Magic Quadrant for Enterprise Architecture Tools

Gartner RAS Core Research Note G00207406, Chris Wilson, Julie Short, 28 October 2010, R3498 01292011

While the primary purpose of an enterprise architecture tool is to store, integrate and structure information related to EA, EA tools must also support the creation, collection, analysis and presentation of this information to meet stakeholder needs.

WHAT YOU NEED TO KNOW

Enterprise architecture (EA) teams must clearly articulate the value they bring to the organization. EA tools are a means to this end and are attracting considerable interest due to their enhanced functionality – for example, scenario planning, expanded decision analysis and presentation to a variety of stakeholders. This market also continues to be affected by merger and acquisition activity, with last year's merger between Software AG and IDS Scheer still to be completed, and this year's acquisition of Sybase by SAP.

The EA tool Magic Quadrant describes a large and diverse market, but readers should consider that the best EA tool for a given organization might well be outside of the Leaders quadrant. Niche problems may require niche solutions. When selecting an EA tool, organizations should consider a range of criteria, and should weight these according to their current and future needs. Given global economic uncertainty, organizations should consider the viability of their preferred vendors. Additionally, organizations should ensure there is adequate support for the tool in their geographical region.

This year, Gartner has changed its criteria for evaluating EA tools to emphasize how they can be used by a chief enterprise architect or senior manager in IT or the business, and their teams, rather than focusing primarily on the provider's support for the tool. Our focus this year, therefore, has shifted to those capabilities that support and assist an EA team in its day-to-day activities. Some of these activities include modeling, future-state analysis, road mapping, presentational aids, dashboard analysis and scenario planning.

The tool capabilities measured in this year's Magic Quadrant are:

- Repository/metamodel
- Modeling
- Decision analysis
- Presentation

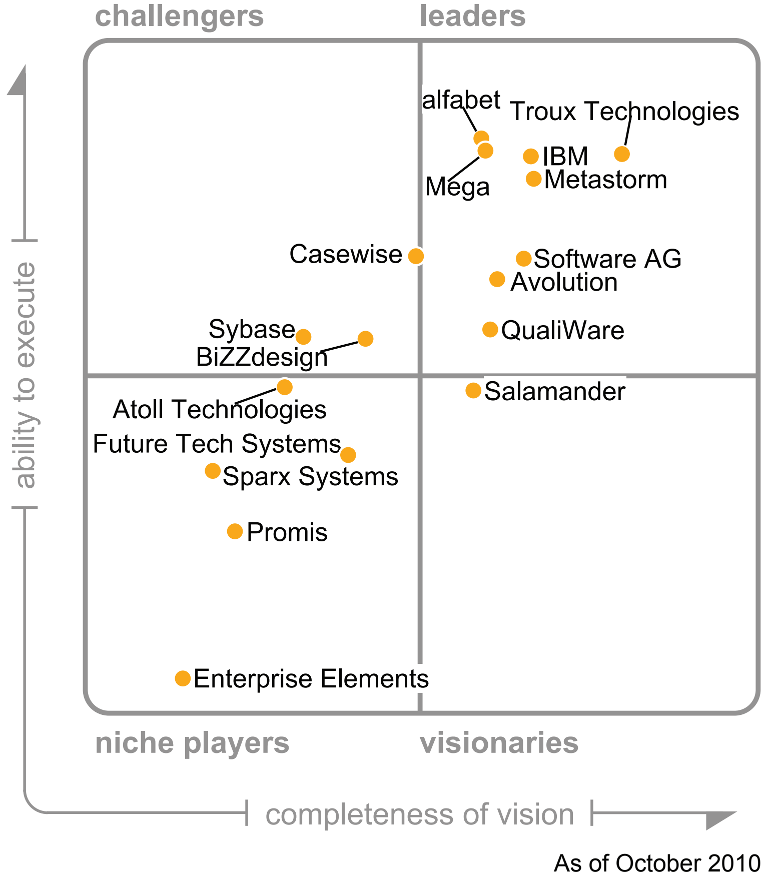
Gartner

- Administration
- Configurability
- Frameworks and standards
- Technical
- Interfaces
- Usability

We have also expanded the number of tools included in the Magic Quadrant to 17, evaluated against six key criteria:

1. A vendor's specific responses to all 15 evaluation criteria that define the Magic Quadrant
2. A vendor's specific responses to 10 tool capabilities
3. A vendor's differentiator in this marketplace
4. A vendor's presentations of its tools in support of a common use case, which addressed the use of the tool in presenting to various stakeholder groups
5. Client responses to 15 questions on their use and opinions of their tools
6. Any client inquiries/comments received by Gartner during the past year for any of the tools

Figure 1. Magic Quadrant for Enterprise Architecture Tools



Source: Gartner (October 2010)

The variation in questions (and the associated changes in weighting) has resulted in a graphical representation which, in Gartner's view, more accurately reflects the marketplace.

To aid practitioners in their decision making, Gartner will be introducing the Critical Capability Analysis (CCA) for EA tools. This deliverable analyzes EA tools according to how they perform against specific capabilities, use cases and scenarios. There are important differences between the Magic Quadrant and the CCA. The Magic Quadrant positions vendors within a market and does not exclusively analyze the products. The Magic Quadrant provides a relative placement (no scores) of the vendor in a particular market, while the CCA shows the relative importance of the major functions of EA tools for various use cases and the relative strength of the functions delivered by various vendors.

All the vendors will be represented in the CCA with the use case from this Magic Quadrant and the 10 tool criteria being used as input to the CCA.

MAGIC QUADRANT

Market Overview

New Demands for EA Tools and Vendor Responses

With the global economic downturn continuing throughout 2010, and only now starting to improve, the adoption of EA tools has reflected the need to provide better management, analysis and communication capabilities to demonstrate the value these tools bring to an organization. The chief architect and EA team are not the only stakeholders benefiting from an EA tool. EA tool vendors have responded to this demand, and most of the vendors are reporting continued revenue growth in 2009 and into 2010. Product revenue for vendors in this market typically ranges between $10 million and $25 million.

Additional Focus Areas for EA Tools

Many of the EA tools have the ability to do modeling. Analytical techniques, enabled through modeling, closely match the analytical needs of enterprise architects. However, the richness of tool capabilities have continued to increase, particularly in areas that enable them to support a range of EA activities such as task management, governance, risk, compliance, communication and collaboration, while maintaining a common repository. As these capabilities continue to increase, many EA tool vendors are competing in other markets such as business process analysis (BPA) and risk and compliance. Here is a summary of those vendors participating in other Magic Quadrants:

- Enterprise governance, risk, and compliance platforms: Mega and Software AG
- BPA tools: Casewise, IBM, Mega, Metastorm, Salamander, Software AG and Sparx Systems
- Operational risk management software for financial services: Mega

Other Offerings – Open Source and Shareware

"Disruptive innovators" (such as low-end offerings and open source) are also a consideration – especially as the current technology providers increase their functionality. Recently, open-source offerings for EA support emerged. While it is still too early to assess their adoption and success in this market, they must be put on the "radar screen," and to this end, Gartner will be developing a CCA to compare the functionality of all these tools. Low-end or no-cost offerings with minimal functionality often supplant high-end comprehensive offerings over time, due to the increased complexity, at a cost, which is added as vendors attempt to differentiate their products from their competition. This differentiation comes at a cost for the vendor. Increased functionality and complexity can result in a higher learning curve for the customer. It also results in increased price for the product. This opens up the market for new products that focus on specific areas of functionality (for example, modeling or presentation) to enter the market at a lower cost. Gartner has seen this happen with open-source products starting to enter this marketplace. For the vendor, this is referred to as "the innovator's dilemma.[1]"

Mergers and Acquisitions

Merger and acquisition activity has also continued, with Software AG having completed its restructuring in light of its recent merger with IDS Scheer (legal requirements in Germany are yet to be completed) and the recent acquisition of Sybase by SAP. Clients should speak with a Gartner analyst to find out the current status of a vendor if they are concerned about possible acquisitions, mergers or issues.

Market Definition/Description

Definition of the EA Tool Market

The EA tool market consists of vendors that offer software products to capture, store, structure, analyze and present information related to EA. The information stored in an EA tool must allow for multiple architectural views, including business, information, technology and solutions. Vendors usually offer related support, training, consulting and maintenance.

In the vendor descriptions in this Magic Quadrant, we highlight several strengths and cautions for each vendor. We have not attempted to mention all strengths and cautions for each vendor. Rather, the purpose of the comments is to provide guidance on the most salient, distinguishing points for each vendor.

The minimum requirements of an EA tool are:

- The ability to create or import models and artifacts
- The ability to present repository information to support a variety of stakeholder needs, including displaying it graphically and textually, as well as providing it in executable forms pertinent to the reader
- A robust, yet flexible, repository and metamodels that support often-changing relationships between objects within and between various viewpoints or architectures, as well as capturing temporal relationships and changes
- Requisite administrative capabilities to meet diverse needs (such as security, audit/control, collaboration, configuration and versioning, including multiple environments [for example, development, testing and production])

Key Requirements of Enterprise Architects

Enterprise architects must integrate, analyze and communicate structured and unstructured information about a wide range of subjects (technology, solutions, interfaces, information and data, business processes, organization structure, and strategy). This information must be authoritative, auditable and meaningful for a variety of stakeholders across IT and the business.

While many teams start off using drawing tools, spreadsheets, and other office productivity and content management tools to document and share their EA, this approach becomes extremely difficult once artifacts appear in multiple places. For example, representations of an application might appear on a diagram depicting a server, a diagram depicting a business process, and a diagram depicting the application's interfaces – all on different content management systems, spreadsheets or diagrams. Changes to the application might require updates in all locations, introducing additional complexity and opportunities for inconsistency and inaccuracy. Adoption of an EA tool addresses this issue of keeping all changes in sync by providing a single repository that enables the changes to be reflected in the entire architecture across all viewpoints (such as business, information, technology and solutions).

Enterprise architects should take note that the EA tool repository may need to link to other corporate metadata solutions in the enterprise. The repositories may contain modeling data for portfolio and project management, life cycle management, or others. This is important for collaboration and the end-to-end modeling capabilities within the enterprise. The importance of this is such that many organizations may prefer to purchase a tool that has "good enough" capabilities for the EA team, but which provides this integration, rather than implement a "best-of-breed" stand-alone EA tool.

What's New

This year, many EA tool vendors have begun to reposition their products as business planning, not primarily IT planning tools. This positioning may help them increase the interest and engagement of business leaders, and overcome skepticism about the term of art "enterprise architecture," which is just emerging from the "Trough of Disillusionment" in Gartner's Hype Cycle methodology. While these vendors still support EA concepts, principles and best practices, this positioning may help rebrand IT-centric architecture efforts in terms of "business architecture," "strategy architecture," "business value," etc. Of course, renaming and repositioning EA will not solve challenges of governance, business strategy, measurement, collaboration and communications. Clients need to evaluate a vendor based on its real abilities and capabilities to support the client's business, information, technology and solution architecture needs – not based on market repositioning.

Inclusion and Exclusion Criteria

Inclusion in this year's Magic Quadrant was granted to those vendors that provide tools in this marketplace for the use of EA teams, as identified by Gartner analysts. There was no exclusion due to revenue or other constraints. The only exception was the exclusion of open-source products because the concept of "vendor" in this case does not exist.

Added

These vendors have been added to this year's Magic Quadrant:

- Atoll Technologies (previously AAM Technologies)
- Avolution
- BiZZdesign
- Enterprise Elements
- Future Tech Systems
- Promis
- Sparx Systems

Dropped

In comparison with the 2009 Magic Quadrant, no vendors were dropped. Due to the merger of IDS Scheer and Software AG, the ARIS product is now marketed by Software AG.

Evaluation Criteria

Ability to Execute

Vendors are evaluated on their ability to execute – to compete effectively, positively impacting revenue and delivering solutions to clients that create positive win-win relationships. Here are the weighted Ability to Execute criteria (see Table 1 for weightings):

- **Product/Service:** This includes the core products/services offered by the vendors that compete in this market. We looked in detail at 11 aspects of a vendor's EA product suite:

  1. Repository/metamodel
  2. Modeling
  3. Decision analysis
  4. Presentation
  5. Administration
  6. Configurability
  7. Frameworks and standards
  8. Technical
  9. Interfaces
  10. Usability
  11. Differentiators

- **Overall Viability:** An assessment of the vendor's financial health, the strength of its customer base and its presence in the market; for the larger vendors, we also evaluated the relevant business unit and the likelihood that the vendor will continue to invest in and sell the product. This specifically refers to IBM, Sybase/SAP and IDS Scheer/Software AG.

- **Sales Execution/Pricing:** The overall effectiveness of the sales channels as well as the product pricing, including the cost of training and consulting.
- **Market Responsiveness and Track Record:** Ability to respond to changes in the market as customer needs evolve and market dynamics change, recognizing the vendor's history of responsiveness.
- **Marketing Execution:** The effectiveness of programs communicating the organization's message to the market to increase awareness of its products and establish a positive identification with the product or brand and organization among buyers.
- **Customer Experience:** The customer's experience with the vendor and its products.
- **Operations:** The organization's ability to meet its goals and commitments, including the vendor's technical support, training and consulting operations.

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product/Service	High
Overall Viability (Business Unit, Financial, Strategy, Organization)	High
Sales Execution/Pricing	Standard
Market Responsiveness and Track Record	Standard
Marketing Execution	Standard
Customer Experience	Standard
Operations	Standard
Source: Gartner (October 2010)	

Completeness of Vision

Vendors are also evaluated on their vision – their ability to articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how consistently they map their strategies and plans to their stated vision – as well as the practicality of their vision. Ultimately, vendors are rated on their understanding of market forces and their plans to exploit the market. Here are the weighted Completeness of Vision criteria (see Table 2):

- **Market Understanding:** Ability to understand and accurately forecast buyers' needs in the EA environment, and to translate these needs into products and services.
- **Marketing Strategy:** A clear, differentiated set of messages communicated consistently throughout the organization and externalized through the website, advertising, customer programs and positioning statements, consistent with the market understanding.
- **Sales Strategy:** The strategy that uses the appropriate network of direct and indirect sales channels, coupled with marketing, service and communication affiliates that extend the scope and depth of market reach for selling products and services.
- **Offering (Product) Strategy:** A vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and features as they map to users' requirements.
- **Business Model:** The soundness and logic of a 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 industries.
- **Innovation:** Direct, related, complementary and synergistic allocation 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 its "home" region directly, or through partners, channels and subsidiaries, as appropriate for that geography and market.

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	Low
Innovation	Standard
Geographic Strategy	Low
Source: Gartner (October 2010)	

Leaders

Leaders have a broad range of capabilities to support EA, combined with the ability to deliver these capabilities to a diverse group of stakeholders. While each of the eight Leaders has different strengths, they all provide good capabilities to assist EA's mission to translate business vision and strategy into effective enterprise change. In addition, they have a clear vision of where EA is going and maturing.

Challengers

The three Challengers have good functionality but have not to date built a significant global presence in this market.

Visionaries

This year, Salamander has been positioned in the Visionaries quadrant, due to its approach to translating EA into business value, and presenting that in meaningful, understandable ways targeted at the specific recognized audience.

Niche Players

There are five vendors in this quadrant. Vendors in the Niche Players quadrant tend to have strengths in numerous aspects of EA, but may be relatively deficient in functional breadth, global presence, industry breadth or market focus. However, they may also have expertise in a particular niche market, which actually makes them the vendors of choice for that market.

Vendor Strengths and Cautions

alfabet

Strengths

- Despite difficult global economic conditions in 2009, alfabet continued to report continuing growth with its planningIT product.

- The vendor's planningIT is designed for integrated IT planning and includes functional breadth beyond traditional EA, supporting a continuum of IT planning and control functions, and processes critical to the CIO.

- planningIT provides an integrated workflow engine to link the EA processes and the planning within enterprise activities.

- There is a rich metamodel "out of the box" in alfabet's planningIT. This provides a firm foundation based on best practices on which to structure and relate the variety of information that is of interest to enterprise architects and then to track its use by projects.

- One of alfabet planningIT's strengths is its ability to track and manage the rollout of future-state architecture. Attractive functions include the ability to set up automated alerts for the use of unapproved design elements in projects and the ability to automatically notify stakeholders of changes to architecture standards.

- planningIT can be acquired through a traditional, perpetual license, through subscription, through a hosting model or through metered licensing based on function calls per user. This provides considerable flexibility to meet a wide range of needs.

Cautions

- The vendor shows a reliance on small local consultancies, while working with the larger consultancies on a case-by-case occurrence. As alfabet continues to expand in all geographic markets, it states that it will adapt its partner concept as customer circumstances dictate. Potential clients need to consider and validate this when considering alfabet as a possible solution provider.

- While planningIT supports the drawing of a range of diagrams natively and through Visio, alfabet is one of the vendors in this market that does not participate in related modeling markets. Organizations that want extensive modeling capabilities native to their EA tool, as opposed to integrated with other tools, should consider alternatives.

Atoll Technologies

As of September 2010, Atoll Technologies is the new corporate identity for AAM Technologies.

Strengths

- Atoll Technologies' SAMU product focuses on a repository solution that may be tailored by the user as required. This is primarily a technical focus, and combined with the bundling of EA with ITIL and service-oriented architecture (SOA), may be considered a good fit for those enterprises looking for this type of a solution.

- Atoll Technologies is a small, up-and-coming vendor based in Hungary, with a growing user base predominantly in Eastern Europe, and with some presence in the Middle East. It has plans to extend this presence in the near future.

Cautions

- Atoll has limited geographical exposure – its primary customer base is within Eastern Europe, with some in the Middle East. Customers outside this area should carefully consider the support they may require.

- Atoll has just launched itself to differentiate from AAM Technologies, the parent company. In a volatile, niche market with many mergers and consolidations still occurring, the ability to remain independent and not be taken over by a major player is unclear. Buyers should negotiate contract conditions that bind successor companies to protect them against this possibility.

- Focusing solely on the repository aspect, and its technical focus, customers may need to consider if investment in this tool is sufficient for their needs, immediate and longer term. For example, there is no support for business process modeling (BPM).

Avolution

Strengths

- Avolution's unique XML-based approach to the tool market gives a flexibility that most of the other vendors struggle to provide.

- Avolution's Abacus product has been developed to solely address the EA marketplace. As a relatively new entrant to this space, it does not have the baggage and potential restrictions of older tools that have grown into this space, originating as a modeling tool.

- Avolution's background from a university in Australia has meant that it approaches the EA tool market with a fresh approach, and is always researching new and innovative methods in analysis and presentation of the data.

Cautions

- Avolution's configurability and academic base would, in Gartner's view, make it a prime merger/takeover candidate by a larger competitor or someone wishing to enter this market.

- Avolution has predominantly been focused in Asia/Pacific and Europe, with 80% of the market from these areas. Its U.S. presence is small but with intentions to grow. Potential users outside the core focus areas should determine the level of support Avolution can provide to ensure it meets their requirements.

- Flexibility comes at a price. Abacus' flexibility in some cases may be a disadvantage. Clients need to be very clear on what and why they are creating their own unique models and the implications of doing it.

BiZZdesign

Strengths

- BiZZdesign's user base is predominantly in Belgium, the Netherlands and Luxembourg, with strong academic links in that region, and is now planning to expand into other areas of the globe. In particular, it is one of the tools that support ArchiMate modeling language, which is now part of the standards supported by The Open Group, having originated from the Telematica Instituut in the Netherlands where BiZZdesign is also based. This is complemented by BiZZdesign's focus on training, with its materials, methods and tools being used by several universities.

- Customers wishing to adopt a standards-based approach using The Open Group standards for their modeling and EA activity may well wish to consider BiZZdesign on their shortlists.

Cautions

- BiZZdesign is primarily based in the Netherlands, with some offices in Western Europe and North America. Potential customers outside these core areas should determine the support they can receive if they choose this tool.

- While many vendors support The Open Group standards and models (for example, The Open Group Architecture Framework [TOGAF]), BiZZdesign has focused its tool primarily on these standards and models. Potential customers should ensure that BiZZdesign directly supports alternate models (such as British Ministry of Defence Architectural Framework [MoDAF]) or can be configured to support them.

- BiZZdesign is a small vendor, and does not have a wide geographic presence because its customers are primarily located in the Netherlands and neighboring countries. Its small size, in our view, makes it vulnerable to acquisition. Buyers should negotiate contract conditions that bind successor companies to protect them against this possibility.

- BiZZdesign users comment on its flexibility, including the ease of metamodel customization. However, this flexibility is achieved through the use of a scripting language and is not graphical. Consequently, organizations that are considering this product and needing flexibility must be prepared to acquire the relevant technical skills.

Casewise

Strengths

- Although it has benefits across a wide range of vertical industries, Casewise offers focused frameworks and models for several industries, including telecommunications, utilities, healthcare and pharmaceuticals. This will suit organizations wanting to leverage these capabilities to kick-start their work.

- Casewise contains a rich metamodel out of the box, with coverage of standard architecture viewpoints (business, information, technology and solution). This provides a firm foundation on which to structure and relate the variety of information that is of interest to enterprise architects.

- Casewise is maturing as an EA tool and is recognizing the need to bring value to the business.

- Having roots in modeling, Casewise provides good modeling and simulation capabilities. Casewise provides diverse methods of modeling, including Visio and Web-based modeling, which may appeal to large organizations requiring collaboration among diverse stakeholders.

Cautions

- Although it provides an attractive EA tool, Casewise has not displayed leadership in specific areas of this market during the evaluation period. Ongoing changes and additions to the management team are purporting to address this.

- According to customer reports, Casewise's portal is still receiving criticism from users, with complaints about "bugs" and a concern that the portal upgrades are coming out at a slow pace. While Casewise claims to have addressed this, organizations that plan to use the portal should emphasize this in their proof-of-concept project prior to finalizing their purchase.

Enterprise Elements

Because of logistical difficulties, Gartner was unable to review this tool as presented by the vendor, and, therefore, relied solely on the written response supplied by the vendor. This was the only EA tool where this approach was taken. However, with the written responses from the vendor, we believe its positioning accurately reflects its position in the marketplace.

Strengths

- Enterprise Elements has developed a very configurable Web-based product.

- The tool supports multiple EA frameworks and can be customized to meet user requirements.

- Enterprise Elements has focused on the defense market, and potential customers in this area should look at this tool as part of their evaluations.

- The tool provides strong support of EA from strategy to implementation with a collaboration-based approach, with threaded discussions and use of a task engine.

Cautions

- A relatively recent player in this market, Enterprise Elements is still in catch-up mode. It focuses primarily on the defense market in the U.S. Organizations outside the U.S. or not in the defense industry should ensure that this product is capable of meeting their needs before making the investment.

- In light of our opening statement about the company, potential buyers should pilot and review the tool to ensure it meets their specific needs.

Future Tech Systems

Strengths

- Future Tech Systems is a small, independently owned U.S.-based organization, with a tool providing a strong repository and associated modeling capabilities.

- Customer comments state that Future Tech is reactive to issues and quick to respond to any outstanding issues.

- In developing its tool, Future Tech has considered its ease and quality of presentation as a major differentiator in the market.

Cautions

- Due to the size of Future Tech, in a volatile and changing market, Gartner has concerns over the viability of the organization in that we see it as a potential merger/takeover target.

- Future Tech is U.S.-based and develops a lot of its potential customers via word of mouth. Potential customers need to ensure that there is adequate support available to them for this product, especially outside Future Tech's home base.

IBM

As explained in the What You Need to Know section, this year Gartner used different criteria for scoring an EA tool. This change in scoring focus has resulted in the positioning change for IBM compared to previous EA tool Magic Quadrants. The result has not been attributable to any specific action or inaction by IBM in the year since the previous Magic Quadrant.

Strengths

- IBM's System Architect product suite pioneered EA when it was developed by Popkin Software. The product has established a substantial presence and reputation in this market. Overall, System Architect is a robust, feature-rich product with a lot of potential to be configured to meet user requirements.

- IBM is emphasizing the importance of making EA actionable, and is building bridges between System Architect and other products to implement this. System Architect is a good choice for organizations that are looking for a well-established and proven tool integrating the EA requirements with portfolio management, BPM, asset management, etc.

- As well as competing in the EA tool market, System Architect participates in several modeling markets, including BPM. This will appeal to organizations that prefer to acquire an EA solution that integrates a repository with modeling capabilities.

- IBM's global coverage and support structure makes it an ideal contender for those clients that have an international user base, or who find it difficult to find an EA tool with support in their location.

Cautions

- While promoting the adoption of Jazz in last year's Magic Quadrant, IBM has still not implemented it as expected. Gartner has concerns that IBM has not clearly articulated the benefit of the Jazz platform in a manner that addresses specific areas of concern to an EA Team.

- Despite the product's extensive functionality for enterprise architects, Gartner has received reports on aspects of System Architect that appear to make the product unduly complex. The first aspect is the way in which relationships are represented in the repository, which makes nonstandard reports and navigation of relationships more difficult than necessary. IBM acknowledged this issue in the 2009 Magic Quadrant, but we are still hearing customer issues with the complexity of the product. Although System Architect has a number of capabilities that shield the user, more-sophisticated users may encounter difficulties with the configuration required to tailor the product. Concern has also been expressed to Gartner about the poor graphical qualities built in to the tool in comparison to competitors. IBM has addressed many of these concerns in the latest versions of the product, but organizations considering any sophisticated use of System Architect should verify this and must commit and train resources to deal with this complexity to shield the rest of the EA team from it.

Mega

Strengths

- Mega has a clear identification and understanding of stakeholder expectations within its customers, particularly in the area of EA management providing value to areas outside the typical EA team.

- Mega has the ability to exchange information with a range of products, including modeling and development tools, as well as the ability to export to a number of integration middleware suites. This benefits organizations that want to automatically incorporate this information into their repositories.

- In addition to competing in the EA tool market, Mega participates in several other related markets, including BPA; governance, risk and compliance (GRC), specifically operational risk management; and the application analysis and design markets. This is a good solution for organizations desiring a single integrated tool to provide for multiple stakeholder needs beyond EA.

- Mega has focused on R&D in the defense and security market – clients in these areas may well wish to consider Mega in their shortlists of solutions.

- With a full EA suite of products, Mega provides an integrated, well-featured and mature EA tool.

- The Mega Modeling Suite contains a rich metamodel out of the box, with coverage of business, information, technology and solution architecture viewpoints. This provides a firm foundation on which to structure and relate the variety of information that is of interest to enterprise architects.

Cautions

- Mega is a Europe-based company, with a growing presence in North America as well as subsidiaries in Japan and Mexico. Elsewhere, it is represented by resellers. Organizations wanting a direct vendor presence in other geographies may prefer a vendor with wider presence.

Metastorm

Strengths

- Metastorm ProVision has a long-standing reputation for ease of use relative to some others in this market. Organizations desiring large deployments with average users should consider the importance of usability.

- Although it has benefits across a wide range of vertical industries, Metastorm's ProVision offers frameworks and models for several industries, including telecommunications, insurance, defense and supply chain management. These can provide a useful starting point for EA work and will be attractive to many organizations in these industries.

- In addition to competing in the EA tool market, Metastorm ProVision participates in several modeling markets, including BPA. This will appeal to organizations that prefer to acquire an EA solution that integrates a repository with modeling capabilities.

- Metastorm provides an EA tool integrating with BPA and BPM disciplines.

- Metastorm offers a software as a service (SaaS) model for its EA tool.

Cautions

- While Metastorm has a global presence, potential customers must clarify and understand if this affects Metastorm's support in their specific regions, because there have been comments of difficulties with experiences being physically available locally.

Promis

Strengths

- Promis provides the functionality of its tool via a SaaS implementation.

- Promis' Enterprise Value Architect (EVA) Netmodeler is, as the name suggests, a strong contender among the modeling tools.

- Promis' tool can be deployed across a wide range of environmental configurations, making it a possible candidate for those clients with restricted hardware and software environments.

Cautions

- Promis is a small developing company with limited global reach. Customers outside these areas should determine the necessary support and engagement for its tool.

- Promis has had operational difficulties in the past due to expansion plans. Potential clients should confirm that this has been sorted out for their geographical areas before committing to this tool.

QualiWare

Strengths

- In addition to competing in the EA tool market, QualiWare participates in several related markets, including BPA and GRC. This, coupled with its approach to engaging employees throughout the enterprise, will appeal to organizations wanting a single modeling and repository tool with an eye on collaborative reuse.

- QualiWare has major strengths in its product with respect to investment and portfolio management. Customers with a need in these areas should consider this tool as part of their shortlists.

- QualiWare products contain a rich metamodel out of the box, with coverage of business, information, technology and solution architecture viewpoints. This provides a firm foundation on which to structure and relate the variety of information that is of interest to enterprise architects.

- QualiWare has developed strong collaborative elements within its tool. Organizations and countries where this is culturally important may well wish to consider QualiWare as one of the vendors to review.

Cautions

- Information received from customer references has indicated that there may be some bugs with the pre-general-availability release of the QualiWare Integration Server, a key component of the tool's architecture.

- Users have concerns about the length of time it takes for QualiWare to issue corrections to faults in the system.

- QualiWare has enjoyed considerable success in its Scandinavia base and has successfully established a presence in North America. However, QualiWare is still a relatively small, private company that earns most of its revenue in Europe. In our opinion, this lack of scale results in vulnerability to a takeover. Buyers should negotiate contract conditions that bind successor companies to protect them against this possibility.

Salamander

Strengths

- Salamander is a functionally rich product, particularly strong in supporting business decision making. This is reflected in its position as the sole vendor in the Visionaries quadrant.

- Although Salamander has customers across a range of industries, it has considerable focus on EA support in "critical and national infrastructure," which includes the military and intelligence communities, and it has had considerable success with this constituency. It also has a team dedicated to the natural resources sector. For these reasons, Salamander is an attractive choice in these industries. While Salamander focuses on these niche areas, Gartner recommends that potential customers outside this niche consider whether the MooD product could support their business needs.

- Salamander's variants allow the representation of different architecture configurations. Variants are powerful because they can be structured as a tree, showing divergences from a common heritage. Business performance can be attached to variants to improve business decision making. The differences between variants can also be displayed graphically. This is particularly useful in a federated organization, with business units sharing some aspects of the architecture and being independent in other aspects of the architecture.

Cautions

- Salamander does not have a wide geographic presence, with customers primarily located in the U.K. and other Western European countries. Although the Internet and electronic communications have reduced the impact of distance, organizations outside Salamander's home base should clarify ongoing support arrangements. Additionally, Salamander addresses this caution via partnerships with "major global system integrators."

- Salamander is still growing rapidly, although it is still a relatively small, private company. In our opinion, this lack of scale results in susceptibility to an acquisition. Buyers should negotiate contract conditions that bind successor companies to protect them against this possibility.

Software AG

While in Germany the merger between Software AG and IDS Scheer is not yet legally completed, the management and organizational structures of the organization are now in place. With the administrative aspects of the merger now complete, going forward we expect to see Software AG strengthening its positioning within the EA tool landscape.

Strengths

- Software AG's Architecture of Integrated Information Systems (ARIS) is well-known for its long-standing leadership in the BPA/BPM market, and its rich modeling and analysis capabilities. This makes it well-suited for organizations that want to use the same tool for EA and BPA/BPM.

- ARIS has the ability to exchange information with a range of products, including several development tools, as well as some integration middleware. ARIS also has the ability to exchange packaged application information with SAP's Solution Manager and SAP's Enterprise Service Repository, as well as the ability to import information from Oracle's Fusion middleware. This makes it attractive for organizations in which these vendors' applications play an important role. In addition, the merger of IDS Scheer and Software AG has delivered a tightly integrated solution between ARIS and webMethods.

- The ARIS product contains a rich metamodel with broad EA content included out of the box. This provides a firm foundation on which to structure and relate the variety of information that is of interest to enterprise architects.

Cautions

- Although the ARIS product set in totality is feature-rich, Software AG markets its solutions depending on the expressed wishes of the customer. While this addresses the immediate perceived needs of the customer, the full EA capability as recognized in this marketplace may not be contained in the marketing bundles as specified by Software AG. Clients will need a clear understanding of their full requirements because functionality may be contained in other bundles from ARIS other than just the EA bundle.

- Gartner is still hearing concerns expressed by users regarding the complexity of configuring the product to meet their exact needs, and the need to bring in IDS Scheer consultants to advise. Potential customers should ensure that this will not be an issue for them prior to commitment to the tool.

- Due to the merger's legal complexity and organizational restructuring, the income from ARIS remained flat in 2009; however, the EA-specific revenue increased. Overall revenue, including EA-related revenue, is expected to grow now that the restructuring is complete.

Sparx Systems

Strengths

- Sparx Systems has a unique offering in this Magic Quadrant as a vendor that provides a low-cost shareware model for immediate download.

- Usability of the tool has been developed using external experts to ensure a high level of productivity with the tool.

Cautions

- Enterprise Architect is an inexpensive modeling tool, but lacks the full functionality of many of the major players.

- Sparx Systems has a unique selling model, but potential customers need to evaluate whether this tool fulfills all the needs of an EA tool or is simply an inexpensive modeling tool.

Sybase

Strengths

- In addition to competing in the EA tool market, Sybase's PowerDesigner participates in several modeling markets, including database design, in which it has a 35% market share. This will appeal to organizations that want to use a single integrated modeling and metadata management solution as one of their core EA strategies – particularly those with a strong focus on information architecture in depth.

- Sybase customers we've spoken to have been very happy with the overall customer relationship, support, and services that they have experienced and have rated it highly. This attention to customers positions Sybase well in its plans to provide more-extensive EA capabilities and will appeal to organizations that value excellent support.

- Software AG, Troux Technologies and alfabet all integrate with PowerDesigner's modeling and repository capabilities to gain complementary functionality over and above what they are able to offer individually. Clients and potential clients of these tools may wish to consider the robustness of the Sybase PowerDesigner modeling and metadata management in addition to the functionality in these other tools.

Cautions

- Sybase was acquired by SAP in July 2010. SAP's chosen modeling tool for BPM is Software AG's ARIS product. The future relationship between these two products in the EA tool marketplace is unclear at the time of this writing. Clients need to review this relationship as part of their consideration of this product.

- Although Sybase has strong information architecture functionality, there is an indication that it may not provide the full functionality required for a mature EA team with regard to the other architecture viewpoints. Clients need to verify the extent of functionality of Sybase to ensure it meets their current and future needs.

- Due to the depth of capabilities with the tool, customers have reported a high learning curve with the product. Potential customers may wish to determine the reality of this before making an investment in the product.

Troux Technologies

Strengths

- Troux Technologies has a clear identification and understanding of stakeholder expectations within its customers, and uses this in its marketing and deployment approach as well as within the tool itself.

- Troux has the ability to provide advanced architecture configuration management capabilities through the Troux Initiatives product, which enables a range of programs to be described, with each program permitted multiple future options that can be explored. This will be attractive to federated organizations.

- Troux Collection provides starter sets for importing information from a range of sources that include runtime environments, such as middleware and server directories. However, the real value of Troux Collection is that it allows rules to be configured to resolve conflicting information from multiple sources. Troux is also leveraging this capability to form tighter integration to strategic partners (for example, configuration management databases [CMDBs] and program and portfolio management [PPM]). This is particularly useful for organizations that want to regularly refresh the current-state-architecture information in the repository from the actual runtime environment.

- A range of capabilities foster EA collaboration and governance. These include the ability to remind users of their obligations to refresh information in the repository. There is also the ability for architecture stakeholders to make journal entries or blog posts about information within the repository. This will suit those organizations that require management rigor in their EA processes, as well as fostering collaboration between architecture contributors.

- Troux offers a SaaS model for its EA tool.

Cautions

- With its leadership in the EA tool market, combined with its attractive product capabilities, in our opinion, Troux is a tempting takeover target. Although a new owner may retain key personnel and continue to enhance the solution, there is an element of uncertainty. Buyers should negotiate contract conditions that bind successor companies to protect them against this possibility.

- Due to the depth of capabilities with the tool, customers have reported a high learning curve with the product. Potential customers may wish to determine the reality of this before making an investment in the product.

- Customer comments referred to lengthy delays in correcting some software errors. Gartner has also received some dissatisfaction from users with the support received from Troux, referring to better understanding the capabilities of the product.

Acronym Key and Glossary Terms

ARIS	Architecture of Integrated Information Systems
BPA	business process analysis
BPM	business process modeling
CMDB	configuration management database
EA	enterprise architecture
GRC	governance, risk and compliance
PPM	project and portfolio management

Evidence

[1] "The Innovator's Dilemma," by Clayton Christiansen (Harvard Business School Press)

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.