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Magic Quadrant for Delivery Utility Enterprise Asset Management

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For delivery utility companies searching for EAM maintenance software solutions, we analyze stand-alone (component) and suite-based software products that solve asset management problems.

What You Need to Know

This research provides guidance for companies that are investing in management software for physical assets and equipment, and it updates the 2010 "Magic Quadrant for Delivery Utility Enterprise Asset Management." We evaluated enterprise asset management (EAM) products for power generation in the "Magic Quadrant for Power Generation Enterprise Asset Management Software," with a greater focus on the unique features and vendor experience in that subsector.

Component (aka best-of-breed) EAM products that are suitable for delivery (that is, power transmission and distribution, water, wastewater, and gas) companies are a specialized area of software. Some suite vendors also actively market their EAM modules as component offerings and sell them as specialized maintenance solutions. Other suite vendors offer only EAM modules as part of the ERP suite being marketed, and, thus, these vendors have a market for EAM that is limited to their own customer base. In the past, these differences have often been simplistically reduced to the "better functionality" of the component vendors, contrasted with the better integration of a single-vendor ERP. This is no longer such a simple argument, since the EAM investment by ERP vendors has steadily reduced the functional difference to the point where functionality is not the main differentiator between suites and specialized component products. However, the majority of deals are still EAM component/best-of-breed sales.

In this sector, clients need to look at their overall application portfolios and plan how their EAM solutions will interact with other related components, such as geographic information systems (GISs), customer information systems (CISs), outage management and mobile work scheduling. As evidenced by the growth forecasts and inquiries we receive on this topic, many utilities are considering upgrading to or reinvesting in asset management software. Because investments in EAM can address issues with aging assets (by better maintenance), the aging workforce (retention of knowledge in tasks and processes) and network reliability (preventive and predictive maintenance), resulting in overall better customer service, regulators are likely to decide favorably on cost recovery for these investments.

Utilities need to make key architectural decisions, such as choosing between an EAM component approach or an ERP suite solution, as part of their EAM selection processes. Based on the relative importance of asset reliability and availability to the overall success of the business, a company should select the vendor that best fits its architecture, while offering the optimal mix of functionality for the asset portfolio. Vendors vary widely in scalability and functionality, and a solution that is appropriate for one client may lack key features needed by another. Long-term vendor and product viability are factors in most customer evaluations, and potential buyers should examine current profitability as well as a long-term commitment to EAM and utilities.

Although the scope of this assessment is global, some vendors specialize in geographies, and they may be small globally but significant regionally, so do not choose vendors based on size alone. Because the Magic Quadrant process is, by necessity, an "averaging" of vendor offerings and performance, we always recommend consulting the authoring analyst to get specific advice on your needs, location and industry subsector (such as electric, gas or water).

Magic Quadrant

Positioning on this Magic Quadrant (see Figure 1) reflects the customer view of the market. It also focuses on the solutions available; includes the suite offerings; and takes into consideration functionality, the experience available and the fit to purpose. This assessment focuses on the vendors providing applications that are used to manage work associated with transmission (for example, electric transmission lines/substations and gas pipelines) and distribution (for example, electric wires, gas pipes and water pipes). It also covers various work types, including construction (capital), inspections, operations and maintenance, and service orders.

Figure 1. Magic Quadrant for Delivery Utility Enterprise Asset Management



Source: Gartner (November 2011)

Clients should bear in mind that the market for EAM products is very broad and populated with hundreds of vendors. Gartner has reviewed what we consider to be the most relevant products for the clients operating in this market segment. As such, while this Magic Quadrant has widely distributed vendor positions, all vendors listed are active and successful in this market, and are the top echelon. In essence, this Magic Quadrant represents the top-right corner of a much larger "virtual" Magic Quadrant of vendors that are not considered herein.

Market Overview

The market segment considered for this Magic Quadrant is delivery utility (that is, power transmission and distribution, water, wastewater, and gas) companies that seek software solutions for the management and support of internally owned assets in a geographically distributed environment. Their focus is to keep plant and equipment facilities, as well as linear assets (pipes and wires), available with minimal downtime, and at the lowest cost, to maximize revenue.

These systems usually encompass asset management and materials management (for example, inventory and purchasing) functionalities, as well as a work management capability, and include mobile workforce capabilities (or at least formal partnerships). Most installations involve integration with other software products, such as:

- Native or third-party ERP to support budgeting and financial management

- Inventory, supply chain management and procurement
- GISs to support asset management
- Outage management systems (OMSs) for network recovery
- CISs to support customer service

The global EAM market wasn't completely immune to the effects of the global economic downturn, but overall, it held up reasonably well in 2010, with a slight decline of 2.3% to a market value of just under \$1.2 billion in total software revenue (while many other segments in the software industry saw much steeper declines). Gartner remains cautious, but optimistic, that this market will enjoy a slow but steady growth, with more robust growth expected in the coming years, provided the economy remains on a recovery track. (By 2014, we expect the EAM software market to grow to approximately \$1.5 billion in total software revenue.) Higher growth may return to the market faster, but one of the influencing factors is public-sector infrastructure plans, which, in many economies around the world, are currently in doubt as governments look to reduce spending plans.

Vendors with broad offerings — for example, mobile workforce, advanced scheduling, outsourced service management, work management (construction/maintenance/service) and supply chain management — will continue to lead this market. The drive to automate the end-to-end business process will force consolidation and extension to other applications (for example, customer service, asset management and mobile workforce management). Utility companies will benefit by having fewer vendors to manage, and, in the long term, by having access to capabilities for distributed asset and resource optimization.

Gradually, we see application convergence to create an enterprise solution covering the asset life cycle (that is, design, procure, operate, maintain and retire) and task-supporting functionality (that is, mobile workforce, work and asset management, customer and field service, and business analytics) to achieve resource and asset optimization. Utilities should also plan on developing enterprise architecture and enterprise information management strategies to enable more advanced asset analysis capabilities, and to prioritize aging asset risks. EAM, GIS and analysis tools with good enterprise architectures will enable utilities to analyze the multiple perspectives of viewing the assets (see "The Value of Asset Intelligence for Utilities" and "Asset Management and Reliability: A Strategic Road Map").

For delivery utilities (aka network companies), the functionality must be capable of distributed asset support, with particular importance attached to linear asset structures, remote locations of assets, short-term work, reactive or failure-triggered work, condition and performance monitoring, preventive maintenance, and construction capability for network extensions. Particular emphasis is placed on the planning and execution processes. More recently, we have seen a rising need to integrate with operational technology (OT) devices, and this has been particularly accelerated with the needs of the smart grid and new-generation IP addressable supervisory control and data acquisition (SCADA) systems. Typically, we see EAM systems interfaced with the data historian as a proxy for OT integration, and we expect vendors to reflect this growing client need more specifically in the coming years.

The following are the main functional features expected:

- Detailed asset registry combined with detailed parts and support descriptions

- Support for complex inventory relationships for indirect — that is, blue-collar maintenance, repair and overhaul, such as maintenance, repair and operations (MRO) — goods that are associated with forecasts of planned and unplanned work on installed assets
- Supply chain capability for indirect goods, with demand planning linked to maintenance and repair schedules
- Probability-based, "just in case" and MRO-focused inventory and procurement, rather than "just in time" or material-requirements-planning-based
- Support for manufacturer logistics processes for equipment under warranty
- Human capital management capabilities to match location, skills, training and availability with work requirements
- Statistical analyses of equipment performance and reliability
- Condition-based triggers for asset health and performance (OT integration)
- Serial number tracking and tracing for equipment and parts
- Financial support via detailed cost analysis
- Integration with whatever financial and HR package is deployed
- Extensive warranty tracking to component levels, and support for manufacturers' records requirements for equipment under warranty
- Capital construction planning (based on compatible units) defining linear assets and geographic locations
- Long-term maintenance, project and work schedules (integration with GISs)
- Short-term maintenance, client requests and failure recovery work schedules
- Inclusion of, or partnering with, mobile worker and field service support systems

Market Definition/Description

Gartner bases the concept of a Magic Quadrant on a customer-oriented market analysis. Consistent with the approach espoused by business author Geoffrey Moore, a market is "a set of actual or potential customers for a given set of products or services who have a common set of needs or wants, and who reference each other when making a decision."

Buyers often refer to the majority of the EAM market as the best-of-breed or "point solution" market for EAM, but the market might be more correctly described as the EAM "component" market. Buyers usually evaluate products from multiple vendors and look for component solutions rather than suites (on a ratio of approximately 2-to-1, based on a Gartner analysis of license fee expenditures), so the ability to sell the EAM module by itself is an important criterion for a successful vendor, corresponding to the market seeking specialized and flexible solutions. This may progressively change, and we have seen some movement on this in the past year as ERP vendors develop further functionality and aggressively market to their customer base. Clients already invested in an ERP suite would be wise to review the EAM capabilities offered by the ERP vendor suite.

What the Market Is Not

The market does not include IT asset management (see "The Evolving Role of IT Asset Management"), facilities workplace management (that is, an integrated workplace management system — see "Magic Quadrant for Integrated Workplace Management Systems") or financial asset management (see "IT Market Clock for Financial Management Applications, 2011"), which are separate software markets covered elsewhere by Gartner. In addition, the market does not encompass the related service parts planning market, which is related to EAM because it supports the provisioning of spare parts for a repair environment (see "Supply Chain Transformation: The Service Life Cycle Management Maturity Model"). Clients should separately consider coverage of these topics, particularly financial asset management, to plan and manage the depreciation of and investment return from generating assets over time.

Inclusion and Exclusion Criteria

Software products must address the majority of functional capabilities we have listed. Because there are more than 300 vendors in the EAM/computerized maintenance management system (CMMS) class of software, and because most of these are too small in company size or product scope to be of interest to Gartner clients, we evaluated only the top products worldwide that our clients requested via inquiries. These products have demonstrable track records in utilities (that is, a significant portion of their license revenue is from utilities), they have estimated license fee revenue of at least \$2 million generated during the past 12 months, and they cover multiple geographies.

We believe that the products assessed in this Magic Quadrant are of the greatest interest to our clients. The vendors actively sell and market their products in the U.S. and at least one other market. However, there may be reasons for other products to be included on an enterprise's shortlist, such as prior use, price or specific geographic presence. Only products that have been implemented and are in production have been evaluated.

Added

Oracle and SAP have been included because they are commonplace in utilities and have effective EAM modules. While they are rarely implemented as component solutions, they are a significant market in themselves, so users of these ERP suites should evaluate the EAM modules offered. In 2011, we have added the Infor10 EAM product (known previously to some as Datastream) and the Infor10 Hansen product because they have recorded significant sales in distribution and water utilities, have adequate functional capabilities, and are more actively marketing to this segment.

Dropped

Some vendors active in utilities, but not in delivery utilities, are included in the 2011 "Magic Quadrant for Power Generation Enterprise Asset Management Software."

Oracle PeopleSoft and Oracle JD Edwards EnterpriseOne were not included in this Magic Quadrant because they did not meet the inclusion criteria for new business in the utilities market segment. This does not reflect a decreased capability of the products, however, and existing users of Oracle PeopleSoft EAM and Oracle JD Edwards need not be concerned since Oracle has announced further EAM development for these products.

However, users in an evaluation process should consider the development direction of these products against their own needs for utility functionality.

FSC Limited's 4Site product was also evaluated for this Magic Quadrant and was found to have insufficient license revenue for inclusion; however, functionally, it meets requirements, although organizationally, it is quite small. Lawson Software (which was acquired by Infor) was also evaluated, and although it is functionally capable, it does not have utilities as a target market. We have also seen Cascade frequently in the market for condition-based maintenance in substations, but do not see it frequently in the market as an overarching EAM solution.

Evaluation Criteria

Ability to Execute

For network/delivery utilities seeking EAM software, the Ability to Execute is primarily a combination of factors driven by product functionality, global strength and — since the majority of buyers are looking for best-of-breed — the ability to deliver a component solution (or best-of-breed, as it is sometimes known) in the market.

We specifically looked at customer experience in our surveys. Customers were asked about vendor performance in four areas (from extremely dissatisfied to extremely satisfied):

- Does the software do what it is supposed to do?
- Is the software reliable/bug-free?
- How good is the vendor at fixing problems?
- How satisfied are you with the overall relationship?

Using a numeric scale, and taking the entire pool of all references from all vendors in the manufacturing and concurrent utilities Magic Quadrant process, an average of overall customer satisfaction was determined, and then each vendor was ranked according to the scoring of responses specific to that vendor versus the average. A future publication will discuss those results in detail (see Table 1).

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product/Service	High
Overall Viability (Business Unit, Financial, Strategy, Organization)	Standard
Sales Execution/Pricing	Standard
Market Responsiveness and Track Record	High
Marketing Execution	Standard
Customer Experience	High
Operations	Standard

Source: Gartner (November 2011)

Completeness of Vision

For distribution utilities seeking EAM software, Completeness of Vision is primarily a combination of focus on the EAM and field service segments, an appropriate go-to-market strategy, and a focus on innovation in EAM functionality (see Table 2).

Table 2. Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting
Market Understanding	High
Marketing Strategy	Standard
Sales Strategy	Standard
Offering (Product) Strategy	High
Business Model	Standard
Vertical/Industry Strategy	Standard
Innovation	High
Geographic Strategy	Standard

Source: Gartner (November 2011)

Leaders

Leaders in this market have a global presence, an installed base in distribution utilities of all kinds, strong viability and a combination of rich features, including functionality, interfaces with different ERP applications, and a capable and global implementation partner community. IBM Maximo Asset Management continues as the Leader in the component EAM space. Although IBM also has clients outside of utilities, it has a strong presence in the industry.

Challengers

Challengers in this market show good execution, but may lack a focus on functional or technological innovations, which restricts their desirability — particularly as a stand-alone application. There are no Challengers in this iteration of the Magic Quadrant.

Visionaries

Ventyx, an ABB Company, exhibits classic Visionary characteristics. It has a strong focus on EAM and increasingly broad functionality, it is suitable for all types of utilities, and it has displayed technical and functional innovation. The acquisition of Obvient Strategies and other customer successes boost its credentials. With Ventyx's acquisition by ABB, its overall viability is more stable. However, Ventyx's geographic presence is smaller than the performance of its industry peers, and its rate of new deals is below some other competitors' rates. A further complication is ABB's acquisition of Mincom, which positions two overlapping EAM products in the one company.

Mincom itself is also considered in the Visionaries quadrant, with its better financial outlook because of the ABB acquisition and a changed technology approach to its newer Ellipse 8 release. However, there remains a more limited global capability until we see whether the ABB distribution channels and locations can be leveraged. Additionally, there are unanswered questions as to how ABB will market and, over time, develop two EAM products with similar functionalities in many areas. For example, one may be directed toward generation and the other toward distribution, or they may have different geographic emphases.

Invensys Operations Management (Avantis) is also considered a Visionary due to its implementation ease, Microsoft compatibility, inclusion of mobile workforce management, and ability to link to OT systems from Foxboro, Wonderware and others.

Oracle Utilities Work and Asset Management (WAM) is ranked as a Visionary because it interacts with and draws on the resources of Oracle. Oracle Utilities WAM has a demonstrable vision for closely integrating the monitoring and control of infrastructure with traditional EAM features. This will be particularly beneficial in the power sector (including integration with in-house network management and OMS functions), and some aspects will also extend to gas and water utilities.

Niche Players

Vendors are classified as Niche Players due to one or more of several factors, including:

- Narrow platform support
- Lack of global presence
- Inability to assess long-term viability due to nontransparent or poor financial performance
- Limited presence in the distribution utilities market

The Niche Players quadrant contains three classes of vendors:

- Those that offer EAM as a stand-alone component application (for example, Logica, Infor10 EAM and Infor10 Hansen)
- Those that offer EAM as part of a suite (for example, Oracle E-Business Suite and SAP)
- Those that can be delivered as a component or as a suite (for example, IFS)

In the case of suites with inseparable EAM modules, the limitation of being usable (for all practical purposes) only within the larger ERP suite, along with the client cost associated with that strategy, lessens broad demand and impacts execution and vision. We have found that two-thirds of implementations are of a component solution. For suite vendors, often no more than half of their client bases use the "standard" EAM module. Increasingly, it is an important buying criterion, as clients avoid vendor lock-in and look to have more limited-scope projects in current economic times. However, it must be noted that SAP and Oracle continue to invest in their EAM modules as integral parts of their ERP suite strategies. In both cases, EAM functionality has improved (for example, SAP via the use of Enhancement Pack releases, and Oracle by recoding the IP from Oracle Utilities WAM and other sources into the Oracle E-Business Suite) to the point where SAP and Oracle should always be included in EAM evaluations, if the utility is already invested, or plans to invest, in that ERP suite.

Vendor Strengths and Cautions

IBM Maximo Asset Management

IBM Maximo Asset Management continues to have a strong product and presence in the industry. Functionality is being expanded, and the links between IT and OT are being integrated within the product. There is also high user satisfaction for the product, although clients frequently experience negotiating and pricing challenges with IBM.

Strengths

- Under IBM ownership, Maximo has high viability.
- Global sales and implementation resources make the solution widely available.
- Combined with Tivoli software, IBM Maximo Asset Management is able to manage IT-enabled assets with the same solution that is used to manage physical plant assets.
- High EAM investment and the leverage of IBM's research capabilities are bringing advanced maintenance functionalities to market.

- It supports integration with a wide variety of ERP suites and OT systems.
- There is an optional extension for Linear Asset Manager and native integration with ESRI GIS.
- It has versatility across multiple platforms.
- Health and safety functionality and resource scheduling and planning are being added.
- The acquisition of Tririga allows for facility management to be linked to traditional EAM.
- A "real-time asset locator" will be useful for tracking tools and mobile equipment.

Cautions

- Contracts and negotiations continue to be challenging for some clients, as are relations with IBM.
- A specialized version is required for transmission and distribution (T&D) operations.
- It is one of the most expensive products on the market (but with very high functionality).
- IBM is not known as a business application software company, and it has limited business application products on the market (Maximo is actually in the "Middleware Group," and we've observed conflicting messages from IBM on the topic).

IFS

IFS does well with its product set and has had expanded sales in new geographies; however, there are still no utility sales in the U.S., and there is more of a focus on generation than delivery/network utilities. Its modular, flexible architecture continues to be an advantage, and functionality has been extended for construction processes. IFS's acquisition and integration of 360 Scheduling means that it can offer workforce optimization as part of the core solution offering.

Strengths

- IFS's solution can be implemented as part of an ERP suite or as a component EAM.
- Its componentized service-oriented architecture provides a high degree of flexibility.
- It has innovative and rich maintenance functionality, including workforce scheduling.
- It offers very competitive pricing.
- It is very strong in construction project management, which is integral to the EAM component.

Cautions

- IFS only supports the Oracle Database.
- It is not widely deployed in delivery/network utilities.
- The existing customer base is weighted toward EMEA.

- Available resources need to be examined closely prior to project commencement in regions where IFS has not had significant industry sales. There is an increasing number of system integrator partnerships, but their relevant experience needs to be evaluated.
- There is limited global marketing in and commitment to this sector.
- There is no linear asset or compatible unit functionality.

Infor10 EAM

Until now, the product formerly known as Datastream EAM had been focused mainly on manufacturing. Recently, Infor has renewed product focus on other industrial markets and closed new business with utility companies. Changes in senior management have propelled Infor in new market, product, technology and marketing directions, so it is "returning" to the Magic Quadrant after being absent for some time.

Strengths

- Infor has experience delivering this as on premises or software as a service.
- It generally costs less to license and deploy than other competing systems.
- It has broad functionality covering the major EAM functions, including support for calibration.
- It is capable of supporting a broad mix of assets.
- It has native mobile workforce support.
- Its strategic focus includes an integration platform and tools (Ion and Databridge).
- It has a very high degree of product satisfaction among customers.

Cautions

- Although the solution is offered worldwide, new business is mainly from the U.S. and Europe, and with smaller companies.
- It is more focused on water, city infrastructure and distribution utilities, meaning it overlaps with Infor10 Hansen, thereby raising concerns about future product direction.
- It has fewer experienced implementation resources than many other EAM products, thereby limiting customer choice.
- We believe that Infor currently carries at least \$4.5 billion in debt, used primarily to fund acquisitions (Infor has indicated that this figure is materially overstated, but has not provided additional information). This is a highly leveraged company by enterprise application software vendor standards. Gartner suggests that users bear this in mind in discussions with Infor, and seek assurance that the company has the wherewithal to execute on the components of its strategy that are relevant to users' specific strategic requirements.

Infor10 Hansen

Infor10 Public Sector Enterprise Asset Management (Hansen) is focused on a client type (public sector) rather than a functional industry set, which creates a broader solution, but overlaps with its sibling product Infor10 EAM. Changes in senior management have propelled Infor in new market, product, technology and marketing directions. This product is making its first appearance in this Magic Quadrant. The positioning in this mixed-industry Magic Quadrant belies the value this product will have for water utilities (particularly public sector) in English-speaking markets.

Strengths

- It has a strong focus on the public sector, and particularly on water utilities.
- It has extensive experience in public-sector and water needs.
- It has related functionality that extends beyond EAM and is suited to a mixed infrastructure environment.
- It has the capability to reflect pipe connectivity, linear, area, point and other asset types.
- It has native GIS integration and mobile workforce capability.
- It is a PACP/LACP-certified solution (Pipeline Assessment and Certification Program/Lateral Assessment and Certification Program).
- It has reasonably strong customer satisfaction levels.

Cautions

- It has functional overlap with Infor10 EAM, which is stronger in some geographies (for example, Australia and New Zealand).
- It has a presence in North America and Australia/New Zealand, and limited presence in the U.K. and South Africa.
- There are limited choices for system implementers and consultants.
- It is not focused on electric power or gas.
- We believe that Infor currently carries at least \$4.5 billion in debt, used primarily to fund acquisitions (Infor has indicated that this figure is materially overstated, but has not provided additional information). This is a highly leveraged company by enterprise application software vendor standards. Gartner suggests that users bear this in mind in discussions with Infor, and seek assurance that the company has the wherewithal to execute on the components of its strategy that are relevant to users' specific strategic requirements.

Invensys Operations Management (Avantis)

Invensys Avantis is Microsoft-focused, and is more adept at the important integration of IT and OT requirements because of its Invensys family "DNA." However, for delivery utilities, it loses pace with market demands due to the absence of compatible units. It has a Microsoft-centric user interface and platform focus, which can be a strength for some clients, but might be seen as limiting if this is not your technology platform of choice.

Strengths

- Invensys Avantis has a well-regarded and efficient implementation methodology.
- It has good native business intelligence (BI).
- It has a broader asset strategy of OT system links and support for reliability-centered maintenance functionality.
- There is a global sales and support presence.
- It has an in-house mobile workforce solution.
- It has versatility across multiple platforms.
- There is a very high degree of product satisfaction.

Cautions

- EAM and business applications generally are not central to the Invensys product portfolio.
- It has fewer resources (internally) for development.
- It has only limited distribution industry experience.
- There is no compatible unit functionality; however, there is a capital construction capability.
- The EAM product's pricing is at the upper end of affordability for midsize companies.

Logica

Logica's EAM product, the Asset and Resource Management (ARM) Suite, is the result of combining functionality from existing products, the Work Management Information System (WMIS) and Storms. It is more oriented to work management than asset management. Many clients still hesitate to upgrade, and fewer still are buying the new product.

Strengths

- Logica specializes in the distribution utility field, and has good client and market understanding.
- It has large, global, in-house implementation resources.
- It has capable mobile workforce scheduling features.
- It has ready-made integration with multiple ERP vendors.
- It has a good industry fit through the user interface and product terminology.
- Its vision for future products is consistent with industry needs, and it retains essential product functionality for work management.

Cautions

- It is available only on the Oracle Database.

- Logica is, at its core, a system integrator and consulting company (not a software product company), and performs the majority of its own implementations.
- There is a relatively small number of ARM development resources.
- A combination of multiple products with different designs forms the solution.
- There are limited ARM-experienced resources outside North America.
- There are few new clients.
- It has relatively high license fees.
- There is no procurement and inventory functionality and only limited asset maintenance functionality, although it is an area of investment.

Mincom

Mincom has been acquired by ABB and reports into the Ventyx division in the U.S., thereby resolving many of the financial challenges, but also raising new organizational and strategy questions. Mincom's recent progress has been on improving the technical platform and extending the functionality of its newer Ellipse 8 release, and it continues to pursue a dual strategy of suite and component offerings. There are unanswered questions as to how ABB will market and, over time, develop two EAM products with similar functionality in many areas. For example, one may be directed toward generation and the other toward distribution, or they may have different geographic emphases.

Strengths

- Mincom has flexible deployment as a component or a suite.
- ABB ownership means financial stability after successive years of losses.
- It has strong utility performance in its home country of Australia. Previously, in the U.K., it also had strong utility performance.
- The Ellipse system has been recoded in Java as of Release 8, and the technology strategy for reporting has been revised.
- There is a high level of utility maintenance and compatible unit construction functionality.
- It is focused on asset-intensive industries, such as utilities, not on manufacturing, and most recent sales have been to distribution utilities.
- Versatility exists across multiple platforms and is highly scalable.
- It has a linear asset capability within the standard product.

Cautions

- Mincom has historically done well only in Australia, South Africa and the U.K., with a limited presence in North America. This may change if the ABB distribution channels and locations can be leveraged.

- There is a relative shortage of resources and partners.
- It is considered relatively expensive to license.
- While its financial position has been resolved, it is not yet clear what the future sector and geographic focus will be within ABB, nor is the organizational structure clear.
- It has OT integration capabilities, but limited OT utilities experience.

Oracle E-Business Suite

Oracle E-Business Suite continues a steady progression of functional improvements and is approaching a complete ERP suite solution for delivery utilities. The partnership program is improving, and there is a growing global T&D utility customer base. Existing clients of Oracle E-Business Suite should look first at the Oracle eAM module and benchmark any component alternative against the suite's module. The advantages of built-in integration may outweigh any functional shortfalls, of which there will be few.

Strengths

- Oracle E-Business Suite's eAM functionality is approaching parity with best-of-breed applications after Release 12, and should be on the shortlist in any evaluation of EAM solutions for Oracle E-Business Suite customers.
- We are seeing good customer references and a global list of clients.
- It has good usability and growing distribution utility experience.
- There is a strong project and construction capability natively and with Primavera P6 integration.
- It has strong project management functionality, and now includes compatible units and GIS (ESRI) integration.
- It has a global presence and very strong financial stability.

Cautions

- Oracle eAM has not been integrated with other ERP solutions as a component solution, and is not marketed as such. For non-Oracle customers looking for an EAM solution, Oracle eAM is not a practical candidate.
- Only Oracle Database support is provided.
- Compatible unit functionality has only recently been released, so there is no track record.
- It has OT integration strategies and capabilities, but limited OT utilities experience.
- Oracle's efforts are diluted by supporting multiple solutions for just one market segment.
- There is no clear mobile workforce solution, nor is there linear asset management.
- It is unclear how future EAM applications will unfold with Oracle Fusion Applications.
- Satisfaction among users interviewed by Gartner varies.

Oracle Utilities Work and Asset Management

Oracle has taken steps to use the broader family of technologies, and to extend the capability from basic EAM to include the integrated features of network management. The vertical strategy is working well; however, the countries and regions in which Oracle has qualified staff and established clients are still limited. The perception of being focused on small, local utilities makes larger deals difficult to come by.

Strengths

- Although well-suited to municipalities and water utilities (which are often smaller in scale than power utilities), the system is scalable to larger environments.
- The focus is on field service and distribution utility needs with lower cost and complexity.
- Open integration with multiple ERP suites and integration with other Oracle applications are being progressively delivered.
- The integration with network visualization and management tools gives a much broader solution footprint than competitors.
- There are in-house options for mobile and dispatch solutions.

Cautions

- A long heritage as Synergen, acquired first by SPL WorldGroup and then by Oracle, has resulted in product overlap within the Oracle E-Business Suite.
- It is available only on the Oracle Database.
- The countries and regions in which it has qualified WAM staff and established clients are still limited.
- It is unclear how future EAM applications will unfold with Oracle Fusion Applications.
- Satisfaction varies among users that Gartner surveyed.

SAP

SAP has steadily worked to address functionality shortfalls. Now, through its Enhancement Pack releases since ERP Central Component (ECC) 6, this is a nonissue. We are long past the time when SAP customers would always consider a competitor's component solution, and SAP ERP users should benchmark any component offering against the latest evolution of the SAP EAM solution. The last remaining user objections are pricing and the negative sentiment toward the user interface, which can be mitigated by a number of additions and overlays. The NetWeaver Business Client shows promise, but is not yet complete.

Strengths

- SAP has most EAM functionality that most utilities would require.
- It has compatible unit functionality, linear asset management, and enhanced key performance indicators and analytics for assets, which will also form part of the new Rapid Deployment Solution (RDS).
- It has a well-developed partner program to fill functional gaps.

- SAP Business Suite 7 (previously referred to as ECC 6), as a combined solution, provides a single view into all aspects of work and asset management — from HR to materials management.
- The program of Enhancement Pack releases has provided progressive functional improvements with fewer disruptions than a traditional upgrade.
- Recently, there have been significant improvements in work planning (that is, assigning resources to planned jobs).
- It is available on multiple platforms and databases.
- The IS-U package extension provides further utility-specific functionality.
- It has developed a native GIS integration that was previously absent.
- It has the largest market share of EAM business, by our estimation.

Cautions

- SAP's EAM application, while theoretically capable of being implemented as a stand-alone application, requires extensive implementation of other components of SAP's suite solution, such as materials management, financial and HR. Thus, for all practical purposes, it is always marketed, sold and implemented in the context of a full SAP ERP deployment. For non-SAP customers looking for an EAM solution, SAP is not a practical candidate.
- SAP continues to have predominantly European revenue, although this is slowly shifting.
- Clients must check whether their users need functionalities such as an improved user interface and a visual parts selection (which requires additional software products and NetWeaver).
- SAP's investment in Sybase and its mobile ecosystem partners is in its adolescence, but has resulted in a native mobile work order product. SAP has followed up on its acquisition of Sybase by reversing its direction of pushing mobility to partners; now, instead, it is renewing efforts to build out its own mobile application portfolio. However, the previous mobile workforce partners also continue to be available.
- There are relatively lower vendor satisfaction scores, and there is relatively lower product satisfaction among users.

Ventyx, an ABB Company

Since Ventyx was acquired by ABB, there are few viability concerns, which reinforces Ventyx's commitment to the utilities industry. However, ABB's subsequent acquisition of Mincom creates some uncertainty as to which company will be the go-forward product for the distribution sector. Ventyx has also executed key acquisitions that bolster performance, such as Obvient for BI.

Strengths

- Ventyx is a focused utilities specialist with the user interface and functionality to suit the industry.
- It has a long history of industry involvement and focus.
- The transition to the Asset Suite product included a Web services architecture as well as Java-based tools.

- Clients are steadily migrating to the new versions.
- Its acquisition by ABB creates an IT unit (Ventyx-Mincom-Obvient) and complementary OT unit (within ABB) products that have no parallel in the utilities sector.
- It has acquired Insert Key Solutions' (IKS's) Equipment Reliability (ER) Suite and Tech-Assist's Shift Operations Management System (eSOMS) for expanded work management functionality, and Obvient for built-in analytics.
- It is using its Ventyx sibling, MDSI Advantex, as its mobile workforce solution.

Cautions

- Its current product, Asset Suite, is based on a combination of older technologies from Empac and PassPort.
- Customer satisfaction is improving with the newer releases.
- Limited resources are available in the Asia/Pacific region. However, if they were combined with Mincom resources, then Ventyx could have a wide presence in the region.
- As part of ABB, changes in the performance of the Ventyx division will not be easily detected, although there appear to be some sales activities.

Vendors Added or Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor appearing in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets and skills, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability (Business Unit, Financial, Strategy, Organization): Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all pre-sales activities and the structure that supports them. This includes deal management, pricing and negotiation, pre-sales support and the overall effectiveness of the sales channel.

Market Responsiveness and Track Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word-of-mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

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