORT

Appendix A

BRIAN S. SOMMER

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Executive Summary:

- Former Big-5 consulting partner with significant global operations, delivery and sales responsibilities including short and long-term expatriate assignments
- Grown and developed several client-facing research organizations
- Proven ability to work with all levels of staff, business partners and executives including: Wall Street analysts, Fortune 500 executive committees, software company CEOs, venture capitalists, boards of directors, advisory boards, professional societies, clients, etc.
- Excellent English language skills – prolific writer, public speaker, blogger – Some fluency in Spanish and German
- Led successful turnaround efforts for two underperforming and unprofitable internal operations and several client projects/relationships gone awry
- Repeated, demonstrated proof of building organizations while exceeding revenue and profit targets

Professional Experience:

Accenture (nee Andersen Consulting) 1/81-10/99

Partner-in-Charge: Worldwide Software Intelligence Unit

- Most successful, visible and longest running leader in the history of this unit
- Largely responsible for expanding firm's application software practice from less than $100 million annually to over $1 billion
- Produced eight straight years of growing profits and revenues
- Average annual revenues of Software Intelligence group grown to $10+ million
- Led development of numerous intellectual property products that helped leverage $billions in firm revenue
- Developed and expanded strategic relationships with all first and second tier software vendors. Most notable alliances developed: PeopleSoft, Walker Interactive, Adaytum and Oracle
- Organized numerous large internal and external software conferences (e.g., The Software Spectacular) for top client executives
- Promoted the global software implementation practice via:
    - Average 50-100 public speaking gigs annually
    - Numerous media placements
    - Top level relationships with IT industry leaders
    - University relationships (Harvard, Wharton, etc.)
    - Managing IT and Wall Street analyst firm relations
    - Advised 100+ Fortune 500 clients on enterprise (ERP) software.
    - Sold and executed large client engagements at firms like Alcoa, Tenneco, etc.

Partner-in-Charge: Worldwide Human Resources Center of Excellence

- Developed initial relationship/alliance between Andersen Consulting and various HRMS vendors: PeopleSoft, Integral, Tesseract, etc.
- Founded the Worldwide HR Center of Excellence
    - Recruited direct staff of 25 and helped expand global practice to over 200 personnel
    - Responsible for leveraging practice worth over $200 million to Accenture annually
    - Grew group's direct revenue from $0 to approx. $4 million annually in two years
- Led development of numerous human resource practice aids, service offerings and methodologies including:
    - Human Capital/Human Resource Practice Guides (included designs for most HR processes (e.g., payroll, benefits, recruiting, etc.)

Appendix A

  - Numerous training course materials for Accenture practitioners worldwide
- Member of editorial advisory board for IHRIM.link magazine
- Authored several articles on HRIS for leading HR magazines and contributed chapters to a leading book on HR

Partner: Process Competency (Business Process Reengineering)

- Second partner in the development of this global practice competency for Firm
- Led development of all new competency and its rollout to over 19,000 professionals worldwide in less than two years
- Developed material portions of firm's Process Handbook, training courses and other intellectual property needed to build out the service offerings
- Sold and ran finance reengineering projects at several global clients

Partner-in-Charge: Worldwide Finance & Performance Center of Excellence

- Founder and in-charge partner for Worldwide Center of Excellence
  - Recruited direct staff of over 40 personnel and helped expand global practice to over 900 staff
  - Responsible for leveraging practice worth over $1 billion to Accenture annually
  - Grew group's direct revenue from $0 to approx. $6 million annually in two years
  - Independent global review partner for Accenture's internal finance systems and business processes
- Client partner for large shared services accounts like Novartis AG and others. Sold and ran several large finance strategy, shared service, reengineering and financial system implementation projects
- Led Accenture's finance practice alliance efforts with benchmarking, EVA and other niche firms
- Led development of numerous finance practice aids, service offerings and methodologies including:
  - *Shared Services Design Guide*
  - *Post Merger Integration*
  - *Finance Strategy Workshop*
- Promoted the practice in dozens of international shows, events and media (e.g., Wall Street Journal Europe, CFO, etc.).

IQ4Hire, Inc. – CEO 10/99 – 5/01

- Raised approximately $10 million in three venture rounds for an Internet startup. Personally recruited Dave Duffield (PeopleSoft chairman), Ray Lane (ex-Oracle COO) and other technology luminaries as major investors
- Led several high profile sales efforts with key clients (e.g., BMC Software, American Express)
- Company provided outsourced IT services procurement capability to major firms
- Drove aggressive PR and marketing campaigns. Secured feature articles in **CIO, Business Week** and many other publications generating hundreds of press mentions in a few short months.
- Led several M&A efforts

TechVentive - Founder 5/01- Present

- Created several unique intellectual property products, training programs, sales training and negotiation courses for clients globally including: Volvo Heavy Equipment (South Korea), Progress Software (England, Germany, Australia, Brazil and more), Accenture, Primavera Systems, Intel and many more
- Led site selection, acquisition and purchase negotiations for a significant metals manufacturing plant in southeastern U.S.
- Structured significant three-party manufacturing joint venture in North Carolina
- Advisor to several technology startups in the recruiting software, real estate software, and technology analyst spaces
- Speaker at dozens of IT shows and vendor conferences (e.g., HRO World, NetSuite) – Special guest speaker at BMC Software internal strategy summit
- Developed major marketing programs for several mid-sized and large application software vendors
- Authored numerous articles for Optimize magazine, several academic publications and many IT trade publications
- Part of turnaround team for a technology analyst firm and an advisor to another
- On-site consultant to McKesson, Stride-Rite, Designed Alloys & Kraft Foods North America

Appendix A

Education:

BBA (Marketing) 1978 – University of Texas at Austin
MBA (Finance) 1980 - University of Texas at Austin

Appendix B

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Papers and Publications

Professional Services blog, 2005 – 2010.www.servicessafari.blogs.com.

Application Software blog, 2005 – 2010.www.softwaresafari.typepad.com.

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"*A Special Report from Vital Analysis*: OpenAir: An "Automatic" in the PSA Space." TechVentive, Inc. 2008.

Appendix B

"*A Special Report from Vital Analysis:* NetSuite: From Front to Back & Everything In Between." TechVentive, Inc. 2008.

"*A Special Report from Vital Analysis:* Machinery & Equipment Sector: Sector Overview and SYSPRO Case Study." TechVentive, Inc. 2008.

"*A Special Report from Vital Analysis:* Kenexa: Moving Into the Big Leagues." TechVentive, Inc. 2008.

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Editorial Advisor:

Review of Accounting Information Systems, Spring 1996 – Fall 1999

IHRIM.*link*, Fall 2001 – present (Department and Guest Editor)

University Speaking Engagements

MSIS MBA Industry Advisory Sub-Committee – I993 – University of Texas at Austin

Cyberposium, Harvard Graduate School of Business –High Tech & New Media Club, March 1998 moderated panel and Webcast

Kellogg Graduate School of Management, Digital Frontier Conference 2001, Panelist

Michigan State University, Guest Lecturer – MBA program

Arizona State University, Guest Lecturer – MBA program (multiple times – last engagement 1/14/2010)

Northern Illinois University, MPA program, REA Accounting, Sept. 2007

Continuing Education

E2000/Enterprise 2000

Strategic IT Staffing Seminar, May 31, 2000

Strategic IT Staffing Seminar December, 1999

Ariba User Conference, 1999

Andersen Executive Program, 1997

The Perry Performance Classic, 1997

IMD, International Institute for Management Development, 1996

Softworld in Accounting & Finance, London, 1995

Appendix C

I considered the following documents in drafting this rebuttal report:

- Fourth Amended Complaint;
- Expert Report of Paul K. Meyer;
- Expert Report of Kevin Mandia;
- Deposition of Terry Hurst and accompanying exhibits shown or introduced thereto;
- Deposition of Peter Graf and accompanying exhibits shown or introduced thereto;
- ORCL00463506-70;
- ORCL00399402-434; and,
- All documents produced in conjunction with this rebuttal report, listed below.

BEGDOC	ENDDOC
SAP-BSS-000001	SAP-BSS-000004
SAP-BSS-000005	SAP-BSS-000006
SAP-BSS-000007	SAP-BSS-000009
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SAP-BSS-001086	SAP-BSS-001087
SAP-BSS-001088	SAP-BSS-001089
SAP-BSS-001090	SAP-BSS-001091
SAP-BSS-001092	SAP-BSS-001101
SAP-BSS-001102	SAP-BSS-001113
SAP-BSS-001114	SAP-BSS-001123
SAP-BSS-001124	SAP-BSS-001124
SAP-BSS-001125	SAP-BSS-001125
SAP-BSS-001126	SAP-BSS-001126
SAP-BSS-001127	SAP-BSS-001134
SAP-BSS-001135	SAP-BSS-001141
SAP-BSS-001142	SAP-BSS-001147
SAP-BSS-001148	SAP-BSS-001149
SAP-BSS-001150	SAP-BSS-001150
SAP-BSS-001151	SAP-BSS-001153
SAP-BSS-001154	SAP-BSS-001164
SAP-BSS-001165	SAP-BSS-001171
SAP-BSS-001172	SAP-BSS-001175
SAP-BSS-001176	SAP-BSS-001178
SAP-BSS-001179	SAP-BSS-001179
SAP-BSS-001180	SAP-BSS-001180

Appendix C

SAP-BSS-001181	SAP-BSS-001187
SAP-BSS-001188	SAP-BSS-001188
SAP-BSS-001189	SAP-BSS-001189
SAP-BSS-001190	SAP-BSS-001191
SAP-BSS-001192	SAP-BSS-001196
SAP-BSS-001197	SAP-BSS-001204
SAP-BSS-001205	SAP-BSS-001210
SAP-BSS-001211	SAP-BSS-001213
SAP-BSS-001214	SAP-BSS-001215
SAP-BSS-001216	SAP-BSS-001216
SAP-BSS-001217	SAP-BSS-001224
SAP-BSS-001225	SAP-BSS-001227
SAP-BSS-001228	SAP-BSS-001235
SAP-BSS-001236	SAP-BSS-001239
SAP-BSS-001240	SAP-BSS-001246
SAP-BSS-001247	SAP-BSS-001252
SAP-BSS-001253	SAP-BSS-001254
SAP-BSS-001255	SAP-BSS-001256
SAP-BSS-001257	SAP-BSS-001259
SAP-BSS-001260	SAP-BSS-001261
SAP-BSS-001262	SAP-BSS-001263
SAP-BSS-001264	SAP-BSS-001265
SAP-BSS-001266	SAP-BSS-001267
SAP-BSS-001268	SAP-BSS-001268
SAP-BSS-001269	SAP-BSS-001270
SAP-BSS-001271	SAP-BSS-001271
SAP-BSS-001272	SAP-BSS-001276
SAP-BSS-001277	SAP-BSS-001278
SAP-BSS-001279	SAP-BSS-001284
SAP-BSS-001285	SAP-BSS-001285
SAP-BSS-001286	SAP-BSS-001286
SAP-BSS-001287	SAP-BSS-001290
SAP-BSS-001291	SAP-BSS-001292
SAP-BSS-001293	SAP-BSS-001295
SAP-BSS-001296	SAP-BSS-001298
SAP-BSS-001299	SAP-BSS-001313
SAP-BSS-001314	SAP-BSS-001317
SAP-BSS-001318	SAP-BSS-001320
SAP-BSS-001321	SAP-BSS-001322
SAP-BSS-001323	SAP-BSS-001323
SAP-BSS-001324	SAP-BSS-001324
SAP-BSS-001325	SAP-BSS-001325
SAP-BSS-001326	SAP-BSS-001328
SAP-BSS-001329	SAP-BSS-001331
SAP-BSS-001332	SAP-BSS-001333
SAP-BSS-001334	SAP-BSS-001334
SAP-BSS-001335	SAP-BSS-001338
SAP-BSS-001339	SAP-BSS-001339
SAP-BSS-001340	SAP-BSS-001340
SAP-BSS-001341	SAP-BSS-001342

Appendix C

SAP-BSS-001343	SAP-BSS-001344
SAP-BSS-001345	SAP-BSS-001345
SAP-BSS-001346	SAP-BSS-001347
SAP-BSS-001348	SAP-BSS-001352
SAP-BSS-001353	SAP-BSS-001353
SAP-BSS-001354	SAP-BSS-001354
SAP-BSS-001355	SAP-BSS-001357
SAP-BSS-001358	SAP-BSS-001360
SAP-BSS-001361	SAP-BSS-001425
SAP-BSS-001426	SAP-BSS-001446
SAP-BSS-001447	SAP-BSS-001451
SAP-BSS-001452	SAP-BSS-001453
SAP-BSS-001454	SAP-BSS-001464
SAP-BSS-001465	SAP-BSS-001470
SAP-BSS-001471	SAP-BSS-001473
SAP-BSS-001474	SAP-BSS-001478
SAP-BSS-001479	SAP-BSS-001489
SAP-BSS-001490	SAP-BSS-001500
SAP-BSS-001501	SAP-BSS-001509
SAP-BSS-001510	SAP-BSS-001584
SAP-BSS-001585	SAP-BSS-001589
SAP-BSS-001590	SAP-BSS-001595
SAP-BSS-001596	SAP-BSS-001601
SAP-BSS-001602	SAP-BSS-001607
SAP-BSS-001608	SAP-BSS-001611
SAP-BSS-001612	SAP-BSS-001617
SAP-BSS-001618	SAP-BSS-001622
SAP-BSS-001623	SAP-BSS-001628
SAP-BSS-001629	SAP-BSS-001634
SAP-BSS-001635	SAP-BSS-001641
SAP-BSS-001642	SAP-BSS-001649
SAP-BSS-001650	SAP-BSS-001655
SAP-BSS-001656	SAP-BSS-001661
SAP-BSS-001662	SAP-BSS-001673
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SAP-BSS-001681	SAP-BSS-001688
SAP-BSS-001689	SAP-BSS-001692
SAP-BSS-001693	SAP-BSS-001694
SAP-BSS-001695	SAP-BSS-001698
SAP-BSS-001699	SAP-BSS-001702
SAP-BSS-001703	SAP-BSS-001710
SAP-BSS-001711	SAP-BSS-001715
SAP-BSS-001716	SAP-BSS-001719
SAP-BSS-001720	SAP-BSS-001723
SAP-BSS-001724	SAP-BSS-001727
SAP-BSS-001728	SAP-BSS-001732
SAP-BSS-001733	SAP-BSS-001736
SAP-BSS-001737	SAP-BSS-001740
SAP-BSS-001741	SAP-BSS-001744
SAP-BSS-001745	SAP-BSS-001748

Appendix C

SAP-BSS-001749	SAP-BSS-001757
SAP-BSS-001758	SAP-BSS-001766
SAP-BSS-001767	SAP-BSS-001769
SAP-BSS-001770	SAP-BSS-001774
SAP-BSS-001775	SAP-BSS-001802
SAP-BSS-001803	SAP-BSS-001812
SAP-BSS-001813	SAP-BSS-001823
SAP-BSS-001824	SAP-BSS-001832
SAP-BSS-001833	SAP-BSS-001844
SAP-BSS-001845	SAP-BSS-001851
SAP-BSS-001852	SAP-BSS-001854
SAP-BSS-001855	SAP-BSS-001855
SAP-BSS-001856	SAP-BSS-001858
SAP-BSS-001859	SAP-BSS-001859
SAP-BSS-001860	SAP-BSS-001860
SAP-BSS-001861	SAP-BSS-001861
SAP-BSS-001862	SAP-BSS-001863
SAP-BSS-001864	SAP-BSS-001865
SAP-BSS-001866	SAP-BSS-001868
SAP-BSS-001869	SAP-BSS-001870
SAP-BSS-001871	SAP-BSS-001871
SAP-BSS-001872	SAP-BSS-001876
SAP-BSS-001877	SAP-BSS-001878
SAP-BSS-001879	SAP-BSS-001879
SAP-BSS-001880	SAP-BSS-001881
SAP-BSS-001882	SAP-BSS-001885
SAP-BSS-001886	SAP-BSS-001889
SAP-BSS-001890	SAP-BSS-001894
SAP-BSS-001895	SAP-BSS-001897
SAP-BSS-001898	SAP-BSS-001898
SAP-BSS-001899	SAP-BSS-001899
SAP-BSS-001900	SAP-BSS-001906
SAP-BSS-001907	SAP-BSS-001909
SAP-BSS-001910	SAP-BSS-001912
SAP-BSS-001913	SAP-BSS-001913
SAP-BSS-001914	SAP-BSS-001916
SAP-BSS-001917	SAP-BSS-001918
SAP-BSS-001919	SAP-BSS-001921
SAP-BSS-001922	SAP-BSS-001925
SAP-BSS-001926	SAP-BSS-001931
SAP-BSS-001932	SAP-BSS-001939
SAP-BSS-001940	SAP-BSS-001942
SAP-BSS-001943	SAP-BSS-001945
SAP-BSS-001946	SAP-BSS-001947
SAP-BSS-001948	SAP-BSS-001957
SAP-BSS-001958	SAP-BSS-001962
SAP-BSS-001963	SAP-BSS-001965
SAP-BSS-001966	SAP-BSS-001969
SAP-BSS-001970	SAP-BSS-001971
SAP-BSS-001972	SAP-BSS-001973

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SAP-BSS-001974	SAP-BSS-001975
SAP-BSS-001976	SAP-BSS-001977
SAP-BSS-001978	SAP-BSS-001979
SAP-BSS-001980	SAP-BSS-001981
SAP-BSS-001982	SAP-BSS-001983
SAP-BSS-001984	SAP-BSS-001986
SAP-BSS-001987	SAP-BSS-001988
SAP-BSS-001989	SAP-BSS-001995
SAP-BSS-001996	SAP-BSS-001997
SAP-BSS-001998	SAP-BSS-002000
SAP-BSS-002001	SAP-BSS-002023
SAP-BSS-002024	SAP-BSS-002025
SAP-BSS-002026	SAP-BSS-002031
SAP-BSS-002032	SAP-BSS-002036
SAP-BSS-002037	SAP-BSS-002097
SAP-BSS-002098	SAP-BSS-002100
SAP-BSS-002101	SAP-BSS-002104
SAP-BSS-002105	SAP-BSS-002107
SAP-BSS-002108	SAP-BSS-002118
SAP-BSS-002119	SAP-BSS-002121
SAP-BSS-002122	SAP-BSS-002124
SAP-BSS-002125	SAP-BSS-002129
SAP-BSS-002130	SAP-BSS-002132
SAP-BSS-002133	SAP-BSS-002134
SAP-BSS-002135	SAP-BSS-002137
SAP-BSS-002138	SAP-BSS-002139
SAP-BSS-002140	SAP-BSS-002145
SAP-BSS-002146	SAP-BSS-002164
SAP-BSS-002165	SAP-BSS-002166
SAP-BSS-002167	SAP-BSS-002167
SAP-BSS-002168	SAP-BSS-002169
SAP-BSS-002170	SAP-BSS-002172
SAP-BSS-002173	SAP-BSS-002173
SAP-BSS-002174	SAP-BSS-002185
SAP-BSS-002186	SAP-BSS-002192
SAP-BSS-002193	SAP-BSS-002196
SAP-BSS-002197	SAP-BSS-002203
SAP-BSS-002204	SAP-BSS-002215
SAP-BSS-002216	SAP-BSS-002217
SAP-BSS-002218	SAP-BSS-002221
SAP-BSS-002222	SAP-BSS-002224
SAP-BSS-002225	SAP-BSS-002230
SAP-BSS-002231	SAP-BSS-002232
SAP-BSS-002233	SAP-BSS-002235
SAP-BSS-002236	SAP-BSS-002237
SAP-BSS-002238	SAP-BSS-002240
SAP-BSS-002241	SAP-BSS-002261
SAP-BSS-002262	SAP-BSS-002271
SAP-BSS-002272	SAP-BSS-002291
SAP-BSS-002292	SAP-BSS-002310

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SAP-BSS-002311	SAP-BSS-002317
SAP-BSS-002318	SAP-BSS-002320
SAP-BSS-002321	SAP-BSS-002323
SAP-BSS-002324	SAP-BSS-002331
SAP-BSS-002332	SAP-BSS-002333
SAP-BSS-002334	SAP-BSS-002335
SAP-BSS-002336	SAP-BSS-002339
SAP-BSS-002340	SAP-BSS-002341
SAP-BSS-002342	SAP-BSS-002344
SAP-BSS-002345	SAP-BSS-002346
SAP-BSS-002347	SAP-BSS-002358
SAP-BSS-002359	SAP-BSS-002359
SAP-BSS-002360	SAP-BSS-002365
SAP-BSS-002366	SAP-BSS-002369
SAP-BSS-002370	SAP-BSS-002393
SAP-BSS-002394	SAP-BSS-002427
SAP-BSS-002428	SAP-BSS-002453
SAP-BSS-002454	SAP-BSS-002455
SAP-BSS-002456	SAP-BSS-002457
SAP-BSS-002458	SAP-BSS-002459
SAP-BSS-002460	SAP-BSS-002460
SAP-BSS-002461	SAP-BSS-002461
SAP-BSS-002462	SAP-BSS-002462
SAP-BSS-002463	SAP-BSS-002466
SAP-BSS-002467	SAP-BSS-002489
SAP-BSS-002490	SAP-BSS-002506
SAP-BSS-002507	SAP-BSS-002559
SAP-BSS-002560	SAP-BSS-002561
SAP-BSS-002562	SAP-BSS-002565
SAP-BSS-002566	SAP-BSS-002569
SAP-BSS-002570	SAP-BSS-002571
SAP-BSS-002572	SAP-BSS-002574
SAP-BSS-002575	SAP-BSS-002579
SAP-BSS-002580	SAP-BSS-002582
SAP-BSS-002583	SAP-BSS-002596
SAP-BSS-002597	SAP-BSS-002631
SAP-BSS-002632	SAP-BSS-002635
SAP-BSS-002636	SAP-BSS-002638
SAP-BSS-002639	SAP-BSS-002644
SAP-BSS-002645	SAP-BSS-002646
SAP-BSS-002647	SAP-BSS-002648
SAP-BSS-002649	SAP-BSS-002767
SAP-BSS-002768	SAP-BSS-002769
SAP-BSS-002770	SAP-BSS-002770
SAP-BSS-002771	SAP-BSS-002771
SAP-BSS-002772	SAP-BSS-002772
SAP-BSS-002773	SAP-BSS-002776
SAP-BSS-002777	SAP-BSS-002778
SAP-BSS-002779	SAP-BSS-002798
SAP-BSS-002799	SAP-BSS-002930

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SAP-BSS-002931	SAP-BSS-002932
SAP-BSS-002933	SAP-BSS-002933
SAP-BSS-002934	SAP-BSS-002941
SAP-BSS-002942	SAP-BSS-002946
SAP-BSS-002947	SAP-BSS-002950
SAP-BSS-002951	SAP-BSS-002954
SAP-BSS-002955	SAP-BSS-002959
SAP-BSS-002960	SAP-BSS-002996
SAP-BSS-002997	SAP-BSS-002998
SAP-BSS-002999	SAP-BSS-003009
SAP-BSS-003010	SAP-BSS-003010
SAP-BSS-003011	SAP-BSS-003016
SAP-BSS-003017	SAP-BSS-003020
SAP-BSS-003021	SAP-BSS-003023
SAP-BSS-003024	SAP-BSS-003024
SAP-BSS-003025	SAP-BSS-003038
SAP-BSS-003039	SAP-BSS-003041
SAP-BSS-003042	SAP-BSS-003043
SAP-BSS-003044	SAP-BSS-003047
SAP-BSS-003048	SAP-BSS-003048
SAP-BSS-003049	SAP-BSS-003050
SAP-BSS-003051	SAP-BSS-003056
SAP-BSS-003057	SAP-BSS-003062
SAP-BSS-003063	SAP-BSS-003063
SAP-BSS-003064	SAP-BSS-003118
SAP-BSS-003119	SAP-BSS-003134
SAP-BSS-003135	SAP-BSS-003153
SAP-BSS-003154	SAP-BSS-003157
SAP-BSS-003158	SAP-BSS-003160
SAP-BSS-003161	SAP-BSS-003170
SAP-BSS-003171	SAP-BSS-003171
SAP-BSS-003172	SAP-BSS-003178
SAP-BSS-003179	SAP-BSS-003180
SAP-BSS-003181	SAP-BSS-003188
SAP-BSS-003189	SAP-BSS-003192
SAP-BSS-003193	SAP-BSS-003200
SAP-BSS-003201	SAP-BSS-003203
SAP-BSS-003204	SAP-BSS-003206
SAP-BSS-003207	SAP-BSS-003214
SAP-BSS-003215	SAP-BSS-003216
SAP-BSS-003217	SAP-BSS-003219
SAP-BSS-003220	SAP-BSS-003227
SAP-BSS-003228	SAP-BSS-003228
SAP-BSS-003229	SAP-BSS-003234
SAP-BSS-003235	SAP-BSS-003246
SAP-BSS-003247	SAP-BSS-003248
SAP-BSS-003249	SAP-BSS-003250
SAP-BSS-003251	SAP-BSS-003252
SAP-BSS-003253	SAP-BSS-003255
SAP-BSS-003256	SAP-BSS-003257

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SAP-BSS-003258	SAP-BSS-003262
SAP-BSS-003263	SAP-BSS-003263
SAP-BSS-003264	SAP-BSS-003270
SAP-BSS-003271	SAP-BSS-003280
SAP-BSS-003281	SAP-BSS-003283
SAP-BSS-003284	SAP-BSS-003288
SAP-BSS-003289	SAP-BSS-003293
SAP-BSS-003294	SAP-BSS-003298
SAP-BSS-003299	SAP-BSS-003303
SAP-BSS-003304	SAP-BSS-003306
SAP-BSS-003307	SAP-BSS-003311
SAP-BSS-003312	SAP-BSS-003314
SAP-BSS-003315	SAP-BSS-003315
SAP-BSS-003316	SAP-BSS-003318
SAP-BSS-003319	SAP-BSS-003320
SAP-BSS-003321	SAP-BSS-003329
SAP-BSS-003330	SAP-BSS-003335
SAP-BSS-003336	SAP-BSS-003340
SAP-BSS-003341	SAP-BSS-003347
SAP-BSS-003348	SAP-BSS-003350
SAP-BSS-003351	SAP-BSS-003411
SAP-BSS-003412	SAP-BSS-003413
SAP-BSS-003414	SAP-BSS-003415
SAP-BSS-003416	SAP-BSS-003417
SAP-BSS-003418	SAP-BSS-003419
SAP-BSS-003420	SAP-BSS-003420
SAP-BSS-003421	SAP-BSS-003421
SAP-BSS-003422	SAP-BSS-003453
SAP-BSS-003454	SAP-BSS-003461
SAP-BSS-003462	SAP-BSS-003466
SAP-BSS-003467	SAP-BSS-003482
SAP-BSS-003483	SAP-BSS-003484
SAP-BSS-003485	SAP-BSS-003487
SAP-BSS-003488	SAP-BSS-003493
SAP-BSS-003494	SAP-BSS-003496
SAP-BSS-003497	SAP-BSS-003499
SAP-BSS-003500	SAP-BSS-003501
SAP-BSS-003502	SAP-BSS-003506
SAP-BSS-003507	SAP-BSS-003508
SAP-BSS-003509	SAP-BSS-003512
SAP-BSS-003513	SAP-BSS-003515
SAP-BSS-003516	SAP-BSS-003523
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SAP-BSS-003528	SAP-BSS-003532
SAP-BSS-003533	SAP-BSS-003534
SAP-BSS-003535	SAP-BSS-003536
SAP-BSS-003537	SAP-BSS-003538
SAP-BSS-003539	SAP-BSS-003544
SAP-BSS-003545	SAP-BSS-003548
SAP-BSS-003549	SAP-BSS-003549

Appendix C

SAP-BSS-003550	SAP-BSS-003551
SAP-BSS-003552	SAP-BSS-003553
SAP-BSS-003554	SAP-BSS-003557
SAP-BSS-003558	SAP-BSS-003559
SAP-BSS-003560	SAP-BSS-003562
SAP-BSS-003563	SAP-BSS-003565
SAP-BSS-003566	SAP-BSS-003584
SAP-BSS-003585	SAP-BSS-003585
SAP-BSS-003586	SAP-BSS-003587
SAP-BSS-003588	SAP-BSS-003590
SAP-BSS-003591	SAP-BSS-003593
SAP-BSS-003594	SAP-BSS-003597
SAP-BSS-003598	SAP-BSS-003600
SAP-BSS-003601	SAP-BSS-003601
SAP-BSS-003602	SAP-BSS-003602
SAP-BSS-003603	SAP-BSS-003604
SAP-BSS-003605	SAP-BSS-003606
SAP-BSS-003607	SAP-BSS-003608
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SAP-BSS-003614	SAP-BSS-003615
SAP-BSS-003616	SAP-BSS-003619
SAP-BSS-003620	SAP-BSS-003621
SAP-BSS-003622	SAP-BSS-003622
SAP-BSS-003623	SAP-BSS-003625
SAP-BSS-003626	SAP-BSS-003628
SAP-BSS-003629	SAP-BSS-003630
SAP-BSS-003631	SAP-BSS-003632
SAP-BSS-003633	SAP-BSS-003637
SAP-BSS-003638	SAP-BSS-003678
SAP-BSS-003679	SAP-BSS-003685
SAP-BSS-003686	SAP-BSS-003688
SAP-BSS-003689	SAP-BSS-003689
SAP-BSS-003690	SAP-BSS-003691
SAP-BSS-003692	SAP-BSS-003692
SAP-BSS-003693	SAP-BSS-003695
SAP-BSS-003696	SAP-BSS-003697
SAP-BSS-003698	SAP-BSS-003709
SAP-BSS-003710	SAP-BSS-003711
SAP-BSS-003712	SAP-BSS-003713
SAP-BSS-003714	SAP-BSS-003714
SAP-BSS-003715	SAP-BSS-003716
SAP-BSS-003717	SAP-BSS-003718
SAP-BSS-003719	SAP-BSS-003720
SAP-BSS-003721	SAP-BSS-003728
SAP-BSS-003729	SAP-BSS-003731
SAP-BSS-003732	SAP-BSS-003734
SAP-BSS-003735	SAP-BSS-003742
SAP-BSS-003743	SAP-BSS-003745
SAP-BSS-003746	SAP-BSS-003747

Appendix C

SAP-BSS-003748	SAP-BSS-003748
SAP-BSS-003749	SAP-BSS-003750
SAP-BSS-003751	SAP-BSS-003752
SAP-BSS-003753	SAP-BSS-003753
SAP-BSS-003754	SAP-BSS-003756
SAP-BSS-003757	SAP-BSS-003759
SAP-BSS-003760	SAP-BSS-003760
SAP-BSS-003761	SAP-BSS-003763
SAP-BSS-003764	SAP-BSS-003765
SAP-BSS-003766	SAP-BSS-003766
SAP-BSS-003767	SAP-BSS-003768
SAP-BSS-003769	SAP-BSS-003770
SAP-BSS-003771	SAP-BSS-003771
SAP-BSS-003772	SAP-BSS-003773
SAP-BSS-003774	SAP-BSS-003775
SAP-BSS-003776	SAP-BSS-003791
SAP-BSS-003792	SAP-BSS-003796
SAP-BSS-003797	SAP-BSS-003801
SAP-BSS-003802	SAP-BSS-003804
SAP-BSS-003805	SAP-BSS-003807
SAP-BSS-003808	SAP-BSS-003818
SAP-BSS-003819	SAP-BSS-003835
SAP-BSS-003836	SAP-BSS-003836
SAP-BSS-003837	SAP-BSS-003837
SAP-BSS-003838	SAP-BSS-003838
SAP-BSS-003839	SAP-BSS-003839
SAP-BSS-003840	SAP-BSS-003840
SAP-BSS-003841	SAP-BSS-003842
SAP-BSS-003843	SAP-BSS-003844
SAP-BSS-003845	SAP-BSS-003848
SAP-BSS-003849	SAP-BSS-003850
SAP-BSS-003851	SAP-BSS-003853
SAP-BSS-003854	SAP-BSS-003855
SAP-BSS-003856	SAP-BSS-003857
SAP-BSS-003858	SAP-BSS-003859
SAP-BSS-003860	SAP-BSS-003861
SAP-BSS-003862	SAP-BSS-003864
SAP-BSS-003865	SAP-BSS-003866
SAP-BSS-003867	SAP-BSS-003868
SAP-BSS-003869	SAP-BSS-003870
SAP-BSS-003871	SAP-BSS-003872
SAP-BSS-003873	SAP-BSS-003873
SAP-BSS-003874	SAP-BSS-003876
SAP-BSS-003877	SAP-BSS-003877
SAP-BSS-003878	SAP-BSS-003879
SAP-BSS-003880	SAP-BSS-003880
SAP-BSS-003881	SAP-BSS-003881
SAP-BSS-003882	SAP-BSS-003883
SAP-BSS-003884	SAP-BSS-003885
SAP-BSS-003886	SAP-BSS-003886

Appendix C

SAP-BSS-003887	SAP-BSS-003889
SAP-BSS-003890	SAP-BSS-003893
SAP-BSS-003894	SAP-BSS-003913
SAP-BSS-003914	SAP-BSS-003966
SAP-BSS-003967	SAP-BSS-003968
SAP-BSS-003969	SAP-BSS-003977
SAP-BSS-003978	SAP-BSS-003981
SAP-BSS-003982	SAP-BSS-003985
SAP-BSS-003986	SAP-BSS-003991
SAP-BSS-003992	SAP-BSS-003993
SAP-BSS-003994	SAP-BSS-004007
SAP-BSS-004008	SAP-BSS-004009
SAP-BSS-004010	SAP-BSS-004012
SAP-BSS-004013	SAP-BSS-004016
SAP-BSS-004017	SAP-BSS-004022