Gartner Research Models

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How Do Analysts Develop and Resolve Research Positions?

Research Communities

- Analysts from around the world “meet” in virtual communities of interest.
- Current information about a topic is exchanged via our network of client and industry contacts.
- Trends are identified, and their implications to clients and the industry are discussed.
- “Stalking horse” positions are developed and the validity of differing views is argued.
- Gartner formulates an integrated position that reflects our best analytical judgment.
- Positions are updated on a continuous basis.

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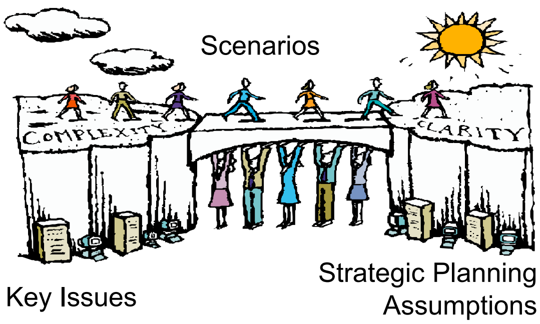
“Vision is the art of seeing the invisible.” (Jonathan Swift)

The Gartner research process is simple yet powerful. It relies on an active interchange of information and ideas across the analyst community, building on a solid foundation of statistically relevant market research and a broad range of other knowledge from multiple sources.

Analysts gather information via formal survey instruments and informal surveys of users and vendors. This is the most powerful element of our research— the network. Either individually or via group interaction, analysts perceive patterns in survey results because they are constantly checking the validity and impact of new data on existing research positions. Occasionally, analysts will see new patterns or a new perspective that will generate new questions and research positions. Such breakthroughs are some of the most powerful and valuable insights that we can provide to our clients. “Stalking horses” are conceptual graphic constructs to illustrate theories and present them to other analysts, users and vendors. Before publishing a position derived through this process, the analyst seeks out relevant supporting material, using all available channels — including telephone conversations, press releases, financial reports, Wall Street reports, news wires, other Gartner research and the like.

Scenarios and Strategic Assumptions ...



Key Issues — The unanswerable key questions

Strategic Business or Planning Assumptions — Our best working answers, with an assigned probability

Probabilities — The likelihood of the answer occurring, expressed numerically (that is, 0.8 probability)

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Scenarios are five-year sector forecasts that outline a projected chain of events using "Key Issues" and "Strategic Planning Assumptions." They change dynamically, based on changes in the industry, technology and sector-specific events. Our overall scenario theme is change: What will be the revolutions/discontinuities in your sector in the next five years? We do not use "rearview mirror" analysis extrapolated forward. Scenarios are our structure for "futurism." They are action-oriented and give clients guidance for decisions that must be made *now.*

Key Issues are a critical part of Gartner's research architecture. They appear in all deliverables and represent a question about the future — the answer to which is neither currently known nor obvious, and which (we believe) has significant consequences for the industry. They are determined in two ways: 1) questions Gartner analysts believe clients should be asking about trends and directions in technology, and 2) the questions our clients are currently asking about the future. Answering Key Issues is the foundation for analysts' research agendas.

Strategic Planning Assumptions are Gartner's best answers to Key Issues at a given point in time. A probability (between 0.1 and 0.9) is always assigned so that clients will know the degree of conviction or confidence that the analyst has in the prediction.

Probabilities

1.0	This has already happened, but either the event has been hidden or the full impact has not yet been realized.
0.9	This will definitely happen, barring a major industry reversal; we would be shocked otherwise. Moreover, we are almost certain of the timing.
0.8	This will happen, barring exceptional circumstances. We would be quite surprised if it failed to happen, but a degree of uncertainty exists. We have a good idea of the timing.
0.7	There is good reason to believe this will be true, but there is a decent chance it will not be. We would be surprised, but not shocked, if it did not happen. The timing is soft and may vary from our estimates.
0.6	This is a general trend or direction — better than a rumor or guess, but not necessarily by a great deal. We most likely do not have a firm idea of the timing.

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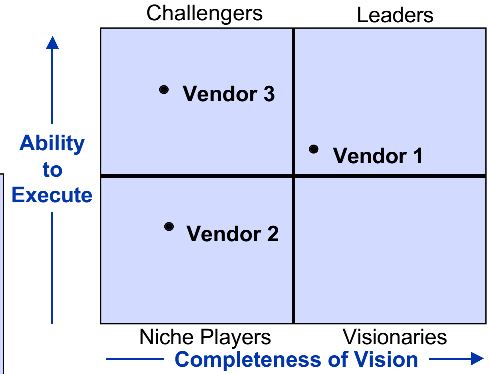
We append a "probability" to Strategic Planning Assumptions to indicate what kind of action clients should take. For example, if a prediction carries a probability of 0.9, this means that, barring something truly unexpected and exceptional, it *will* happen. Organizations should immediately take action on the advice given in a Strategic Planning Assumption with a 0.9 probability. For a 0.6 probability, the analysts who crafted the Strategic Planning Assumption have applied the Gartner research process and their best analytical skills to make the prediction; but because there are many unknowns, the 0.6 probability tells a client not to take immediate action, but rather to be aware that this is the prediction the analysts believe is *most* likely.

However, for every 0.8 probability, there is also a 0.2 probability. Although an analyst believes the 0.8 scenario is most likely, there is still a possibility that the 0.2 prediction could come true — if not for an entire market, then perhaps for a single enterprise or even a single line of business within an enterprise. Gartner analysts present these two possibilities, called a *dialectic,* in their presentations.

The Gartner Magic Quadrant

Gartner Magic Quadrants are graphical strategic planning assumptions that position vendors in a market sector going forward, based on individual vendors' Completeness of Vision and Ability to Execute within a given market.

Ability to Execute: This dimension is beginning to outweigh the Completeness of Vision dimension as vendors get better at saying the right things without necessarily delivering them. Criteria include Financial Strength, R&D Management, Marketing & Sales, Alliances.



Completeness of Vision: Gartner has identified four components for the tangible measurement and comparison of vision:
1. Does the vendor have a vision or at least a strategic plan?
2. Is this vision in line with industry and sector trends?
3. Does this vision match Gartner's?
4. Is the vendor's vision comprehensive enough to establish a broad installed base within customers and across industries, without trying to own every seat?

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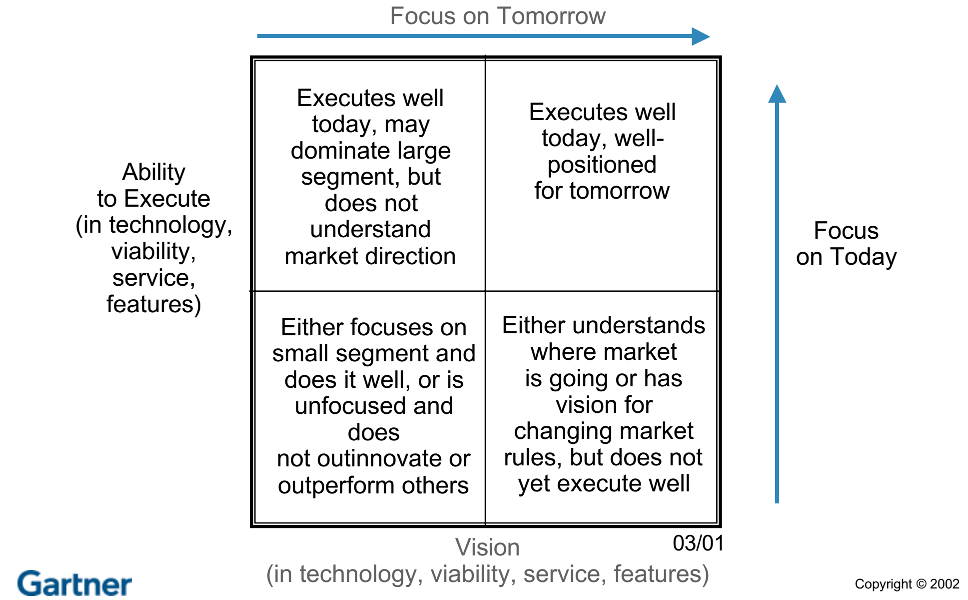
Magic Quadrants were created to provide a simple construct for positioning vendors within a given market space. The first step is to define a "market," and for that we use Geoff Moore's definition: "a common set of users with a common set of wants and needs who reference each other when making a buying decision." This is a critical first step in creating a quadrant, because it ensures that vendors competing in a single market are compared fairly. It would be unfair to rate a vendor against others in a market in which they do not compete.

There is a well-defined, repeatable process for creating Magic Quadrants. Our goal is to ensure that the highest levels of thoroughness, consistency and integrity are applied to the research process that leads to the publication of Magic Quadrants, so that the implicit conclusions are defensible and clients can view and interpret Magic Quadrants in a consistent manner. In this way, we can provide an appealing, easily understood but rich construct to help our clients evaluate vendors and products accurately — as well as a mechanism that is objective, fair and defensible.

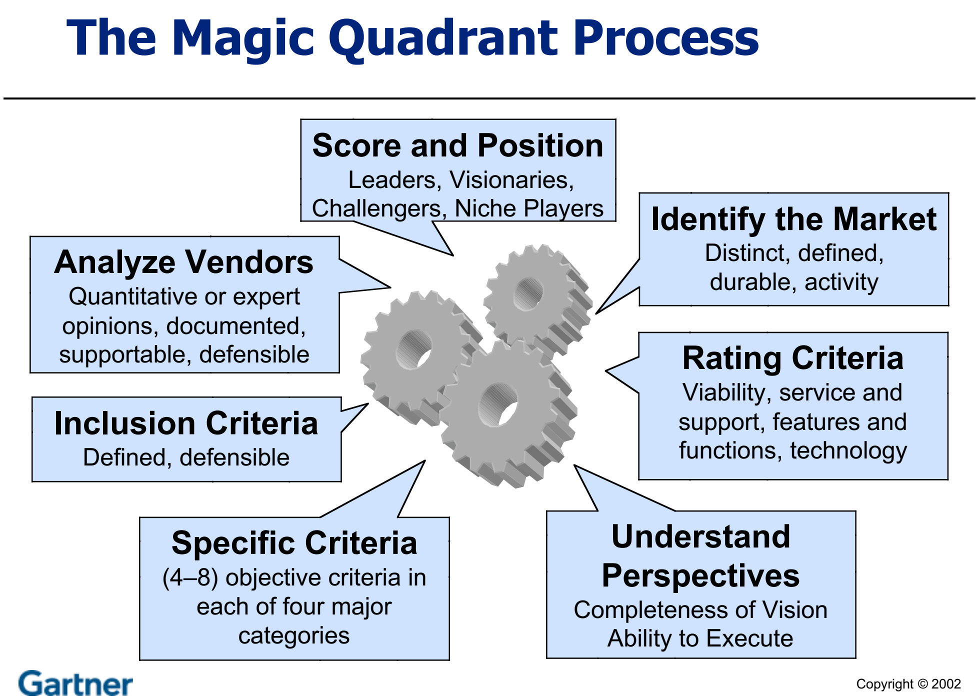
What Do the Quadrants Mean?



The *Vision* axis is a view of how well a company or product will do in the future — in the areas of viability, service/support, features/functionality and technology — based on the Gartner scenario for where a product or market is headed. This view is derived by the iterative process of looking at the “vision” of the vendors in the market segment; listening to clients speak of what they want, need and will buy in this area; and balancing this against business and technology trends. It is the combination of these elements that generates a scenario and future view or vision. The Vision axis becomes a measure of *tomorrow.*

The *Ability-to-Execute* axis is a Gartner view of how well a company or product is doing now, in each of the four areas listed above. This view is driven by the iterative process of looking at how well a vendor is delivering products/services/financial results in a given market segment; listening to clients speak about the vendor/product in terms what is delivered and working; and balancing this against current business and technology realities. The combination of these elements generates a view of how well the vendor/product is doing in a given market area, as well as its overall ability to execute. This axis becomes a measure of *today.*

A Gartner Magic Quadrant should be only *one* piece of information used in a purchasing decision, not the only one.

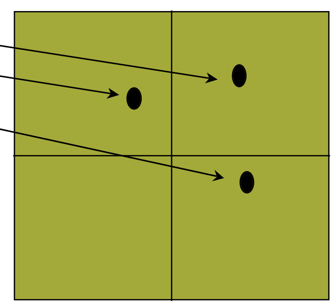


Creating (and maintaining) a Magic Quadrant is an iterative process. To create one, analysts need to define the scope and extent of a market, then evaluate the criteria for success (in a given market segment) against specific market characteristics, using the aforementioned metrics (viability, service/support, features/functionality, technology) for today as well as tomorrow. These characteristics are defined in a hierarchy of the analysts' choosing. Once this hierarchy is created, then analysts review all vendors in this space at specific points in time against all criteria (such as when Magic Quadrants are revised). Values for each metric, and for each vendor, are then ranked using a numerical value that indicates high-to-low values. Clear criteria must be defined for the inclusion (or exclusion) of vendors in the Magic Quadrant. If no change has occurred in the market, the previous values (and players) remain unchanged. There could be as little as eight data points in this process (one for each of the four values for each metric), but no more than 40 are recommended because the rule of diminishing returns comes into effect. Research management imposes guidelines and templates for standardized use across all research areas (for example, in areas of viability and service); and analysts are committed to the creation and maintenance of Magic Quadrants over time (until the Magic Quadrants are retired). The end product and the analysis is left to the analysts and undergoes traditional peer review.

Methodology and Process

A score is determined for each vendor and represents their capabilities, compared to Gartner's criteria for the ideal offering in that market.

Company A
Company B
Company C



	Ability to Execute A/B/C	Vision A/B/C
Viability	9/9/6	9/6/7
Services	8/7/5	7/4/7
Features	7/7/3	6/3/8
Technology	7/6/4	7/4/7
Average	**7.8/7.3/4.5**	**7.3/4.3/7.3**

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Underlying every Magic Quadrant is a very detailed set of analyses, based on the published evaluation criteria for the product or service that is being rated. Magic Quadrants are the result of many meetings between the analysts who cover the market under consideration, and who review each product or service against the evaluation criteria. Note that a quadrant does not rate vendors against *each other*, but rather against the published evaluation criteria. If analysts believe that, to be rated a Leader, a product must have 100 functions, and the best product in the market has only 50, then there will be no vendors in the Leaders quadrant.

Viability looks at the business model (investment, commitment, focus and competence) for the product being evaluated.

Service/support looks at the ability of the vendor (as well as associated partners) to help users install and maintain the product throughout its life cycle, both pre- and post-installation.

Features and functionality is a metric that either defines what a product does or identifies its key non-technology-related characteristics.

Technology examines the nature and characteristics of the product's underlying technology.

Magic Quadrants and Vendor Ratings

- *Magic Quadrants* are about markets and vendor executions within a given market, with respect to a product or set of products/services.
- *Vendor ratings* are about a vendor and its health, capabilities and products/services.
- How vendor ratings relate to Magic Quadrants:
  - Small vendor: strong mapping
  - Big vendor: initiatives that should map, where applicable (such as Oracle Data Warehousing)

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Vendor ratings are different from Magic Quadrants. The latter represent a market (such as the data warehousing DBMS market, business intelligence [BI] suites, customer relationship management [CRM] applications) and our opinion of vendors' perceived relative strengths within that market. Research areas have found that a Magic Quadrant is not representative of their market dynamics; for example, the services markets have a strong dependence on inconsistent local resources. Gartner Dataquest vendor market shares provide data points that show near-term relative penetration of markets. Gartner Research comparison charts provide other data points.

The vendor rating focuses on a vendor as a whole, not just its position within a single market. Additionally, the vendor rating provides actionable advice on specific vendor initiatives (such as products, services, pricing). Clients may use Magic Quadrants and a vendor rating together to get an overall view of a vendor and its position within particular markets.

Goal of Vendor Ratings

- To provide clients with a single, focused source for finding Gartner's bottom line research on a client's (positive and negative) opinion of a given company.

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Gartner's vendor ratings provide clear, concise indicators of each vendor's overall status, and the status of such initiatives as strategy, organization, product(s), technology, marketing, financials and support. By rating vendor strengths and challenges in this manner, Gartner is able to give its clients a single, focused perspective on which they can act. The latest vendor ratings and a full list of included vendors is maintained on www.gartner.com (click on the Vendor Ratings link).

Vendor ratings are not a substitute for traditional in-depth analysis, research or one-on-one discussions. Instead, the rating represents Gartner's overall view of a vendor and its initiatives, much like the financial industry's use of "buy, accumulate, hold and divest" recommendations. The vendor rating methodology may be used to rate vendors overall (as an entire corporation, taking into account financials, organization, management issues, marketing strategies, support) or for specific initiatives (including products, strategies, pricing, go-to-market plans, financial position, marketing plans). Specifically, in the latter case, vendor ratings are based on our assessment of the vendor's vision and execution for a product or service, relative to our analysis of clients' requirements. It is not intended as a comparison relative to competitors in the market.

Gartner's Vendor Ratings

Strong Positive: Solid provider of strategic products, services or solutions. **Customers**: Continue investments. **Potential Customers**: Consider this vendor a strong strategic choice.

Positive: Demonstrates strength in specific areas but is largely opportunistic. **Customers**: Continue incremental investments. **Potential Customers**: Put this vendor on a short list of tactical alternatives.

Promising: Shows potential in specific areas; however, initiative or vendor has not fully evolved or matured. **Customers**: Watch for a change in status and consider scenarios for short- and long-term impact. **Potential Customers**: Plan for and be aware of issues and opportunities related to the evolution and maturity of this initiative or vendor.

Caution: Faces challenges in one or more areas. **Customers**: Understand challenges in relevant areas and begin to assemble contingency exit plans as needed. **Potential Customers**: Note the vendor's challenges as part of due diligence.

Strong Negative: Difficulty responding to problems in multiple areas. **Customers**: Exit immediately. **Potential Customers**: Consider this vendor only if there are no alternatives.

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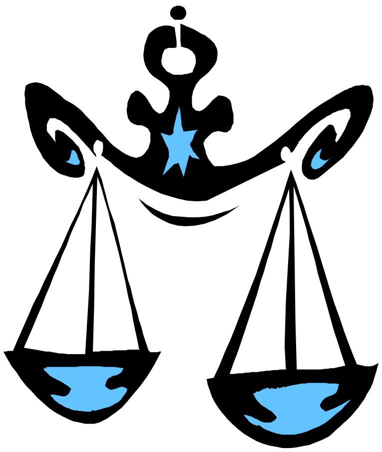
Gartner uses these categories to rate vendors as entities; however, we will also use them to rate different aspects of a vendor, such as strategy, organization, product(s), technology, marketing, financials or support. Vendors with a clear focus, solid products and an advantageous market position may be rated "positive" or "strong positive." Vendors or product lines that lack these qualities may be rated "caution" or "strong negative." Vendors that have potential, but which we believe should be very carefully evaluated, will be rated "promising."

Additionally, vendors rated a "strong negative" will be put on a vendor alert list, while vendors rated a "strong positive" will be put on a vendor opportunity list. These vendors, in particular, will be closely monitored.

Gartner Vendor Ratings

- **Corporate Viability:**
  - Strategy (Required)
  - Marketing (Required)
  - Financial (Required)
  - Organization (Required)
- **Products/Services/Technologies:**
  - Products/Services (Required)
  - Technology (Recommended)
  - Pricing (Recommended)
- **Customer Service/Product Support:**
  - Support (Recommended)
  - Sales/Distribution Channel (Required)



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When rating a vendor overall, Gartner considers the entire organization — not just a single strategy, product line or organizational issue — across three areas: **corporate viability, products/technology** and **customer service/support**. *Strategy:* We look for clarity (goals must be clear, shared and understood at all levels in the organization) and commitment (employees must be committed to the overall strategy). *Marketing:* Tactics should derive from overall strategy, evaluate all markets and realistically approach them to achieve profitable sales. Communications must be consistent and articulate a clear vision. *Financial:* Overall financial position, performance and investment. *Organization:* Structure should reflect strategy for success, with strong leadership, ability to grow and appropriate skills within workforce. *Products/Services:* Offerings should align with strategy, be complete, be supported and well-regarded by customers. Market recognition for quality and clear positioning, the ability to manage assets and deliver consistent performance, and a good track record are important. *Technology:* Is the vendor "proactive" or "reactive" with regard to technology? Is it innovative? Is it tied to specific technologies? Does it use a common architecture? *Pricing:* Is it fair, public, sustainable, clear and reasonable? *Support and Distribution:* Good support is essential. We evaluate client feedback, resources, partnerships, effective use of services to grow the business, and focus and potential channel conflicts.

Which Vendors Get Rated?

- Vendor ratings are like Magic Quadrants, Research Notes and presentations. As such, market changes, client inquiries and research agendas of analysts drive the creation of a vendor rating. Sales contracts, vendor requests and/or SAS engagements do not initiate or drive vendor ratings.
- Vendor ratings are covered under a Gartner copyright. Vendors may not publish, duplicate or copy vendor ratings without specific permission from Gartner vendor relations.
- Vendor ratings are updated based on changes in the market, events and client issues.
- We will rate large vendors and small vendors equally, based on the research agenda of analyst and client inquiries.
- Vendor ratings will include strengths and challenges. Areas of evaluation are to be chosen by the analyst and research community.

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Gartner does not take vendor ratings lightly. In the past, many vendors that were placed on "problem watch" subsequently corrected their problems and were removed from that list; conversely, we have also seen vendors with strong potential falter. A vendor's ratings will be periodically revised to reflect our change in judgment, when a significant internal or external event directly affects the vendor. We encourage enterprises to check www.gartner.com regularly, since we will track market, technological and organizational changes that may impact a vendor. We also urge enterprises to monitor the specific vendor ratings that most affect their businesses.

Example: Siebel's Overall Rating — Positive

VendorRatings

SIEBEL.

Select a Vendor

Overall Rating: Positive as of 11 October 2002

Read Full Ratings Report (.ppt)

Initiative	Rating	Status
Corporate Viability		
Strategy	Positive	No Change
- ESP Support	Strong Positive	No Change
Financial	Strong Positive	No Change
Marketing	Positive	No Change
Organization	Positive	No Change
Product/Services/Technologies		
Product/Service	Positive	No Change
- CRM Application Suite	Positive	No Change
- Marketing Suite	Caution	No Change
- CRM Sales Suite	Strong Positive	No Change
- Customer Service and Support Suite	Positive	No Change
- Field Service Automation	Promising	No Change
Technology	Promising	No Change
- Software Version Control	Positive	No Change
Pricing	Promising	No Change
Customer Service/Product Support		
Sales/Distribution	Promising	No Change

View Ratings Definitions

Lead Analyst
Michael Maoz

Analyst Comments

11 October 2002 **Overall Rating: Positive**
Scott Nelson
Siebel is the leader in CRM market visibility. But through 2004, Siebel's challenge will be to deliver a business process integration solution open to competing technology.
Read Full Ratings Report (.ppt)
(The "Notes Page View" for these slides can be viewed by saving this file to your harddrive and opening it on your desktop)

3 June 2002 **Overall Rating: Positive**
Michael Maoz
Through 2004, Siebel's task will be to deliver a business process integration solution open to competing technology approaches. It is the leader in market visibility, "mind share," marketing strength and independent software vendor partnerships.
Vendor Rating: Siebel Systems
3 June 2002

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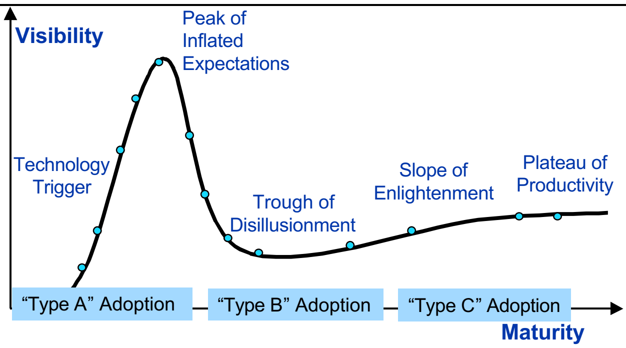
The success of CRM initiatives will continue to depend more on innovative business processes than on leading technologies, yet CRM will not succeed without great technology. Although the most important innovations continue to come from small niche vendors, the large CRM suites will continue to evolve as a backbone on which a business can design and execute a CRM process. Siebel Systems continues to improve its CRM offerings, and although its products have room for improvement in areas such as analytics, marketing automation and field service applications, they continue to outperform major rivals in virtually every industry. Siebel takes a very aggressive functionality approach that exceeds best-of-breed in the areas of partner relationship management, opportunity management systems and CRM sales suites, and Siebel challenges the best in sales configuration systems. The major CRM suite vendors seek to meet the *minimum* standard for most of their CRM modules. Siebel, on the other hand, actively seeks to outdistance both best-of-breed rivals and enterprise resource planning (ERP) vendors.

The Gartner Technology Hype Cycle

Gartner's Hype Cycle helps enterprises decide when to implement emerging technologies. As with all technology investments, there is no simple answer. Business needs and philosophies should determine when it makes sense to invest in a particular new technology.



Enterprises are identified as Type A, Type B and Type C, based on the aggressiveness with which they adopt and use technology, which typically varies by industry:

- **Type A** enterprises are technology-driven and often use immature, cutting-edge technologies to gain an edge.
- **Type B** enterprises are moderate technology adopters, implementing new technologies that have entered the mainstream.
- **Type C** enterprises are technologically risk-averse and are usually among the last to adopt new technologies.

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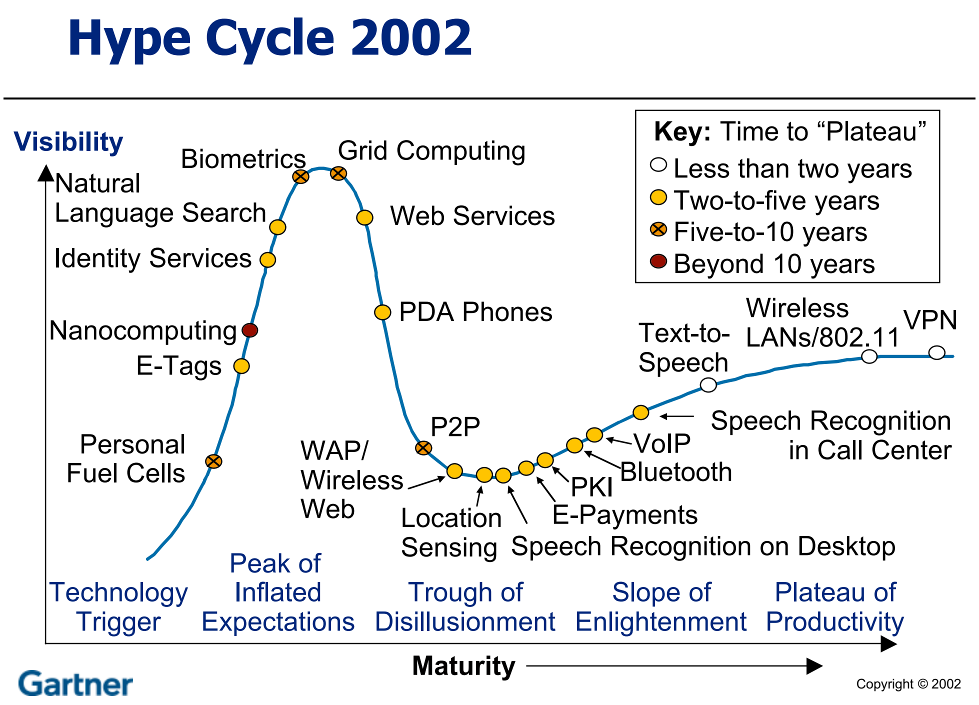
The Gartner Technology Hype Cycle is a construct used to describe (graphically) the stages through which all new technology introductions progress, from conception (Technology Trigger) through a peak of inflated expectations and media-supported hype (Peak of Inflated Expectations) and the inevitable decline that follows (into the Trough of Disillusionment). Some technologies continue to decline, and their path winds toward the x-axis over time. Others find more realistic deployment as their real benefits are established (Slope of Enlightenment) and reach maturity (Plateau of Productivity).

User Organizations: Type A companies compete at the cutting edge of innovation and use IT as a weapon. They tend to be the rarest group. They weigh the risk of the early use of technology against the benefits of competitive advantage. Type B companies compete neither on price nor innovation, but rather on full service and overall value. They represent the largest group and use IT to improve their productivity, product quality and customer service, typically waiting for a technology to become mainstream before considering implementation. Type C companies compete on the thin edge of cost margin or economies of scale, and use IT to help reduce costs. They are the second-largest group. Type C companies will generally lag the market (often by 12-to-24 months), waiting for a technology to become absolutely stable before deployment.

Strategic Imperative: Enterprises must be selectively aggressive in the early adoption of only those technologies that support key business initiatives and market imperatives.

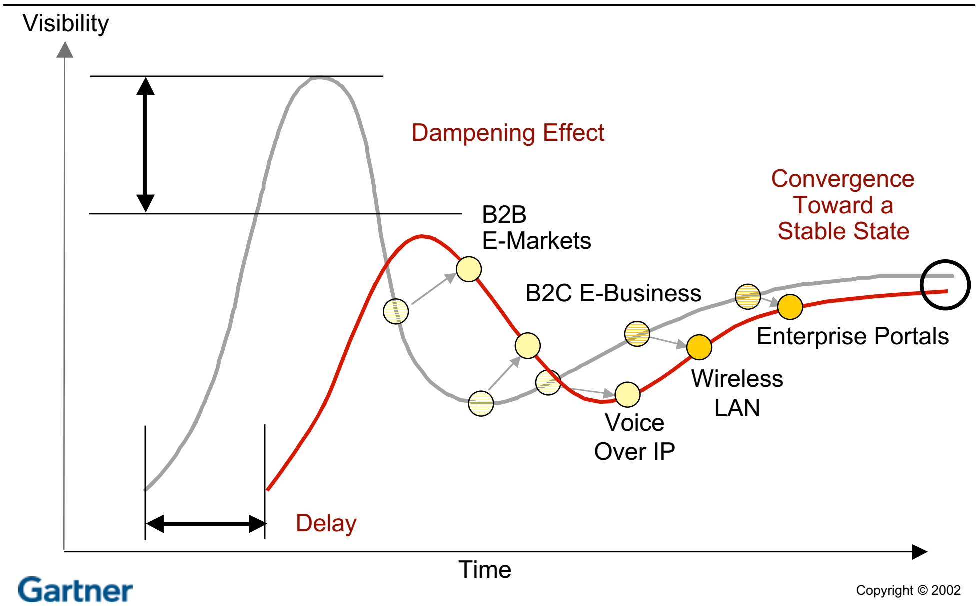


Key Issue: How can technology planners identify the technologies and applications that will generate maximum benefit for their enterprises?

Once an enterprise has decided that an emerging technology will play a role in its future business processes, it must determine the optimal time to invest seriously in the technology. If an enterprise launches its efforts too soon, it will suffer unnecessarily through the painful and expensive lessons associated with deploying an immature technology. If it delays action for too long, it runs the even-greater risk of being left behind by competitors that have succeeded in making the technology work to their advantage. The decision can be eased by understanding the Hype Cycle model of emerging technologies, which Gartner introduced in 1995. The Hype Cycle characterizes the typical progression of a technology, from overenthusiasm through a period of disillusionment (because of the inevitable failures that arise from inappropriate application) to an eventual understanding of the technology's relevance and role.

Action Item: Technology planners should assess the relative impact of a technology and act early for high-impact technologies — no matter what their normal level of technology aggression — while waiting for others to move first on technologies that are less relevant to the core of their business.

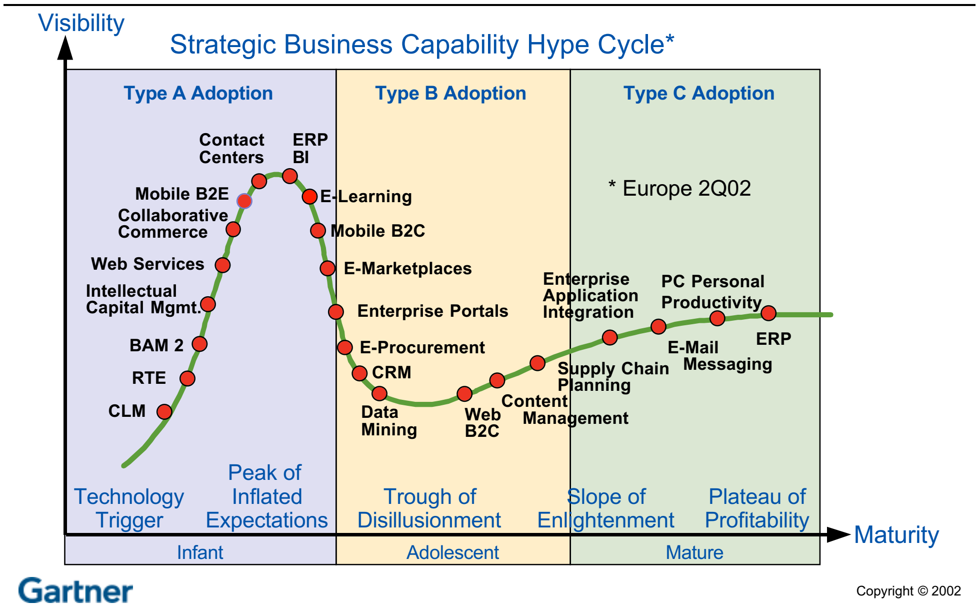
The Regional Hype Cycle



The maturity (time) axis represents both time and knowledge — the more mature the technology is, the more we understand how to use it and what risks are involved. It therefore corresponds (inversely) to risk as well; the further we progress toward the right, the lower the risks involved (and, commensurately, the lower the competitive advantage of deployment).

The inevitable delays that exist across geographies also mean that Hype Cycles vary across geographies, being both delayed and dampened by the transfer and move away from the "home" market. This is a significant issue for regionalized organizations, or for global organizations seeking to implement technologies across their enterprise.

A High-Level Integrated Cycle



During the "gap year" (between mid-2001 and mid-to-late 2002), European enterprises will adjust IT investment behavior and correct inappropriate practices acquired in the years of e-business hype. Instead of solving problems by simply "throwing money at them," there will be an increasing focus on delivering short- to midterm measurable return on investment.

The era of e-business hype (1999 to 2000) artificially skewed enterprise IT investment risk behavior. In particular, many Type B mainstream enterprises were seduced into taking early-adopter Type A investment decisions. This must be corrected if Type B's are to succeed in adopting technology that is appropriate to their needs. Such enterprises should defer or cancel projects based on technologies that are too risky for their natural profiles.

We recommend that enterprises exploit the short-lived economic downturn by stopping some projects and focusing more attention on optimizing those that remain. This will increase the chances of fully delivering a few new strategic business capabilities, ready for the return to growth.

Action Item: 1) Understand your enterprise's attitude toward technology risk. 2) Check your strategic IT investment portfolio against the Gartner Hype Cycle. 3) Tune your portfolio and project management tactics to align deployment progress correctly.

Recommendations

- Understanding *how* Gartner research is carried out and presented is key to using it, to make informed decisions.
- Magic Quadrants, Hype Cycles and vendor ratings are not the single solution to any question. They must *always* be used in conjunction with other research and information to support strategic decisions.
- If in doubt, *ask us!*