

The ERP Market Sizing Report, 2006–2011

by Simon Jacobson, Jim Shepherd, Marianne D'Aquila, and Karen Carter



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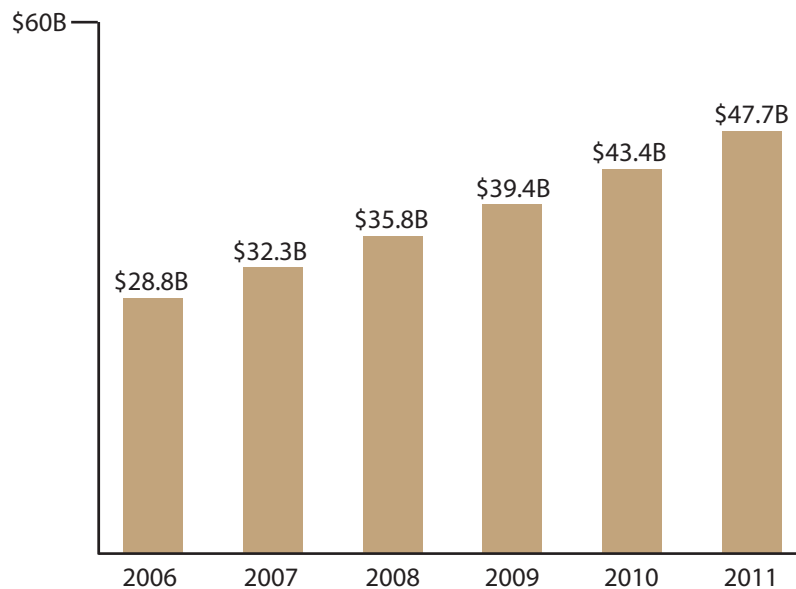
Total ERP market revenue grew to over \$28B in 2006, driven by a combination of strong customer demand and leading vendors expanding their product portfolios through acquisition.

The
Bottom
Line

Executive Summary

The ERP market had a spectacular year, with total revenue growing by 14% and license revenue up an amazing 18% from 2005. While sales of traditional ERP applications were very healthy in 2006, many vendors also saw substantial revenue growth from the acquisition of other software companies. Globalization, centralization, and regulatory compliance were the key drivers for continued ERP investment among large corporations. In the small and midsize business (SMB) segment, which continues to outgrow the overall market, companies are buying new ERP systems in response to new customer requirements and the desire to participate in the global market.

Figure 1: ERP application revenue estimate, 2006–2011



Source: AMR Research, 2007

Here are some major trends from the 2006 ERP market:

- ERP vendors that traditionally offered a single, internally developed product line now go to market with a broad portfolio of products targeted to specific industry and departmental buyers.
- **Oracle** and **SAP** continue to dominate the market among very large global companies. In the increasingly important SMB segment, though, they face formidable competition from **Infor**, **Sage Group**, **Microsoft**, **Lawson**, and **Epicor**.
- New pricing and deployment models, such as software as a service (SaaS) and enterprise licensing, are starting to gain acceptance. We expect most of the ERP vendors will begin offering on-demand in addition to on-premises options in the near future.
- The fundamental ERP concept of a single-vendor, pre-integrated suite of packaged business applications is making excellent headway in non-manufacturing markets such as retail, financial services, and public sector. As ERP vendors buy and build the necessary industry functionality, their available market rapidly expands.

Acronyms and Initialisms

CAGR	Compound annual growth rate	MES	Manufacturing execution system
CRM	Customer relationship management	MRP	Materials requirements planning
EAM	Enterprise asset management	SaaS	Software as a service
ERP	Enterprise resource planning	SCM	Supply chain management
GRC	Governance, risk management, and compliance	SMB	Small and midsize business
HCM	Human capital management	SOA	Service-oriented architecture
M&A	Merger and acquisition		

The ERP market saw lots of M&A activity in 2006, but there was a significant change in the acquisition type. Most of the transactions over the last several years have involved larger ERP companies buying smaller ones in order to gain critical mass and grow customer bases. In 2006, ERP vendors seemed to be much more focused on expanding their product portfolios beyond traditional ERP applications and extending their reach into new vertical markets.

Findings and analysis

The acquisition of software companies from outside the ERP space is blurring the distinctions between application categories and significantly increasing the ERP vendors' shares of overall enterprise application revenue. Here are some of the interesting M&A transactions from 2006:

- **CDC Software** further expanded its manufacturing capabilities with **MVI** for operations intelligence and **JRG** for production scheduling.
- Infor's acquisition of **SSA** added new ERP systems along with CRM and supply chain assets. It also moved into the performance management space with the purchase of **Extensity** and **Systems Union**, as well as the enterprise asset management (EAM) market with **Datastream**.
- **Consona** (formerly **Made2Manage**) acquired the **Intuitive** ERP product. It also made two major CRM acquisitions with **Onyx** and **KNOVA**.
- Oracle and SAP added products to enhance their core applications. Oracle acquired demand management vendor **Demantra** and **360Commerce** to broaden its retail industry focus. SAP continued to invest in its governance, risk management, and compliance (GRC) product line with the additions of **Virsa** and **Pilot Software**.
- Epicor expanded its scope from manufacturing and services to retail with the closing of its acquisition of **CRS Retail Systems**.
- **QAD** broadened its product line with the additions of **FBO Systems** for EAM and global trade management provider **Precision Software**.
- **Microsoft** acquired **eBECS** to enhance the lean manufacturing support in the Dynamics AX product.

Traditionally, the ERP market has been segmented by the size of customers the vendors targeted: large enterprise vendors, midmarket vendors, and small business vendors. It was thought that the same vendors and products couldn't serve multiple segments, but that notion has been disproved recently. We are now seeing many ERP vendors competing effectively in all segments. The Fortune 2000 have largely selected and deployed their ERP backbones, but many of them still rely on legacy MRP and MES investments within certain geographies, divisions, or individual facilities. With the focus on standardizing IT architectures across the entire company, centralized ERP systems that are extended to the entire corporation are replacing many of the midmarket plant applications. The traditional large enterprise vendors have started to attack the market perception that their products are too big and complex, and they're making inroads into the midmarket through rapidly growing reseller channels.

The midmarket is one of the key areas where the larger enterprise vendors believe they have an opportunity to sustain or accelerate growth, even as ERP opportunities at the higher end of the market decline. For vendors like **Cincom** and QAD that have traditionally served this segment, we see a circling of the wagons—a focus on selling additional functionality into their installed bases in order to stave off the advances of larger vendors.

Table 1: ERP vendors ranked by application revenue, 2005-2006

2006 Revenue Rank	Company	Revenue, 2005 (\$M)	Revenue, 2006 (\$M)	Revenue Share, 2005	Revenue Share, 2006	Growth Rate, 2005-2006
1	SAP	10542	11753	42%	41%	11%
2	Oracle	5166	6044	20%	21%	17%
3	Infor	480	2114	2%	7%	340%
4	Sage Group	1438	1830	6%	6%	27%
5	Microsoft	844	996	3%	3%	18%
6	Lawson	346	560	1%	2%	62%
7	Epicor	291	384	1%	1%	32%
8	IFS	279	309	1%	1%	11%
9	Exact Software	281	303	1%	1%	8%
10	Activant	260	289	1%	1%	11%
11	CDC Software	202	240	1%	1%	19%
12	QAD	222	236	1%	1%	6%
13	Deltek Systems	151	230	1%	1%	52%
14	Glovia	212	212	1%	1%	0%
15	SSA Global*	733	0	3%	0%	-100%
16	Geac*	445	0	2%	0%	-100%
17	MAPICS*	178	0	1%	0%	-100%
Subtotal		22069	25499	87%	88%	16%
Other ERP Vendors		3289	3321	13%	12%	1%
Total		25358	28820	100%	100%	14%

*Acquired by Infor in 2006.

Source: AMR Research, 2007

Table 1a: Application segments of ERP vendors based on total revenue, 2006

2006 Revenue Rank	Company	Total Company Application Revenue, 2006 (\$M)	Enterprise Mgmt. (\$M)	Human Capital Mgmt. (\$M)	Supply Chain Mgmt. (\$M)	Product Lifecycle Mgmt. (\$M)	Customer Mgmt. (\$M)	Sourcing and Procurement (\$M)
1	SAP	11753	6394	1540	740	411	2268	400
2	Oracle	6044	2200	1529	586	48	1378	302
3	Infor	2114	1522	42	307	32	190	21
4	Sage Group	1830	1299	348	37	0	146	0
5	Microsoft	996	578	90	70	0	259	0
6	Lawson	560	280	112	62	22	0	84
7	Epicor	384	288	38	0	0	46	12
8	IFS	309	148	19	62	25	25	31
9	Exact Software	303	303	0	0	0	0	0
10	Activant	289	87	0	116	0	87	0
11	CDC Software	240	120	0	60	0	60	0
12	QAD	236	129	0	64	0	37	5
13	Deltek Systems	230	198	32	0	0	0	0
14	Glovia	212	144	11	30	0	28	0
Subtotal		25499	13690	3760	2132	539	4524	855
Other ERP Vendors		3321	1428	698	251	18	830	96
Total		28820	15327	4202	2401	556	5384	951

Source: AMR Research, 2007

Table 2: ERP vendors ranked by license revenue, 2005-2006

2006 Revenue Rank	Company	Revenue, 2005 (\$M)	Revenue, 2006 (\$M)	Revenue Share, 2005	Revenue Share, 2006	Growth Rate, 2005-2006
1	SAP	3423	3839	44%	42%	12%
2	Oracle	1653	2323	21%	25%	41%
3	Sage Group	537	641	7%	7%	19%
4	Microsoft	510	602	7%	7%	18%
5	Infor	110	535	1%	6%	386%
6	Epicor	81	100	1%	1%	23%
7	Exact Software	84	91	1%	1%	8%
8	Deltek Systems	45	76	1%	1%	69%
9	Lawson	68	73	1%	1%	7%
10	IFS	50	59	1%	1%	17%
11	QAD	56	54	1%	1%	-2%
12	Glovia	54	54	1%	1%	0%
13	Activant	37	43	<0.5%	<0.5%	16%
14	CDC Software	34	40	<0.5%	<0.5%	18%
15	SSA Global*	221	0	3%	0%	-100%
16	Geac*	67	0	1%	0%	-100%
17	MAPICS*	55	0	1%	0%	-100%
Subtotal		7084	8528	91%	92%	20%
Other ERP Vendors		717	709	9%	8%	0%
Total		7801	9237	100%	100%	18%

*Acquired by Infor in 2006.

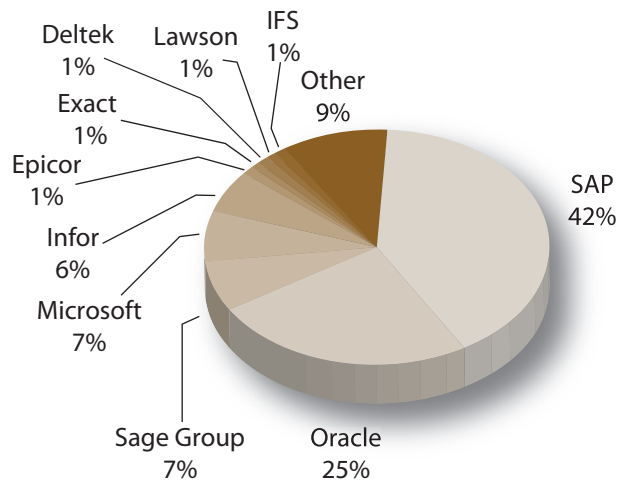
Source: AMR Research, 2007

Table 2a: Application segments of ERP vendors based on license revenue, 2006

2006 Revenue Rank	Company	License Revenue, 2006 (\$M)	Enterprise Mgmt. (\$M)	Human Capital Mgmt. (\$M)	Supply Chain Mgmt. (\$M)	Product Lifecycle Mgmt. (\$M)	Customer Mgmt. (\$M)	Sourcing and Procurement (\$M)
1	SAP	3839	2092	501	241	135	741	130
2	Oracle	2323	944	489	225	19	530	116
3	Sage Group	641	455	122	13	0	51	0
4	Microsoft	602	349	54	42	0	157	0
5	Infor	535	386	11	78	8	48	5
6	Epicor	100	75	10	0	0	12	3
7	Exact Software	91	91	0	0	0	0	0
8	Lawson	73	36	15	8	3	0	11
9	Deltek	76	66	10	0	0	0	0
10	IFS	59	28	4	12	5	5	6
11	QAD	54	30	0	15	0	9	1
12	Glovia	54	37	3	8	0	7	0
13	Activant	43	13	0	17	0	13	0
14	CDC Software	40	21	0	10	0	10	0
Subtotal		8529	4621	1217	668	169	1582	273
Other ERP Vendors		708	292	130	101	9	143	32
Total		9237	4913	1347	769	178	1725	305

Source: AMR Research, 2007

Figure 2: ERP vendor license revenue share, 2006



Source: AMR Research, 2007

ERP revenue segments and market channels, 2006

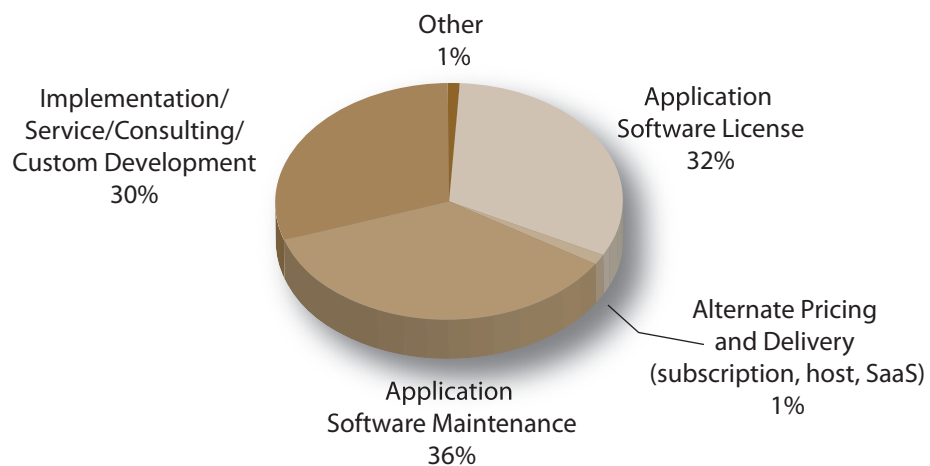
While traditional license and maintenance revenue continued to grow steadily, we see emerging opportunities in the ERP market for new methods of purchase and deployment. Vendors like **Plexus Systems** find that alternative approaches, such as hosting, subscription-based pricing, and SaaS, generate interest from larger companies that need to react quickly to structural changes like acquisitions and divestitures. Companies looking for more manageable or cost-effective applications for smaller plants or divisions are also showing interest. With minimal IT budgets and support staff, SMBs also love the concept of SaaS as a way to get ERP capabilities without a major capital expenditure. AMR Research predicts a 20% CAGR in alternate pricing models, such as hosting and subscription revenue, for 2007.

Table 3: ERP application revenue and share by revenue type, 2005-2006

Revenue Type	Revenue, 2005 (\$M)	Revenue, 2006 (\$M)	Revenue Share, 2005	Revenue Share, 2006	Growth Rate, 2005-2006
Application Software Licenses	7801	9237	31%	32%	18%
Alternate Pricing and Delivery (subscription, host, SaaS)	76	387	<0.5%	1%	410%
Application Software Maintenance	9002	10375	36%	36%	15%
Implementation/Service/Consulting/ Custom Development	8099	8646	32%	30%	7%
Other	380	174	2%	1%	-54%
Total	25358	28820	100%	100%	14%

Source: AMR Research, 2007

Figure 3: ERP application revenue share by revenue type, 2006



Source: AMR Research, 2007

ERP application segments, 2006

Software license revenue for the ERP vendors grew by 18% in 2006, thanks in part to the many acquisitions of non-ERP applications. Core ERP license revenue remained steady as companies continued their efforts to broadly deploy core applications and then added complementary functionality in later phases. The major growth for most ERP vendors is coming from add-on functionality such as CRM, human capital management (HCM), and supply chain management (SCM), with HCM and SCM revenue growing at over 40% in 2006.

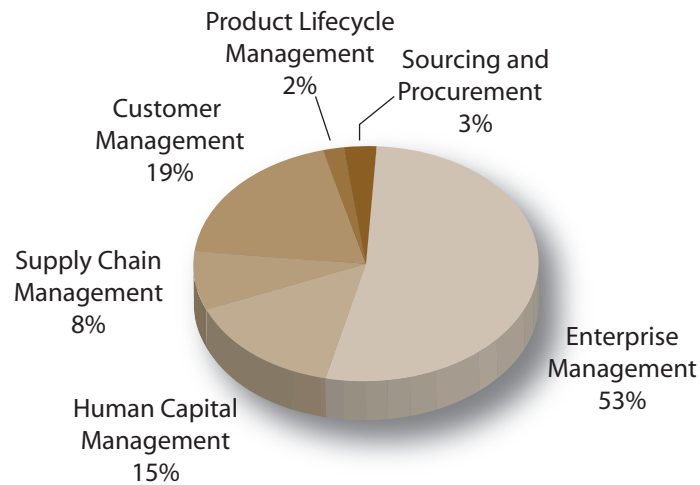
This expansion does not indicate core ERP revenue is declining, but that customers are seeking to acquire as much functionality from a single source rather than endure the complications of integrating multiple best-of-breed applications. An argument can be made that this testifies to the sales and marketing techniques of the leading ERP vendors that have successfully convinced CIOs and senior executives to acquire as much as possible from a single source. Also, the ERP vendors have acquired products or developed their own functionality that is either comparable to or better than many of the best-of-breed applications. They are reaping the benefits of these cross-selling opportunities.

Table 4: ERP license revenue and share by application segment, 2005–2006

Application Segment	Revenue, 2005 (\$M)	Revenue, 2006 (\$M)	Revenue Share, 2005	Revenue Share, 2006	Growth Rate, 2005-2006
Enterprise Management	4842	4912	62%	53%	1%
Human Capital Management	921	1347	12%	15%	46%
Supply Chain Management	606	769	8%	8%	27%
Customer Management	1014	1725	13%	19%	70%
Product Lifecycle Management	166	178	2%	2%	8%
Sourcing and Procurement	243	305	3%	3%	26%
Total	7801	9237	100%	100%	18%

Source: AMR Research, 2007

Figure 4: ERP license revenue share by application segment, 2006



Source: AMR Research, 2007

ERP revenue and market share by company size, geography, and industry vertical, 2006

The actual revenue segmentation of ERP sales by company size showed very little change in 2006, with the midmarket still the major growth leader. Major growth also came from the small business segment (less than \$30M in annual revenue) with 27% growth and the lower end of the midmarket (annual revenue between \$30M and \$250M) with 18%. The large enterprise group (more than \$1B in annual revenue) also grew at 18%, a reflection of the internal ERP consolidation and standardization projects, as well as ongoing investments in add-on functionality and additional seats from ERP vendors.

We predict the midmarket will continue to be a major growth category—and heated battleground—for the ERP vendors. In 2006, this segment allowed companies like Sage Group and Microsoft Business Solutions to grow at 19% and 18%, respectively. They continue to push up market to compete with firms like CDC Software and Epicor, which grew 18% and 23%, respectively. We expect Lawson to show strong growth in the next year as the combined Lawson-**Intentia** organization enjoys its first year as a merged company.

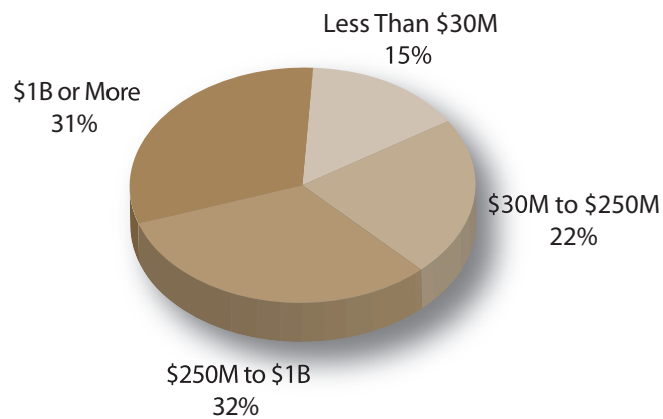
Additionally, Infor intends to gain market share through additional acquisitions, while Oracle and SAP continue to rely on reseller and partner programs. These programs, specifically Oracle's Accelerate and SAP's PartnerEdge, are meant to reach more buyers and provide their partners and resellers with the appropriate resources to help them gain increased market share.

Table 5: ERP license revenue and share by customer company size, 2005-2006

Customer Revenue	Revenue, 2005 (\$M)	Revenue, 2006 (\$M)	Revenue Share, 2005	Revenue Share, 2006	Growth Rate, 2005-2006
Less than \$30M	1092	1386	14%	15%	27%
\$30M to \$250M	1716	2032	22%	22%	18%
\$250M to \$1B	2574	2935	33%	32%	14%
\$1B or More	2419	2863	31%	31%	18%
Total	7801	9237	100%	100%	18%

Source: AMR Research, 2007

Figure 5: ERP license revenue share by customer company size, 2006



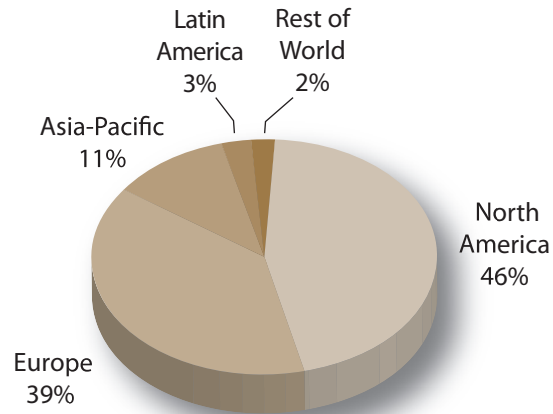
Source: AMR Research, 2007

Table 6: ERP license revenue and share by geographic region, 2005-2006

Region	Revenue, 2005 (\$M)	Revenue, 2006 (\$M)	Revenue Share, 2005	Revenue Share, 2006	Growth Rate, 2005-2006
North America	3507	4243	46%	46%	21%
Europe	3042	3587	40%	39%	18%
Asia-Pacific	858	978	9%	11%	14%
Latin America	226	252	2%	3%	12%
Rest of World	168	177	3%	2%	6%
Total	7801	9237	100%	100%	18%

Source: AMR Research, 2007

Figure 6: ERP license revenue share by geographic region, 2006



Source: AMR Research, 2007

ERP technology trends, 2006

Conventional wisdom indicates SaaS will primarily appeal to SMBs, while large enterprises will choose traditional licensing and on-premises deployment. That view is changing as many larger organizations get more comfortable with the SaaS model, but there are still concerns about the idea of multitenancy. Big-company CIOs want the option of bringing the software in house or having it hosted by a third party if the SaaS vendor gets in financial trouble or they are unhappy with the service level. SaaS-based ERP also raises the question of what data companies are comfortable storing outside their firewalls, especially when it comes to financial data where any manipulation or adjustment can carry painful ramifications.

No real barrier exists to entering the SaaS world, and no vendor will be willing to lose a sale simply because the prospect prefers to have the software hosted and pay for it monthly. We expect the interest in SaaS as a delivery option for ERP, in addition to perpetual, term, and enterprise licenses, to increase in 2007.

Picture this: As ERP vendors begin to alter their business models to offer SaaS-based products, some of these larger companies may find it useful for fast-track deployments, smaller or very autonomous business units, or even as a helpful option when the business has a strong sense of urgency, but a limited appetite for capital expenditure. SAP's not-yet-released SaaS offering, A1S, has already sparked a flurry of inquiries with respect to how the product will look and feel. But more importantly, it has turned the spotlight on vendors like **Glovia**, Plexus, and **NetSuite**, which have been offering their products through a SaaS model for some time. Furthermore, vendors such as Epicor and QAD have started to publicize their SaaS ambitions through accessories, such as Epicor's TaxConnect and QAD's Global Trade Management product.

While SaaS is a hot topic, we cannot overlook the impact of service-oriented architectures (SOAs) on the ERP market. The shift to SOA continued to dominate vendor marketing messages and consumed large portions of their development budgets, but did not ignite the anticipated buying frenzy among customers. Most buyers are wary about new architectures and are becoming even more risk averse, especially now that their ERP systems support most of the critical business processes and key company data. ERP vendors have shifted from a message about the revolutionary new capabilities of SOA to one that emphasizes their evolutionary and nondisruptive approaches to introducing the new technology.

Despite the slow buyer uptake, SOA is still a major priority for ERP vendors. While the efforts of Microsoft, Oracle, and SAP have received the most attention, the ERP market as a whole has embraced SOA:

- At the end of last year, SAP unveiled its business process platform—the end result of its journey from client/server to a services-based architecture.
- Infor announced its OpenSOA positioning, which is a unique approach. Instead of providing an event-enabled bus or hub to foster application interoperability, the company is seeking to enable events within the application and deliver a true building-block method of tying together a heterogeneous IT architecture.
- Other vendors stayed the steady course with their SOA journeys. Lawson continued the evolution of its Landmark project, which synthesizes the core technology foundations between S3 and M3 (formerly **Intentia's** Movex product) to provide a common security and application configuration model. Epicor continued its SOA transition by making similar components and sharing services between its core Vantage manufacturing products and the iScala products.

While the vendor approaches tend to differ, the end result will not: more flexible and adaptable products. The vendors will benefit from a more productive development environment as they find it much easier to configure applications for specific markets and even individual customers. For vendors with sizeable installed bases of customers on legacy technology platforms, SOA also provides a vehicle to upgrade their customers to newer, modernized products without major business disruptions.

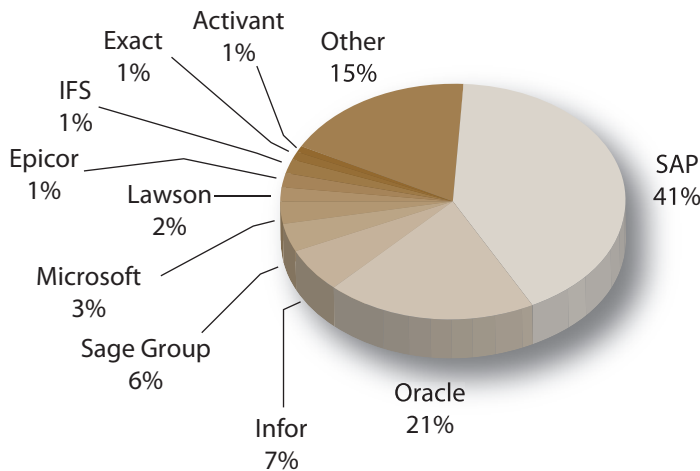
2006 ERP Market Structure

Oracle and SAP continue to command the lion's share of revenue from the ERP market. We predict they will not lose ground anytime soon, especially as both firms are going gangbusters for the midmarket. That said, expect some shift in the landscape populated by several other competent providers:

- Infor's growth cannot be underestimated. The company relies on an innovative business model that centers on acquiring products to generate additional maintenance and license revenue, as well as increasing cross-selling opportunities within its ever-growing installed base. The company believes it has developed a disciplined and effective process for evaluating, acquiring, and assimilating software businesses, and it intends to capitalize on this core competency. Infor has proven to be a successful cross-selling machine in addition to being extremely skilled in integrating acquired entities.
- Sage Group is bringing to its customer base CRM functionality plus business intelligence through the inquiry and analysis tools Business Insights Analyzer and Explorer. The Analyzer is the drill-down, basic reporting tool that has some wizards to build queries, and Explorer is the role-based, personalization-driven reporting structure.
- Microsoft Business Solutions, while focused on the midmarket, continues to be pulled into larger enterprise deals. With the widespread adoption of Microsoft technologies on the plant floor, firms looking to feed a modern ERP beast might find comfort in one of the Dynamics products.
- For Lawson, 2007 will truly test the success of its Intenia acquisition, since there is minimal crossover between the S3 and M3 products other than the shared services of the Lawson Business Intelligence (LBI) and financials offerings. The critical success factor will be gaining mass market appeal for the M3 product in North America, where the brand is not as well known as it is in Europe.

Customer retention rates remain in the 90% range for many vendors, and maintenance revenue continues a steady growth at 15%. But a software vendor can only survive on maintenance for so long. ERP vendors, as part of their evolution toward portfolio providers, must find new ways to not only service their customers, but compete in new markets. This further indicates that, for any vendor to truly succeed in this market, new license sales and net-new customers will be the Holy Grail. For the mass market vendors, the increased reliance on partner networks to help drive volumes of new license sales will be crucial. For the ones focused on specific industries and manufacturing styles, providing a portfolio of industry-specific functionality that can keep clients competitive in the global economy will be crucial.

Figure 7: Top 10 ERP vendors by 2006 total revenue share



Source: AMR Research, 2007

We predict an 11% CAGR for the ERP market through 2011. We don't anticipate any drastic changes to the dynamics of this market over the next five years, although we do expect to see revenue growth come from ERP extension segments such as CRM, HCM, and SCM. We also anticipate that several ERP vendors will increase revenue from manufacturing operations.

The current outside-in focus of CIOs, the desire to source as much functionality as possible from a single vendor, and the growing acceptance of integration standards (OAGiS and ISA-95, for example) to help guide enterprises to plant integrations have created a perfect storm for ERP vendors to expand to the shop floor, an area that many vendors have morphed out of from their MRP roots. Oracle and SAP have made very public advances with their product roadmaps: Oracle with the MES functionality in R12, SAP through xApps, xMII for manufacturing integration and intelligence, and xLPO for lean manufacturing support. As ERP vendors continue to build applications for services-based platforms, creating and composing the necessary extensions into manufacturing environments for support of manufacturing processes becomes a reality.

Beyond integration, look for ERP vendors to play a more crucial role in the lean initiatives of their clients. As companies start to embrace lean thinking beyond their manufacturing environments, we expect ERP-based lean implementations will grow. Many best-of-breed add-ons excel at their given lean focus, which works well for the highly focused surgical strikes of early-stage lean adopters. As time goes on, however, manufacturers will want to use more capabilities that reside in their ERP systems: order management, mixed-mode manufacturing, cascading planning, integrated financials, and corporate-wide analytic systems, most of which aren't part of specialty lean systems.

Shifts in revenue type will also continue. Alternate pricing revenue will continue growing at the expense of license revenue, which we still expect to grow at a 10% CAGR as software becomes a larger part of the revenue mix and installed bases continue to grow.

Geographically speaking, we expect little change in the balance of power. North America is expected to regain some of the market share that was lost in prior years to emerging markets in Asia-Pacific and Latin America, especially as the spending trends for the midmarket continue on their upward course. Also, Europe's overall share is forecast to remain steady at 39%, but as Eastern European countries like Russia, Poland, and the Czech Republic continue to be low-cost centers for global firms, we predict they will take some share from Germany, France, and the UK.

Table 7: ERP application revenue estimate by revenue type, 2006-2011

Revenue Type	Revenue, 2006 (\$M)	Revenue, 2007 (\$M)	Revenue, 2008 (\$M)	Revenue, 2009 (\$M)	Revenue, 2010 (\$M)	Revenue, 2011 (\$M)	Five-Year CAGR
Application Software License	9237	9951	11189	12465	13668	14892	10%
Alternate Pricing and Delivery	387	452	537	631	737	954	20%
Application Software Maintenance	10375	11459	12719	13991	15390	16929	10%
Implementation, etc.	8646	9933	10846	11734	12907	14198	10%
Other	174	484	537	591	650	715	33%
Total	28820	32278	35829	39412	43353	47688	11%

Source: AMR Research, 2007

Table 8: ERP application revenue share by revenue type, 2006-2011

Revenue Type	Revenue Share, 2006	Revenue Share, 2007	Revenue Share, 2008	Revenue Share, 2009	Revenue Share, 2010	Revenue Share, 2011
Application Software License	32%	31%	31%	32%	32%	31%
Alternate Pricing and Delivery	1%	1%	2%	2%	2%	2%
Application Software Maintenance	36%	36%	36%	36%	36%	36%
Implementation, etc.	30%	31%	30%	30%	30%	30%
Other	1%	2%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%	100%

Source: AMR Research, 2007

Table 9: ERP application revenue growth rates by revenue type, 2006-2011

Revenue Type	Growth Rate, 2006	Growth Rate, 2007	Growth Rate, 2008	Growth Rate, 2009	Growth Rate, 2010	Growth Rate, 2011	Five-Year CAGR
Application Software License	18%	8%	12%	11%	10%	9%	10%
Alternate Pricing and Delivery	409%	17%	19%	17%	17%	29%	20%
Application Software Maintenance	15%	10%	11%	10%	10%	10%	10%
Implementation, etc.	7%	15%	9%	8%	10%	10%	10%
Other	-54%	178%	11%	10%	10%	10%	33%
Total	14%	12%	11%	10%	10%	10%	11%

Source: AMR Research, 2007

Table 10: ERP application revenue estimate by application segment, 2006-2011

Application Segment	Revenue, 2006 (\$M)	Revenue, 2007 (\$M)	Revenue, 2008 (\$M)	Revenue, 2009 (\$M)	Revenue, 2010 (\$M)	Revenue, 2011 (\$M)	Five-Year CAGR
Enterprise Management	15326	17215	19312	21479	22023	24226	10%
Human Capital Management	4202	4842	5374	5912	6936	7630	13%
Supply Chain Management	2401	2637	3046	3547	4335	4769	15%
Product Lifecycle Management	556	613	681	749	824	906	10%
Customer Management	5384	6133	6449	6621	7934	8727	10%
Sourcing and Procurement	951	839	967	1104	1301	1431	9%
Total	28820	32278	35829	39412	43353	47688	11%

Source: AMR Research, 2007

Table 11: ERP application revenue share by application segment, 2006-2011

Application Segment	Revenue Share, 2006	Revenue Share, 2007	Revenue Share, 2008	Revenue Share, 2009	Revenue Share, 2010	Revenue Share, 2011
Enterprise Management	53%	53%	54%	55%	51%	51%
Human Capital Management	15%	15%	15%	15%	15%	16%
Supply Chain Management	8%	8%	9%	9%	10%	10%
Product Lifecycle Management	2%	2%	2%	2%	2%	2%
Customer Management	19%	19%	18%	17%	18%	18%
Sourcing and Procurement	3%	3%	3%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%

Source: AMR Research, 2007

Table 12: ERP application revenue growth rates by application segment, 2006-2011

Application Segment	Growth Rate, 2006	Growth Rate, 2007	Growth Rate, 2008	Growth Rate, 2009	Growth Rate, 2010	Growth Rate, 2011	Five-Year CAGR
Enterprise Management	-3%	12%	12%	11%	3%	10%	10%
Human Capital Management	40%	15%	11%	10%	17%	10%	13%
Supply Chain Management	22%	10%	16%	16%	22%	10%	15%
Product Lifecycle Management	3%	10%	11%	10%	10%	10%	10%
Customer Management	63%	14%	5%	3%	20%	10%	10%
Sourcing and Procurement	21%	-12%	15%	14%	18%	10%	9%
Total	14%	12%	11%	10%	10%	10%	11%

Source: AMR Research, 2007

Table 13: ERP application revenue estimate by geographic region, 2006–2011

Region	Revenue, 2006 (\$M)	Revenue, 2007 (\$M)	Revenue, 2008 (\$M)	Revenue, 2009 (\$M)	Revenue, 2010 (\$M)	Revenue, 2011 (\$M)	Five-Year CAGR
North America	13237	14057	15102	16612	18273	20101	9%
Europe	11192	12492	13973	15371	16908	18598	11%
Asia-Pacific	3050	3631	4299	4729	5202	5723	13%
Latin America	787	1291	1541	1695	1864	2051	21%
Rest of World	554	807	914	1005	1106	1216	17%
Total	28820	32278	35829	39412	43353	47688	11%

Source: AMR Research, 2007

Table 14: ERP application revenue share by geographic region, 2006–2011

Region	Revenue Share, 2006	Revenue Share, 2007	Revenue Share, 2008	Revenue Share, 2009	Revenue Share, 2010	Revenue Share, 2011
North America	46%	44%	42%	42%	42%	42%
Europe	39%	39%	39%	39%	39%	39%
Asia-Pacific	11%	11%	12%	12%	12%	12%
Latin America	3%	4%	4%	4%	4%	4%
Rest of World	2%	3%	3%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%

Source: AMR Research, 2007

Table 15: ERP application revenue growth rates by geographic region, 2006–2011

Region	Growth Rate, 2006	Growth Rate, 2007	Growth Rate, 2008	Growth Rate, 2009	Growth Rate, 2010	Growth Rate, 2011	Five-Year CAGR
North America	16%	6%	7%	10%	10%	10%	9%
Europe	13%	12%	12%	10%	10%	10%	11%
Asia-Pacific	9%	19%	18%	10%	10%	10%	13%
Latin America	7%	64%	19%	10%	10%	10%	21%
Rest of World	1%	46%	13%	10%	10%	10%	17%
Total	14%	12%	11%	10%	10%	10%	11%

Source: AMR Research, 2007

Appendix A: Related research

Market Sizing Series

The following vendor survey-based Market Sizing Reports will be available from the AMR Research Market Services:

- The ERP Market Sizing Report, 2006–2011
- The Supply Chain Management Market Sizing Report, 2006–2011
- The Product Lifecycle Management Market Sizing Report, 2006–2011
- The Human Capital Management Market Sizing Report, 2006–2011
- The Sourcing and Procurement Market Sizing Report, 2006–2011
- The Customer Management Market Sizing Report, 2006–2011
- The Manufacturing Operations Software Market Sizing Report, 2006–2011
- The Knowledge and Performance Management Market Sizing Report, 2006–2011
- The IT Management and SOA Market Sizing Report, 2006–2011
- The Retail Applications Market Sizing Report, 2006–2011

These Reports present views on specific markets by software vendor, technology, customer base, and market forecast through 2011:

- Software vendors
- Revenue from 2005 to 2006
- Revenue from software licensing, hosting or subscriptions, software maintenance, implementation service/training/consulting/custom development, computer systems hardware and other equipment, and other
- Revenue by software application segment
- Revenue by customer company size
- Revenue by geographic region
- Forecast, 2006–2011
- Five-year forecast of market revenue by revenue type
- Five-year forecast of market revenue by application type
- Five-year forecast of market revenue by geographic region

IT Spending Series

This essential market research reference is focused on the demand for information technology and software. Based on an annual survey of technology end users, the study provides insight into purchasing trends by industry and company size. The IT Spending Reports include the following:

- U.S. Enterprise IT Spending, 2007–2008
- U.S. SMB IT Spending, 2006–2008
- European SMB IT Spending, 2006–2008

Application and Market Trends Spending Series

This customer-driven, demand-side research is focused on understanding application-level trends in adoption, investment, and future deployment. Based on an annual survey of technology end users, the study provides insight into application purchasing trends by industry and company size. The Application and Market Trends Spending Reports include the following:

- Market Demand for Governance, Risk Management, and Compliance (GRC), 2007–2008
- Market Demand for Business Intelligence and Performance Management (BI/PM), 2007
- The ERP Application Spending Report, 2007–2008
- The ERP Midmarket Application Spending Report, 2007–2008
- The Supply Chain Management Spending Report, 2007–2008
- The Customer Management Spending Report, 2007–2008
- The Human Capital Management Spending Report, 2007–2008
- The Manufacturing Operations Software Spending Report, 2007–2008
- The NRF Retail Application Spending Report, 2007–2008
- The Knowledge Management Spending Report, 2007–2008
- The Product Lifecycle Management Spending Report, 2007–2008
- The Sourcing and Procurement Spending Report, 2007–2008
- The IT Management and SOA Spending Report, 2007–2008
- The Enterprise Application Services Spending Report, 2007–2008

Appendix B: Research methodology

AMR Research's Quantitative Research group tracks the enterprise software market from the bottom up. For this purpose, we have developed a database of software vendors that provide applications to enterprises worldwide.

Selection criteria for application software vendors

AMR Research's goal is to capture the leading 90% (by revenue) of enterprise application software vendors that are actively pursuing business within the United States. To be included in AMR Research's effort, vendors must meet the following qualifications:

- Develop and sell packaged application software products either directly to end users or through a third-party distribution channel (this excludes third-party distributors and developers that OEM source code exclusively)
- Achieve a minimum of \$1M in total annual revenue or provide a fast-growing new technology or functionality—for example, Internet-enabled APS applications
- Provide packaged software applications in the following segments: ERP, sourcing and procurement, supply chain management, customer management, human capital management, and product lifecycle management
- Provide systems hardware as part of a turnkey solution only (this excludes hardware vendors like Sun, which does not provide application software)
- Provide implementation services, including consulting, customization, system integration, and training, as part of its application software business and not as stand-alone services only

Information collection

Information on application software vendors is derived from a number of sources:

- Software vendor surveys distributed in February
- End-user surveys that detail application software suppliers and company spending
- Vendor and end-user communications with AMR Research
- Annual reports, 10Ks, 10Qs, and IPO prospectuses
- Trade publications, seminars, and conferences
- The Internet

AMR Research has developed a Vendor Information Request survey form that is distributed to each company in our software vendor database. We then follow up with these companies to ensure the timely return of the completed survey. Inconsistencies or questions are resolved between AMR Research and each company before the data is entered into our database.

It is easier to gather detailed company information from publicly held companies or those close to filing IPOs than from privately held companies. In cases where companies do not share performance information with AMR Research, we estimate financial information based on a number of factors. These include, but are not limited to, customer information, information by business partners, competitors, resellers, and analyst estimates. AMR Research shares these estimates with the company for confirmation or correction before entering them into the database.

Companies that do not want their revenue published or that are smaller than \$1M in total revenue are included in the Other segment.

Database for software vendors

Based on the selection criteria outlined above, AMR Research has built a software vendor database that provides detailed information for each company on the following metrics (we do not quantitatively publish all of the metric data listed below in our reports):

- Total company revenue and revenue by product type (software licenses, hosting or subscription, maintenance, implementation, hardware, and other)
- Number of existing and new customers
- Software revenue by application segments
- Software revenue by operating system
- Software revenue by database management system
- Software revenue by customer size
- Software revenue by geographic region
- Software revenue by vertical industry
- Software revenue by distribution channel

Company revenue by revenue type

Most application software vendors sell more than software licenses. They also provide installation, implementation, training, and other services, including turnkey solutions. In order to understand a software vendor's business model and its future revenue potential, AMR Research determines the share of its revenue derived from each of the following segments:

- Application software licenses generally provide the highest profitability and signal future growth opportunities. Application software license revenue can be derived either from licenses paid in full or from one-year license fees/leases. Application software license revenue does not include revenue from middleware, database runtime licenses, or one-of-a-kind software products developed for a specific customer.
- Alternate pricing delivery revenue captures revenue that is not perpetual or term for application service providers. This includes subscription, hosting and software as a Service (SaaS).
- Software maintenance provides a stable revenue stream. However, a maintenance share higher than industry average can indicate a lack of new customer growth or market momentum. Generally, software maintenance includes free upgrades, bug fixes, access to bulletin boards, and some software support. It does not include implementation service, training, consulting, software customization, or custom development, among other things.
- Revenue from implementation services, training, consulting, and custom development, among others, is harder to manage and generally provides lower profitability than software licenses. Most application software vendors prefer to hand off a share of these revenue opportunities to system integrators or value-added resellers.
- Revenue from computer hardware sold by software vendors has been decreasing the last few years. However, market niches remain for midrange manufacturers that demand complete systems. AMR Research does not include computer hardware sold without application software by companies like Sun in this Report.

Application segments

Enterprise management

- Core ERP (including core financials)
- Finance and revenue management (stand alone)

Supply chain management

- Order fulfillment (includes order management and order promising)
- Transportation management
- Global trade management (includes international trade logistics)
- Warehouse management
- Supply chain visibility and performance
- Manufacturing and distribution planning
- Demand planning and collaborative forecasting
- Sales and operations planning systems
- Inventory configuration and inventory policy
- Service parts management and planning
- Vendor-managed inventory systems
- Supply chain and performance management

Customer management

- Marketing automation
- Sales force automation
- Customer service

Human capital management

- Core HR
- Talent acquisition and recruiting
- Employee performance management
- Workforce development
- Enterprise incentive management
- Workforce scheduling and optimization
- Professional services automation

Product lifecycle management

- Product data management
- Portfolio management/program management/decision support
- Collaborative design/engineering
- Customer needs management
- CAD/CAM

Sourcing and procurement

- Indirect procurement management
- Direct procurement management
- Sourcing
- Contract management
- Procure to pay

Geographic revenue distribution

AMR Research provides information on vendors' worldwide revenue distribution by five main geographic regions. (Vendors included in this analysis are active within the United States and Europe, although their headquarters may be elsewhere.)

- North America—United States, Canada
- Europe—Western and Eastern Europe, including Russia and other parts of the former Soviet Union
- Asia-Pacific—Australia, China, Hong Kong, India, Japan, Korea, New Zealand, Singapore, Taiwan, Thailand, among others
- Latin America—Mexico, Central America, the Caribbean, and all of South America
- Rest of World—e.g., Africa, the Middle East

Customer base by revenue size

AMR Research reports on application software revenue derived from sales to companies within the following ranges of annual revenue:

- Less than \$30M
- \$30M to \$250M
- \$250M to \$1B
- \$1B or more

This allows AMR Research to be up to date with trends relating to the movement toward the middle market.

Forecasting

AMR Research forecasts are developed by us with input from a number of sources:

- Vendors' own growth expectations
- End-user spending plans
- Wall Street analysis
- AMR Research's competitive analysis
- Regional and worldwide economic growth expectations

The five-year forecast focuses on revenue of all major software vendors active within the United States and Europe, based on long-term growth expectations. These growth projections are primarily based on the following factors:

- Past and present performance by application segment
- End-user IT investment plans
- Emerging/declining technologies
- Worldwide business drivers

Notes

Research and Advice That Matter

Founded in 1986, AMR Research provides subscription advisory services and peer networking opportunities to operations and IT executives in the consumer products, life sciences, manufacturing, and retail sectors. We are the No. 1 research firm focused on the intersection of business processes with value chain and enterprise technologies.

AMR Research has published more than 15,000 pieces of research. Grounded in industry and business process expertise, our analysts deliver independent, leading-edge research on established and emerging technologies. This analysis is supported by the best research data in the industry, expert-led Peer Forums, and daily interaction with our members, the most comprehensive community of practitioners in the industry.

More information is available at www.amrresearch.com. Your comments are welcome. Reprints are available. Send any comments or questions to:

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