ERP software for SMEs demonstrates that size isn’t always everything

The idea behind enterprise resource planning (ERP) is to provide a business with a single product that provides software to support the main business functions in the company. For smaller businesses, choosing an ERP system is a double-edged sword. The products aimed at large multinational companies provide immense flexibility, but can be too complex. If SAP and Oracle are not the best fit, how should a medium-sized business choose an ERP system? This nine-page Buyer’s Guide to ERP Software gives CIOs and senior IT professionals an insight into the market that has grown for ERP aimed at SMEs.

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For smaller businesses, choosing an enterprise resource planning (ERP) system is a double-edged sword. The products aimed at large multinational companies provide immense flexibility, but can be too complex.

The idea behind ERP is to provide a business with a single product that provides software to support the main business functions in the company. The major products, such as SAP and Oracle, are claimed to encompass the best ways to run business processes. But since they cater for large complex businesses, such systems are often too sophisticated for smaller organisations, which may not have the same requirements in terms of scale and complexity of business operations.

Businesses that choose mid-market ERP tend to have limited IT resources but require a flexible product. George Lawrie, principal analyst at Forrester Research, says there are two reasons SAP has not really taken off in the mid-market: “It needs a channel to sell to smaller businesses, and SMEs [small and medium enterprises] question the ease of implementing it.”

SAP and Oracle may be great for providing enterprises with industry-standard business processes, but standardisation erodes the unique selling point in smaller businesses, he says.

As such, the major ERP products from the likes of SAP and Oracle are not always a good fit in smaller organisations. Lawrie points out that customising these systems can be prohibitive. He says, “SMEs are worried by the high maintenance fees and complex implementations associated with major ERP software.”

This is why a market has grown for ERP aimed at SMEs. “Mid-market ERP tends to offer vertical specialisation,” says Lawrie.

Mid-market ERP

If SAP and Oracle are not the best fit, how should a medium-sized business choose an ERP system? Companies must tread carefully when selecting a mid-market ERP system. A company with an ERP product that works in a UK business may not offer the product abroad.

Even companies that are strong internationally may not offer the same product in every region, warns Gartner analyst Christian Hesterman. For instance, he says, “Lawson S3 is primarily used in the US public education and healthcare sectors, while the N3 product is focused on food, textiles and beverage businesses in the rest of the world.”

Hesterman says the product should be good enough in most areas, but businesses will need the flexibility to adapt it. The alternative to having the flexibility to customise an ERP system is a product suite that has been tailored for a specific industry sector.

Microsoft Dynamics AX is one example of such a product. Hesterman says, “Microsoft has a clear strategy to let the channel [IT resellers] build in functionality, then buy back the functionality and integrate it into the core product.”

This approach has put the AX product at the top of Gartner’s Magic Quadrant for mid-market ERP (see box, p3).

ERP in the cloud

Suppliers such as Salesforce.com have made it possible to put customer relationship management (CRM) systems in the cloud, but core ERP software has so far remained largely untouched. If IT departments can make considerable savings switching from in-house systems to cloud-based software as a service (SaaS), why stop at CRM? Businesses should consider using the cloud for ERP.
The role of SaaS and open source in mid-market ERP

Analyst Gartner sees an increasing availability of software-as-a-service (SaaS) ERP systems and, unlike in large enterprises, where its use is limited, SaaS ERP is playing an increasingly important role in back-office and front-office applications for medium-size companies.

Cost reductions in implementation and operation are one of the important drivers for SaaS ERP, and SaaS offerings avoid the need for upfront capital expenditure because they can be funded as an operational expense. However, when analyzing the total cost of ownership of SaaS ERP over five years, Gartner finds that SaaS is not necessarily less expensive than on-premises ERP.

NetSuite is the largest example for a SaaS-based ERP suite. It offers a broad range of application modules, including financials and accounting, purchasing, payroll, order management and inventory control, as well as built-in integration with its CRM and e-commerce capabilities. Gartner has spoken to customers who have a high level of satisfaction with NetSuite’s offerings.

Other notable SaaS ERP players are Plex Online and Glia. SAP has also announced an on-demand ERP system called SAP Business ByDesign.

Open source has had limited impact on ERP. In the past two years, however, some new open source software ERP suppliers have emerged with a focus on leveraging open source software to reduce the total cost of ownership of business applications, and to enable customisations that would be difficult to achieve without access to source code. Although Gartner has doubts as to whether open source software business models actually confer these advantages on open source ERP, these early stage offerings are promising and should be evaluated. Examples for open source ERP suites include Compiere and Openbravo.

Although increasing in importance, none of the SaaS or open source ERP systems met the inclusion criteria for this Magic Quadrant, because of their sales or product focus. Gartner’s ERP Magic Quadrant criteria do not explicitly exclude SaaS or open source packages.

We are tracking their progress and expect their inclusion in future versions of the Magic Quadrant.

This is an excerpt from The Gartner Magic Quadrant for Mid-market ERP.

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Charging

In fact, it is far from clear how the major ERP suppliers will charge for cloud-based ERP. The significant ongoing revenue they receive from annual software maintenance from on-premises applications makes it difficult for established ERP suppliers to offer cheaper software licensed on a monthly subscription basis.

However, smaller software companies are making cloud-based ERP float.

Cloud computing specialist NetSuite has unveiled workflow management software called SuiteFlow which enables users of cloud computing business suites to automate and streamline complex business processes. NetSuite says SuiteFlow allows users to customise workflows to support the way they need to work.

Companies can use SuiteFlow to develop and deploy new business processes. NetSuite says it can be used to support processes such as contract renewal workflows with tasks, reminders and customer notifications, sales processes that include mandatory data entry, follow-up tasks and rep notifications, and customer support processes, including inactivity reminders, escalations and service level agreement enforcement.

Lawson Software, which has mainly focused on traditional ERP, has moved into the cloud by offering its core Enterprise Management Systems and Talent Management suite on Amazon EC2 infrastructure.

The products will be included in the Lawson External Cloud Services offering, which is part of the company’s Cloud Services portfolio. Lawson’s cloud ERP service is targeted at mid-sized companies and organisations looking for a more affordable, flexible and agile deployment option for full-function enterprise software.

Jeff Comport, senior vice-president of product management at Lawson Software, is adamant this approach works. “We are making it easier for our customers to license, use, keep current and even pay for Lawson full-function enterprise software,” he says.

“This should be great news for CFOs and CIOs who worry about lengthy and complex on-premises installations, the cost and inefficiency of their current environment, the best way to allocate IT staff, and the complexity and difficulty of maintaining software versions and upgrades.”

Open source

Similarly, open source ERP provider Compiere, which is used by companies such as Specsavers, has developed a version of its product that works on Amazon Web Services in the cloud.

Some experts believe it is unlikely ERP will move wholesale into the cloud. The major ERP systems tend to be architected as large homogeneous IT systems, which may not be such a good fit for delivery via the internet cloud.

Licensing major ERP systems to deploy via the cloud will still be immature. Instead, niche software companies are likely to build cloud-based services that do many of the functions of ERP.

“We will have much more specialist systems that do a slice of ERP,” predicts David Bradshaw, IDC research manager for software and services in Europe.

Cloud-based ERP could be the way forward for small- and medium-sized companies. Both Oracle and SAP offer products aimed at smaller businesses such as JD Edwards from Oracle and SAP Business ByDesign. These may have a better fit with certain organisations, but implementing on-premises traditional mid-market ERP systems will be the most likely approach businesses take until cloud computing has matured.
Can the middle men survive?

Analyst Paul Hamerman examines the state of enterprise resource planning and the middle tier of suppliers

Businesses are looking for deeper industry expertise from their ERP software providers to gain a more integrated application environment and end-to-end process automation. To date, many companies have combined custom-built applications and customised industry packages to supplement their core ERP software. This environment leads to many moving parts, disparate usability, and integration challenges.

The industry evolution of ERP is playing out in three ways:

**ERP mega-suppliers add vertical depth and breadth**

SAP and Oracle have invested heavily in industry-specific software, each touting capabilities in more than 20 vertical categories. Indeed, their commitment to industries has driven many acquisitions, particularly for Oracle.

SAP generally prefers to build industry functionality natively within its suite, but it has made several vertical acquisitions as well. SAP has also made use of services extensively to add vertical flavour, including partners.

As these two titans battle one another for the prime larger enterprise accounts, they have polarised to some extent. Oracle focuses more on services, government, telecoms, and utilities, while SAP is strong in capital-intensive manufacturing, including oil and gas and chemicals.

Nevertheless, these suppliers continue to battle one another vigorously in most industries, including retail, government, manufacturing and banking. More industry-specific acquisitions are likely.

**Second-tier ERP providers exploit seams in the defence**

Mid-size suppliers have found more success in providing deeper and more granular industry-specific functionality than the mega-suppliers, and in exploiting gaps in the market. Lawson, for example, has successfully targeted industries such as healthcare, food and fashion.

Other software houses – such as Microsoft, Epicor and Sage – may choose to be even more focused to elude the mega-suppliers in targeted industries, often relying on partners to add the last mile of specialisation.

**Specialists focus on fewer vertical markets**

Industry-specific suppliers may not be considered within the scope of the ERP market when they serve a single industry or do not provide the core accounting functionality that is at the heart of ERP systems.

Nevertheless, these specialised offerings are often compelling to customers and may also attract the attention of ERP suppliers looking to partner or acquire.

Specialist firms offering comprehensive suites to particular verticals
The economic downturn has left many ERP suppliers with substantially lower market capitalisations, making them easier targets for acquirers.
Big ERP is dead, long live agile

Michael Pincher looks at what the new breed of cloud-based ERP systems has to offer

If the rate of change outside your organisation is greater than the rate of change inside your organisation, the end is in sight," said US businessman and author Jack Welch. There is something religious about taking up enterprise resource planning (ERP). It needs faith that the goal will justify the sacrifice and change. In short, it requires enormous discipline. This factor was often lacking when many organisations hired consultants instead of adapting to ERP, dismantled the software and rebuilt it to fit existing business processes. They were designing doctrines around how they worked rather than working to industry standards, believing they would lose competitive advantage if they conformed to "best practice". Now, with a new breed of software as a service (SaaS)/cloud computing agile ERP offerings, is it time for change?

Outside pressure
With the private and public sectors challenged, respectively, by moderate growth prospects and government reform, and with both under budgetary pressure, business systems must be adaptable. For example, emphasis in the public sector is now on shared services as part of the Transformational Government agenda. When different organisations have to share systems, you need a commonality of standard processes, but with the ability to support diverse needs. This puts a strain on departments that have implemented a "one size fits all" model, such as that provided by market leaders SAP and Oracle. Sadly, in the public and private sectors alike, many organisations are saddled with monolithic, highly customised systems developed for a different era.

The winds of change
In a recession, businesses change. They consolidate operations and centralise or decentralise functions, and as they do, management's information needs alter dramatically. Although legacy ERP applications can adjust, they cost enormous sums to maintain, modify and update. Traditional ERP continues to be expensive and risky. Given the state of the economy and the fact that traditional big-bang ERP implementations cost more than some organisations can currently afford, SaaS ERP is gaining ground.

Dreams and reality
So what if you want to swap a lumbering enterprise system for a more agile one? The drivers for changing such monumental structures are complex. In selling alternatives to the

Many organisations are saddled with monolithic, highly customised systems developed for a different era
Once, concrete them over and hope to ERP, you have to overcome the
Third, in selling an agile alternative
shelf works just as well.

- **Standardisation is a must.** In truth, off-the-
- **Products are so individual that cus**
- **Little rationale** that its processes and
- **Every company thinks (with**
- **Why customisation is not the best**
- **By educating business managers as to**
- **Your own team saying, “That won’t**
- **Between suppliers promising that**
- **Matches the process will probably fit.**
- **Practice has already resolved it for you, so**
- **Suddenly, something simple becomes complex because you have**
- **Get powerful people aligned behind**
- **This is the moment to ask the**
- **Companies that realign around more**
- **An iterative approach to ERP soft**
- **The underlying principle is simple:**
- **A smaller, tier-two system is cheaper and faster to deploy than**
- **In certain non-transactional busi**
- **A CIQ, you have to negotiate**
- **As a CIQ, you have to negotiate**
- **Your main objective is to limit costs**
- **You never have to dig them up. This**
- **This is a difficult mindset to shift because**
- **New paradigm**
- **Flexibility is the difference between**
- **A rigid ERP and its forerunner. Plasticity**
- **In the new process workflows and**
- **Barely repeatable processes**
- **In certain non-transactional busines**
- **Which each task can lead to**
- **Beware**
- **But is agile ERP the no-brainer some**
- **Ease of implementation: SaaS’s selling**

**Benefits and risks of SaaS ERP**

- Agility improves with users’ ability to re provision technological infrastruc-
- Cost is claimed to be reduced greatly and capital expenditure is converted to ope-
- Device and location independence allows users to access systems using a web browser regardless of their location or device.
- Reliability improves through using multiple redundant sites, which makes cloud computing suitable for business continuity and disaster recovery.
- Maintaining applications is improved as changes reach the client instantly and applications do not have to be installed on individual machines.
- Security is a concern because the data is not on your premises and if there is any disruption in “supply”, there is little your organisation can do about it.

**More agile systems, where users can define the rules, are the route to achieving the fine balance needed**

**New paradigm**

- Flexibility is the difference between agile ERP and its forerunner. Plasticity in workflow, event management, and so on, means that unexpected changes can be accommodated without needing expensive consultants. These are pliable systems open to modification during their lifecycle, rather than those fixed on day one. The market has changed and traditional ERP is facing extinction.

- An iterative approach to ERP software design, development and implementation is a refreshing change from projects that overrun on time and cost.

- But there are risks to this approach: organisational risk, where users become frustrated when their system changes because of updates; business risk, such as what happens if there are problems processing payment as a result of going live without ironing out the wrinkles; and change risk, because it is hard to draw a line in the sand when people know a system is easy to change.

- **Buyer beware**

- But is agile ERP the no-brainer some make it out to be? Aspects to consider when evaluating SaaS options are:
  - Cost: While it is true SaaS is cheaper than tier-one ERP systems – SaaS does not require a complex internal infrastructure to support and you pay less up-front than with traditional on-premises ERP – the ongoing annual leasing costs may be higher.
  - Flexibility: There is less you can do to change the software to fit your business, but this is a reasonable trade-off for a small business, although larger enterprises may struggle.
There is no doubt that SAP is the world’s biggest provider of ERP software. According to ERP Lists, it has about one-third of the market. But that still leaves a lot of share for other suppliers, the names of which may not trip off the tongue. It can be hard to find out where the applications of some of the smaller players are being used.

ERP is one of those areas where it is not that easy to get an accurate picture of market share. The reason is twofold. First, it depends on the size of the companies, SAP and its closest rival, Oracle, are focused mainly on larger businesses, while suppliers such as Microsoft and Infor are more involved in the mid-market – so overall market share does not give much away.

The second reason tying down ERP market share is tricky is that large enterprises also buy mid-market products. That is not to say they ignore the big players, but they select certain products to fit niches that SAP and Oracle do not serve well.

SearchManufacturingERP.com gives the example of French company Areva using Infor SiteLine for site operations alongside SAP for its financials. It felt the Infor product was more cost-effective and easier for its employees to learn to use for that particular purpose or group of users. Such mixed use is known as tier-two ERP and is making a muddle of market share figures because many product usage surveys only ask questions such as, “What is the main ERP product you use?” or only interview representatives from the finance department who forget about products used by other departments.

In fact, mid-market suppliers see the two-tier market as an opportunity for increasing their market share. Microsoft has a page dedicated to tier-two on the Microsoft Dynamics area of its website, which provides a number of case studies, including German company Wurth, which uses Microsoft Dynamics’ Navision in branches while maintaining SAP at its headquarters.

Mid-market target
But it is not a one-way street. SAP has been targeting the mid-market for many years with its Business All in One product. Quocirca spoke to a number of SAP’s mid-market customers last year. A motivator for some of them to use SAP – including Dishman, a UK-based pharmaceutical components supplier, and Consol, a South African bottling company – was that it was easier to participate in the business processes of larger organisations that also use SAP.

To enable this, bigger organisations need to open their ERP applications to authorised outsiders. The degree to which they were doing this was examined in Quocirca research a few years ago. This found that 50% of the enterprises surveyed were allowing external users to access their ERP...
Case study: Midlands Co-op’s three-phase ERP project

Midlands Co-op, the UK’s second largest independent co-operative, is this year due to complete a three-phase ERP project that began in 2007, covering 160 retail stores, writes Anil Mohamed.

The ERP platform provides central data management, automated order and inventory management, stock replenishment, electronic point of sale (Epos) and business intelligence, as well as streamlined invoice matching and accounts payable processes. But, notably, it is not an Oracle, SAP or IBM system, but one from second-tier ERP supplier Aldata.

Mark Ruttley, head of IT at Midlands Co-op, considered both SAP and Oracle before opting for Aldata.

“I was keen to have an integrated system rather than plug-and-play modules and looked at Oracle in particular,” he says. “But it was very clear it was a set of different products bolted together. We wanted something much simpler, modular in description and licence terms, but integrated.

“Aldata provides a real-time solution, from the till to the central data store, with a little bit of handshaking, and it is very scalable. It’s very easy to add to a store because it is centralised and integrated into one system so there are not a lot of technical architecture issues.”

Midlands Co-op replaced a patchwork of core systems across its stores, some of which joined the Co-op network through merger and were running technology platforms at least 10 years out of date.

Some core legacy applications dated back to 1993 and were not well integrated or scalable. They were also prone to escalating maintenance costs. “It was quite a convoluted system and we wanted to take a leap ahead of the pack,” says Ruttley.

Three-phase implementation

The organisation embarked on a three-phase implementation of Aldata Gold, starting with an overhaul of its RB2 system. Phase one involved upgrading core master data, which was formerly held on a Unix-based convoluted system and we wanted to take a leap ahead of the pack,” says Ruttley.

Three-phase implementation

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Lessons learned

The phased implementation has meant the Co-op could break down a massive IT project and focus on particular IT components and issues.

Completing phases also minimised its reliance on “more expensive” external technical and project experts, says Mark Ruttley, head of IT at Midlands Co-op. “Having all the expertise in the project all the time would be expensive.”

The Co-op focused on granular go-live dates very early on, for example a pilot store or a group of five stores. This helped it to learn valuable lessons before moving on to the bigger stores. “Everyone knows their role and what to do if it goes wrong,” says Ruttley.

The answer is that ERP is being web-enabled, but on a more modest scale. Businesses have been slower to web-enable their own ERP applications than other, more obvious, candidates such as portals, content management and CRM, but even when Quocirca’s research was published, 23% had done so.

The market for SaaS-based ERP has been growing, although suppliers in this space admit it is complicated to build such applications. The best-known pure-play SaaS-ERP supplier is NetSuite, and the traditionally on-demand suppliers are following, including SAP with its Business-by-Design product. So is there something holding back the market for SaaS-based ERP?

There is a limiting factor, and this brings us full circle. Small suppliers need to integrate with their larger suppliers’ ERP systems, but their internal processes and requirements will often be very different. Many will buy the ERP application that suits their internal use and seek to integrate it with whatever applications are used by organisations they trade with.

In other words, tier-two fragmentation of ERP does not exist only in large organisations, it is a fact of life across broader business communities. The interests of ERP users are so diverse that the market will continue to support a wide range of products, including those for enterprise-wide needs and those for specialist niches, and the various products will always need to talk to each other at some level.