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GARTNER'S MAGIC QUADRANT and HYPE CYCLE

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Abstract

The analyst and consultancy company Gartner has developed several diagrams that have become widely used graphic forms and standard tools for evaluation and decision making support in organizations. This case study presents their most famous diagrams, the Magic Quadrant and the Hype Cycle. The magic quadrant is a matrix that synthesizes information about vendors and service providers, while the Hype Cycle summarizes the life cycle status of different technologies in a domain. The case study highlights the benefits and risks of such visualizations, the typical uses and similar forms created by users and competitors. Future possible developments of the diagrams conclude the case study.

This case study has been written in 2008 by Sabrina Bresciani under the supervision of Prof. Martin J. Eppler. It is intended as a basis for class discussion and highlights the innovative use of visualization for business purposes.

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1. Introduction

This case study focuses on two famous and widely used graphics, produced by the analysis and advisory company Gartner. The *Magic Quadrant* is a matrix of information about vendors and service providers: a Magic Quadrant diagram for a specific industry can be purchased from Gartner, and it is typically used in companies to assess potential suppliers, understand the competition or their own positioning.
The *Hype Cycle* is a graphic representation of the maturity, adoption and business application of specific information and communication technologies. Companies buy and use the Hype Cycle graphs to support their decision making regarding IT investments.
Both diagrams have been invented by Gartner and have reached a wide use in corporations. This case study describes each one of the diagrams, their typical use, and also the diffusion that these graphic forms had beyond the company itself, as a testimony of their success. We will also present a formal analysis of the diagrams through the collaborative dimensions of visualization framework. In the next section we present an overview of Gartner.

2. The corporate context of Gartner

"Research is the kernel of Gartner." Bob Knapp, CMO Gartner

Gartner Inc. (Gartner) is the largest research and advisory firm of the information technology industry worldwide. Established in 1979 it currently serves 10,000 organizations in 75 countries. It has 4'000 employees, of which 1'200 are analysts and consultants. The average amount spent by each client is around 18'000 US$. Gartner's headquarters are in Stamford, Connecticut and it is a listed company (NYSE:IT) since 1986, with revenues (2007) of US$ 1.2 Billion. In April 2005 it acquired the META group [1].

Gartner focuses on delivering objective, in-depth analysis and actionable advice to enable clients to make more informed business and technology decisions. Gartner seeks to support CIOs to improve their companies and IT managers to optimize IT infrastructure. Garner Executive Program is the world's largest CIO community with 1'400 CIOs in 30 countries, who receive customized advice and participate in peer exchange opportunities through the membership to the Program. Garner also organizes 74 annual events, being the largest IT conference provider in the world. Major magazines and newspapers such as The Wall Street Journal, The Economist and The Financial Times quote Gartner an average of 70 times every week.
Gartner faces a number of competitors, different ones for its different activities. However, often companies subscribe to more than one research company to get a more balanced view, and Gartner, being the biggest analyst in the IT-sector, is usually selected. As far as research is concerned its main competitor is Forrester. For quantitative market research, its major competitors are the International Data Corporation (IDC) and the Yankee Group. For the consulting domain the competitors include Accenture, Ernst & Young, Boston Consulting Group, McKinsey & Company and others. The measurement branch of Gartner does not have major competitors, apart from Compass.
Gartner also publishes books with Harvard Business School Press and John Wiley & Sons on IT and business topics. Since the beginning of 2006 Gartner is also publishing (on its website) a number of Podcasts, called "Gartner Voice. Podcasts for Business and IT Professionals". It also has numerous Corporate Blogs ranging from the topic of Windows Vista, Future Predictions, Media, Government, Innovation to the Ombudsman Office, where clients can discuss problems and post their comments.

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3. Gartner Magic Quadrant

3.1 Description

The Magic Quadrant is a tool to understand vendors or service providers positioning and expectations [1]: the figure below (Fig. 1) shows a typical example. The two-dimensional graphical framework places vendors of a specific industry sector into a strategic matrix. Gartner analysts use multiple objective and subjective criteria to evaluate individual vendors, presented on two axes: *Ability to Execute* and *Completeness of Vision*. These parameters, expressed graphically, create four quadrants: Leaders, Challengers, Visionaries and Niche Players. The result of the analysis shows the ability of the vendor to provide services in relation to competitors, and what to expect for the future. A magic quadrant can be seen as a visual strategic planning assumption. Strategic assumptions designate qualified predictions about an industry's future development. Quoting Soejarto and Hostmann [2]:

> *The Magic Quadrant is a graphical representation of a marketplace at and for a specific time period. It depicts Gartner's analysis of how certain vendors measure against criteria for that marketplace.*

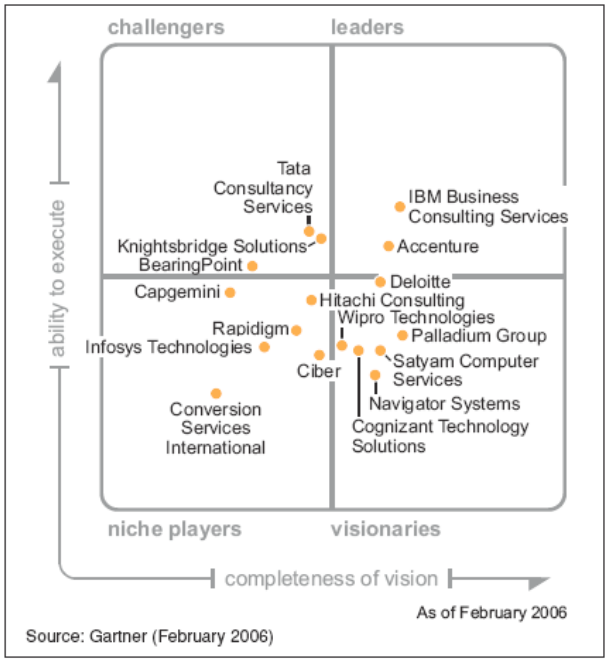

Figure 1. The Magic Quadrant

The Magic Quadrant is intended as a research tool and not as a guide to action. Gartner points out that they are not advising clients to focus only on the *Leaders* category or reject the *Niche Players*, because in certain situations the latter's products can be a more appropriate tactical choice [3]. The magic quadrant is a snapshot of a current situation.

The parameters that define the diagram axes are evaluated by a series of elements, as shown in Table 1. In particular, *Ability to Execute* represents the vendor's ability to execute its vision, i.e. the vendors' financial stability, the depth and breadth of services offered, the ability to satisfy clients needs, the installed product base in the market, service and support reputation. The *Completeness of Vision* represents a vendor's strategic vision, measuring its knowledge of the market, of key market trends and of customers, the allocation of resources and skill building, the investment in R&D, the quality of methodologies, alliances and partnerships.

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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, skills, etc., whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the sub-criteria
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 of the individual business unit to continue investing in the product, to continue offering the product and to 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 in order 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, 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.
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 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 Web site, advertising, customer programs and positioning statements
Sales Strategy	The strategy for selling product 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 set 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 verticals
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

Table 1. Magic Quadrant evaluation criteria [1]

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Analyzed companies that perform well in ability to execute and have high completeness of vision are labelled *Leaders* (top-right quadrant): these vendors not only meet the current demands of the market, but also demonstrate vision to sustain their position. They normally have a high visibility on the market and satisfied customers, but they could be unsuccessful in meeting highly specialized needs of specific segments.

Challengers are vendors that have high ability to execute but lower completeness of vision (top-left quadrant). They normally have the necessary scale and financial resources, but lack innovation and a prospective understanding of the market.

Companies in the bottom-right quadrant are labelled *Visionaries*: they do not have strong ability to execute but have a complete vision of the market. They often introduce innovation of products or techniques, but they may lack financial strength.

The last quadrant, bottom-left, is labelled *Niche players* and includes vendors that have a limited ability to execute and do not have a broad vision. Typically these vendors are new entrants or are focused only on a geographic region or industry fragment.

Development

Following the acquisition of META group in April 2005, Gartner announced the enhancement of the Magic Quadrant research methodologies and processes. A team of analysts reviewed Gartner and META Group analysis tools and developed new tools and templates, reflecting the best practices from each company. One of the introduced innovations in the new version of the Magic Quadrant, is that it allows to click interactively on the vendor pins to get more information.

To sustain the success of its frameworks, Gartner created a specific brand for the Magic Quadrant and its other well-know products, as showed in figure 2.

Figure 2. Magic Quadrants logo [1]

Target group and degree of diffusion

The typical users of Gartner Magic Quadrant are managers, IT managers and CIOs in corporations, government agencies, technology companies as well as the investment community. The diagram is used to understand where a company is positioned with respect to its competition, to see the trends for the future, to support or validate investment plans, and finally to take strategic decisions. It is mainly purchased by medium or large corporations. Possibly no other company has introduced such a persuasive and successful visualization: the Magic Quadrant is widely used, but also copied and applied to various other fields. It is typically used in companies when facing a major decision, as Gartner research is considered as a reliable source on which to base decisions for future investments and the Magic Quadrant offers a quick and easy to understand framework for discussion.

Examples

Below are various examples of Magic Quadrants in order to explain how the format is used and how it works. Figure 3 represents a Magic Quadrant developed in 2006 for Unified Communications (Fig. 3). Gartner defines unified communications as products that enhance individual, workgroup, and organizational productivity by enabling and facilitating the control, management, integration and use of multiple enterprise communication methods. The *Ability to Execute* is defined as having good products' quality and efficacy that enhance individual and enterprise communication. The *Completeness of Vision* is the ability to articulate

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logical statements about current and future market direction, innovation, customer needs and competitive forces.

Looking at the diagram, in the *Leaders* quadrant, we find the most well-known ITC companies such as Microsoft and Cisco Systems: these companies offer comprehensive and integrated products that address a range of market needs. In addition, they have clear evolution plans for their products. In the *Challengers* quadrant we find products that are not fully mature, but have the potential to improve. It is interesting to notice that IBM is positioned in this quadrant. In the *Niche Players* quadrant we find companies like NEC and Ericsson: these vendors offer individual, stand-alone components, but do not have a consolidated product yet. Finally, in the *Visionary* quadrant we find players that have a clear understanding of the market, but have limited ability to execute across the entire set of communication requirements.

In this diagram we find a very even distribution of companies, but this is not always the case, as it can be observed in the example of CRM External Service Providers (Fig. 4).

Figure 3. Unified Communications Magic Quadrant

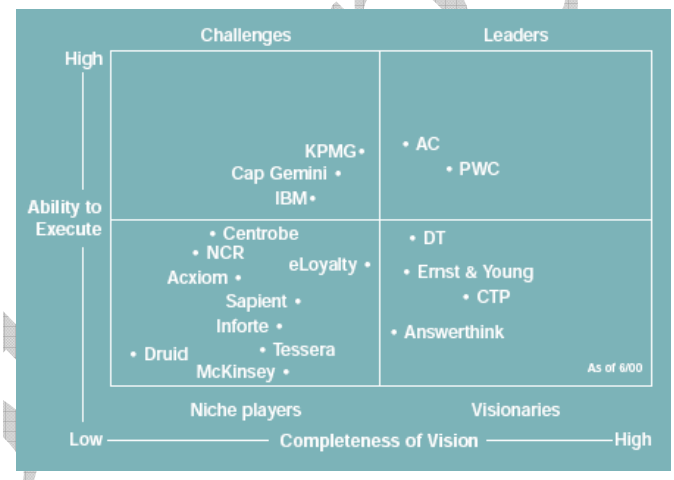

Figure 4. CRM External Service Providers Magic Quadrant

Customers' point of view

One typical use of the Gartner Magic Quadrant is in groups of 6-8 people: the Magic Quadrant is projected or presented inside Power Point presentations. There is no interaction with the diagram, just observation and a conversation around it.

The motivation for using the Magic Quadrant is to legitimate decisions, for example to justify the substitution of a software package, to support decisions and to validate an argument. In the opinion of some interviewed Magic Quadrant users, it has the advantage to be "useful and compact", but with the drawback to seem more objective than it actually is; it seems "statistically proven", there is no argumentation around it because it is considered as the truth. In the words of one IT manager: "It's easy to judge because it's so immediate, but it can lead to rather dangerous conclusions."

3.2 Imitations and similar forms

The extensive diffusion of Gartner's Magic Quadrant can be illustrated by the large number of imitations and similar forms that have been developed over the last years. Forrester's Wave™ (Fig. 5) is probably the most

similar visualization, as the two axes of the diagram track nearly the same data: *Current Offering* corresponds to the Magic Quadrant's *Ability to Execute*, and *Strategy* corresponds to *Completeness of Vision.* It is interesting to notice, however, that the Forrester diagram has a third dimension, represented by the size of the circle representing the companies, corresponding to their market presence. The biggest difference between the two diagrams is that Gartner divides the diagram into quadrants, whereas Forrester's Waves have a different grouping schema (Fig. 6). The companies on the top right and on the bottom left section of the diagram are grouped together on both diagrams, while the remaining ones are aggregated differently. The top right quadrant is also named *leader* in both visualizations.

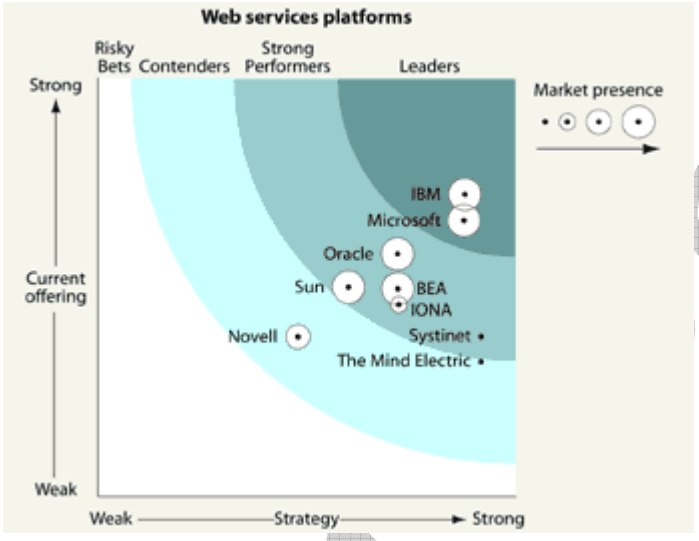

Figure 5. Forrester's Wave [5]

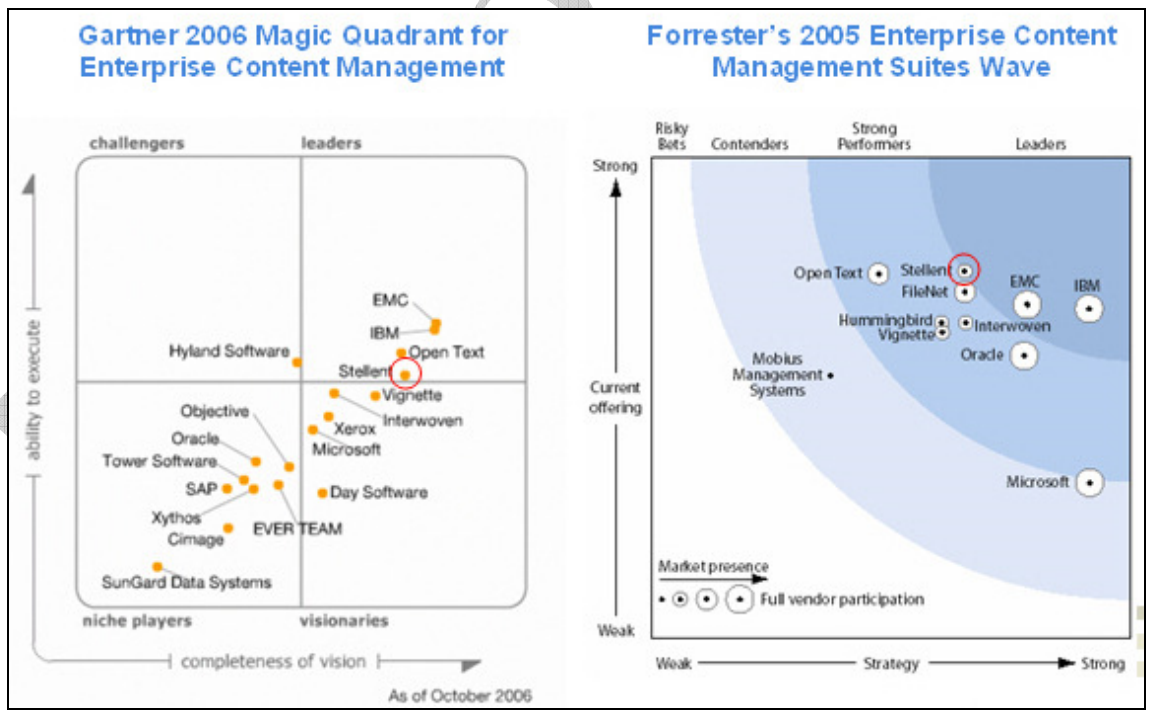

Figure 6. Comparison of Gartner Magic Quadrant and Forrester's Wave

Gartner Magic Quadrant is such a popular diagram that people around the globe have generated a number of unofficial imitations and similar forms and share them mainly through the Web, in particular in Blogs.

Some authors have created their own Magic Quadrant versions, such as Toby Ward, who also changed the axes of the matrix slightly and published a variation of the diagram in his blog [6]. Some users have even proposed improved versions of the original Magic Quadrant. Vincent McBurney (a consultant) superimposed the Magic Quadrant for two subsequent years, and thus tracked the evolution of the firms. He also added the color dimension, using the convention of green for companies who have improved their positioning, and red for those who have dropped. In the example below, the darker circles show a firm's 2005 position, while the light dots refer to the 2006 position (Fig. 7).

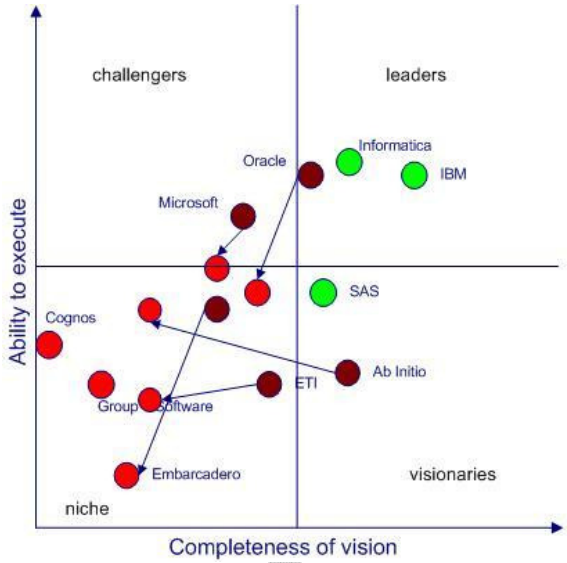

Figure 7. Magic Quadrant improvement [7]

Other users are more critical toward the widespread interpretation of the diagram: Andreas Bitterer, co-author of an article published by Gartner, explains in his blog how the Magic Quadrant is often (mis-) interpreted, through an ad-hoc example that he created about the car market (Fig. 8).

Figure 8. Magic Quadrant imitation [8]

> *"Does this quadrant answer the question which car to buy? If every potential car buyer would base the decision solely on positions on a graphic, we'd all be driving the same car. The fact that we are not, shows that there are vendors for different requirements, budgets, use cases, etc. The same applies for every software market (…)."* [8]

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3.3 Evaluation: benefits and risks

Evaluating the Magic Quadrant format with the use of the collaborative dimensions [10] leads to the following profile (Fig. 9):

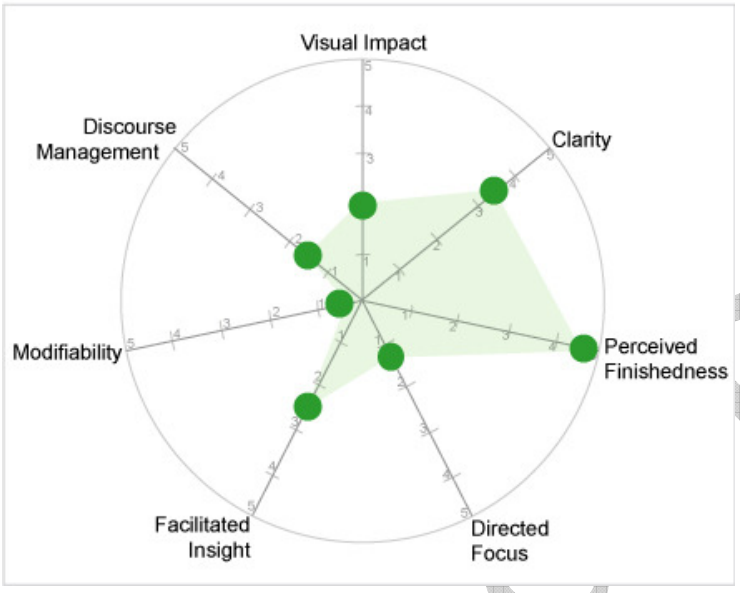

Figure 9. Collaborative Dimensions Framework of the Magic Quadrant

The Magic Quadrant diagram is characterized by a rather high clarity and a not very strong visual impact: this translates into a highly functional visualization, without any distracting decoration. It presents extremely high perceived finishedness, meaning that the users perceive this diagram as highly polished and definitive. In fact, from our interviews with users of the diagram, it emerged that it is rarely questioned. This perception is supported by the fact that the Magic Quadrant cannot be modified and therefore does not give the affordance to the users to modify or question it. This could be risky because Gartner's analysis is often considered by professionals as the unquestionable truth, while it is actually only a very structured, somewhat subjective evaluation. Gartner's Magic Quadrant, even in its digital (Flash) form, does not allow for any modifications, not even writing notes on it, or to highlight certain parts (low directed focus and low discourse management). Therefore the Magic Quadrant offers low support for group discussion and collaboration.

The diagram has several advantages, for instance it is easy to understand at first sight, it presents a condensed form of information without overloading the reader, it provides a good basis for comparison (between the various firms analyzed) and it allows to have both the big picture of the industry situation, and to focus on the situation of a particular area (as for example, niche players).

By contrast, the main disadvantage of the Magic Quadrant is its very high perceived finishedness that makes it appear extremely reliable. Secondly, it does not provide an adequate support for group discussion around the diagram.

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4. Hype cycle

4.1 Description

Hype Cycles offer a snapshot of the relative maturity of technologies, IT methodologies and management disciplines. They highlight overhyped areas against those that are high impact, estimate how long technologies and trends will take to reach maturity, and help organizations decide when to adopt [11].

Gartner's Hype Cycle (Fig. 10), introduced in 1995, characterizes the typical progression of an emerging technology, from over-enthusiasm through a period of disillusionment to an eventual understanding of the technology's relevance and role in a market or domain. It has a simple and clear message: companies should not invest in a technology just because it is being hyped, nor should they ignore a technology just because it is not living up to early over-expectations.

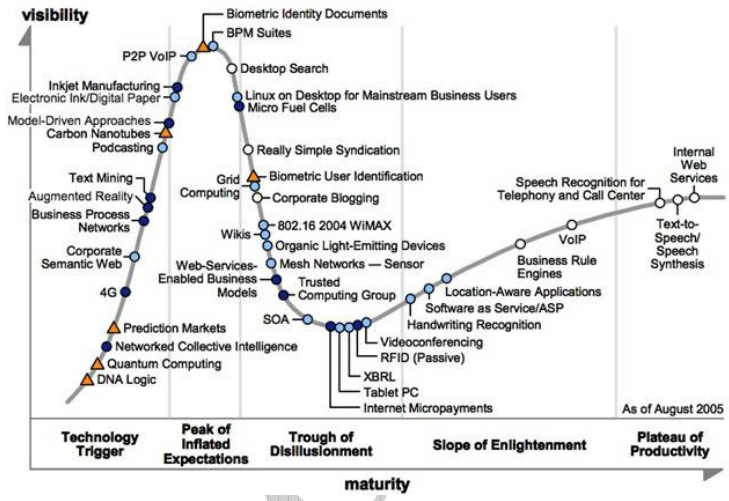

Figure 10. A Gartner Hype Cycle

Gartner explains [11] that its analysts position technologies on the Hype Cycle based on a consensus assessment of hype and maturity. During the first part of the Hype Cycle, when there are many uncertainties regarding a technology, its position on the hype cycle is guided more by its hype levels than its perceived maturity. At the later stages, as more information about maturity, performance and adoption becomes available, hype plays a lesser role in determining the technology's position on the Hype Cycle.

Technologies do not move at a uniform speed through the Hype Cycle. To represent the varying speeds, all technologies on the Hype Cycle are assigned to a category representing how long they will take to reach the Plateau of Productivity from their current position on the Hype Cycle — that is, how far they are from the start of mainstream adoption (triangle icon, colored or empty circles).

Hype Cycles enable technology planners to compare their understanding of technologies' evolution against Gartner's analysis of the technologies' maturity in order to decide when to invest in a technology. If a company 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 Hype Cycle thus states: enterprises should not invest in a technology just because it is being hyped, nor should they ignore a technology just because it is not living up to early over-expectations. Rather, they should be selectively aggressive and move early with technologies that are potentially beneficial to their business. For technologies that are of lower impact, organizations can let others learn the hard lessons,

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putting off their own adoption until the technology is more mature [11]. Below is a description of the five phases of the cycle in more detail.

The five phases of a Hype Cycle

Gartner writes [11] that each Hype Cycle is characterized by the following five phases:

1. "*Technology Trigger":* the first phase of a Hype Cycle is the "technology trigger" or breakthrough, product launch or other event that generates significant press coverage and interest.
2. "*Peak of Inflated Expectations*": in the next phase, a frenzy of publicity typically generates over-enthusiasm and unrealistic expectations. There may be some successful applications of a technology, but there are typically more failures.
3. "*Trough of Disillusionment*": technologies enter the "trough of disillusionment" because they fail to meet expectations and quickly become unfashionable. Consequently, the press usually abandons the topic and the technology.
4. "*Slope of Enlightenment*": although the press may have stopped covering the technology, some businesses continue through the "slope of enlightenment" and experiment to understand the benefits and practical application of the technology.
5. "*Plateau of Productivity*": a technology reaches the "plateau of productivity" as the benefits of it become widely demonstrated and accepted. The technology becomes increasingly stable and evolves in second and third generations. The final height of the plateau varies according to whether the technology is broadly applicable or benefits only a niche market.

The Hype Cycle ends at the Plateau of Productivity, where mainstream adoption of the technology surges.

Gartner research [12] differentiates between three different speeds of the technologies development along the cycle. For visualization purposes, these different speeds have been normalized so they will all fit in one Hype Cycle graphic, and they are represented by different colors and graphic symbols on the cycle.

"Fast-Track" technologies will mature within two to four years. These technologies are often adopted without much fanfare, catching many companies unprepared for their sudden maturity and applicability. Examples include instant messaging, SMS, USB.

"Normal" technologies with relatively few inhibitors usually traverse the cycle in five to eight years.

"Long-Fuse" technologies may take one or two decades to traverse the Hype Cycle. Examples include e-mail, the Internet, and nanotechnology. Indicators: A "science fiction" style fascination with potential applications of the technology, far ahead of its capabilities. Examples include artificial intelligence, nanocomputing and speech recognition. They rely on a new infrastructure (known as an ecosystem) that will take time to evolve.

Development

Since 1995, Gartner has used Hype Cycles to characterize the over-enthusiasm or "hype" and subsequent disappointment that typically happens with the introduction of new technologies.

Jackie Fenn, inventor of the Hype Cycle stated in an interview: "The hype cycle was started as a single Gartner research note I published in 1995, making the observation that technologies tend to follow this cycle of over-enthusiasm and disillusionment, prior to a deeper understanding of where they really apply. I added some examples of technologies on to the chart to illustrate the point. The following year, I started getting requests from clients to "update" the hype cycle with the current year's emerging technologies, which I did, and it became an annual event. In parallel, other analysts within Gartner started using it to drill down into specific sub-domains, for example a mobile and wireless hype cycle, or a security hype cycle. It was also applied to track the progress of a single technology or trend through the hype cycle over time. More recently, we have started to address hype cycles in a more consistent way and are currently putting together our

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second "Hype Cycle special report" which creates about 40 hype cycles from across Gartner's IT and business coverage."

Jackie Fenn and Alex Linden now lead a team of over 100 analysts: they select and analyze more than 500 technologies from technical, business application and industry vertical perspectives to produce a series of Hype Cycles.
Like for the Magic Quadrants, Gartner has developed a specific product brand (Fig. 11) for the Hype Cycles.

Figure 11. The Hype Cycles logo [1]

Behind the Hype Cycle
Gartner asserts [11] that, in looking at the rationale for the Hype Cycle, it becomes clear that the cycle is not so much about technology as it is about human attitudes toward innovation. The same Hype Cycle applies to new business models and management approaches, and to consumer phenomena such as rising movie or music stars. Investors are intensely aware of the hype effect as a new company gains popularity and visibility.
As with other subjective metrics such as stock prices, part of the public's perception of the value of a technology comes from pure speculation or promise (that is, the benefit that people feel the technology might someday deliver), and part comes from the real engineering or business maturity as perceived in the form of real experiences. Both factors evolve over time (Fig. 12).

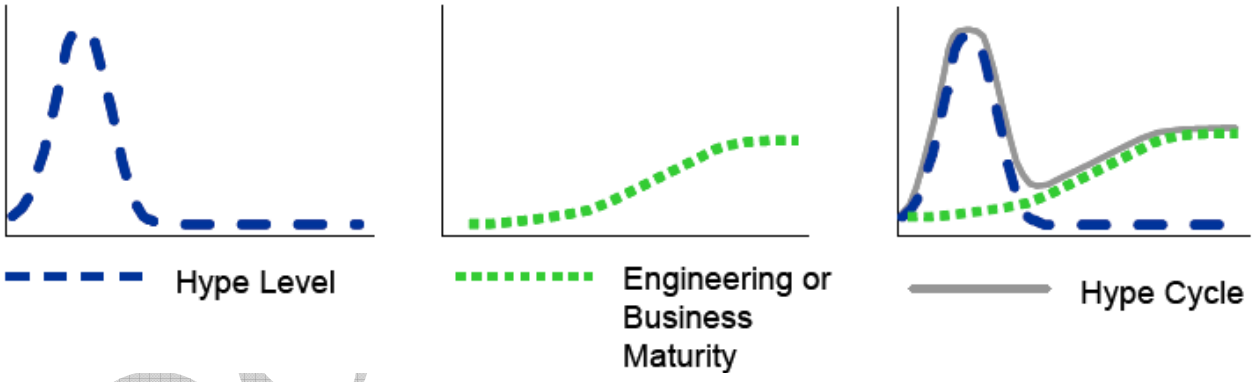

Figure 12. Components of the Hype Cycle [11]

Excitement is a psychological factor that occurs in a rush, rises to a peak and eventually dies down, while real maturity (for example of a product) builds slowly via development and use. Normally, there is a handoff from potential to maturity, as real experience takes the place of speculation as the primary determinant of the public mind-set. Combining the two curves yields the Hype Cycle, with the hype preceding real capability, resulting in the phases of expectation, disillusionment and maturation (The observation that hype precedes maturity has been noted by Howard Fosdick and others) [11].

Target group and degree of diffusion
Hype Cycles are typically used in managerial meetings, to support decisions on IT investments. The diagram is projected (Fig.13) and the discussion revolves around it, similarly to the Magic Quadrant.
A Hype Cycle report is about 30-40 pages and costs around US$ 1'995 for non-subscribers. It is widely used in large corporations to support strategic decision making around technological investments. It is mainly

used by IT teams and by top management as a basis for their decision on the adoption (and timing) of specific technologies, and to avoid the potential dangers of the adoption of over-hyped IT solutions.

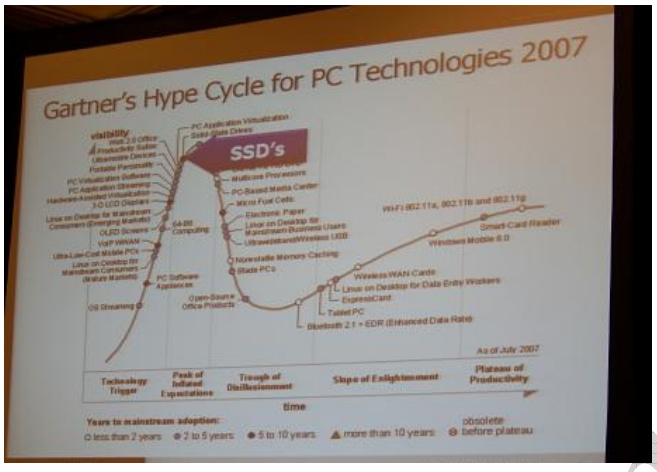

Figure 13. Typical use of the Hype Cycle in organizations

Rousselle [12] underlines that the Hype Cycle demonstrates how human attitudes - not just economic factors - affect technology evolution. It shows how variables such as excitement and frustration are particularly relevant to the investor community. Investment decisions are, at least in part, based on the amount of interest generated in the market. Hype Cycles also indicate how fast investors can expect technologies to move through the Hype Cycle. The main added value is that the "Hype Cycles help investors put the claims into perspective".

The most influential Hype Cycle was the E-Business-Hype Cycle created by Alex Drobik in fall 1999 that predicted the burst of the dot-com bubble in spring 2000.

Examples

The Hype cycle has evolved in its graphic form, including an always growing number of mapped information. Figure 14 represents a version of 1995, with a limited number (10) of analyzed technologies.

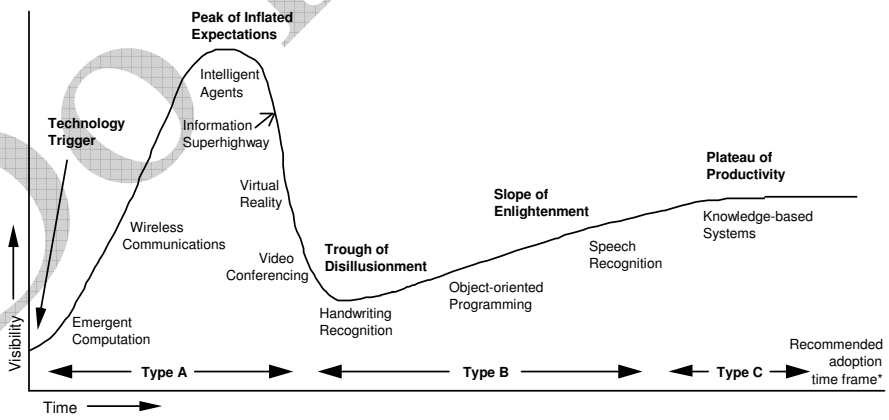

Figure 14. A technology Hype cycle of 1995 [13]

In the version of 2004 (Fig. 15) the diagram has been improved by adding a new piece of information regarding the speed of each technology to reach the plateau of productivity (color coded) and by using a more elaborate graphic style.

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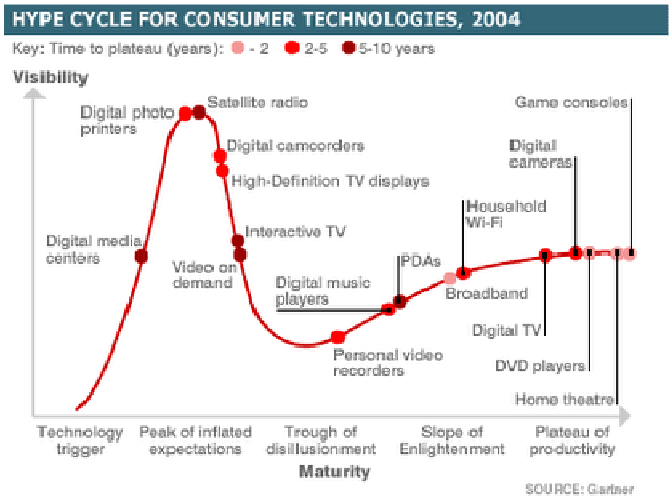

Figure 15. Hype Cycle for Consumer Technologies, 2004 [1]

Finally the latest version of the Hype Cycle (Fig. 16) includes a number of improvements and additions. It analyzes a larger number of technologies (44), therefore allowing to have four times more information than the original version. It also incorporates five timeframes for the speed to reach the plateau, including the option that a technology becomes obsolete before reaching the productivity phase. Moreover, the visual appearance has been improved by adding gray lines as a visual aid to identify the five phases of maturity.
From the three diagrams we can also see how some technologies move in the curve faster than others: for example wireless communication was located at the beginning of the hype curve in 1995 (Fig. 14), but in 2004 it already reached the *slope of enlightenment* (Fig. 15). Conversely, video conferencing was positioned in the *trough of disillusionment* in 1995 (Fig. 14) and remains in the same phase after ten years (Fig. 16).

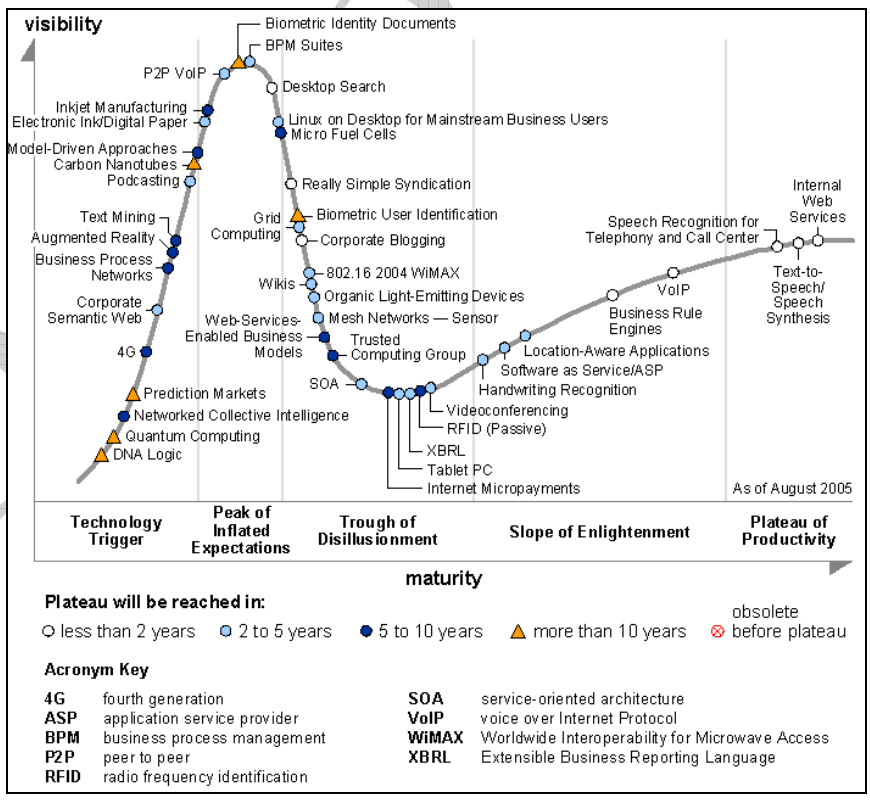

Figure 16. Hype Cycle 2005 [1]

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4.1 Imitations and similar forms

Jackie Fenn [14] says that "it seems to be a graphical representation which resonates with people, and applies to human attitudes beyond just technology. Although many of Gartner's Hype Cycles are focused on specific technologies, the same pattern of hype and disillusionment applies to higher-level concepts such as IT methodologies and management disciplines. A client even commented 'Hey, that describes my personal relationships exactly!'."

Also for the Hype Cycle several imitations and modifications have been produced by users. Some have used the concept of the Hype Cycle to illustrate their knowledge on specific topics, such as the Social Network Hype Cycle (Fig. 17) by Fred Cavazza (Internet expert and authors of several blog on the web latest trends), and the Indian Hype cycle by Kaushik Gala (Fig. 18).

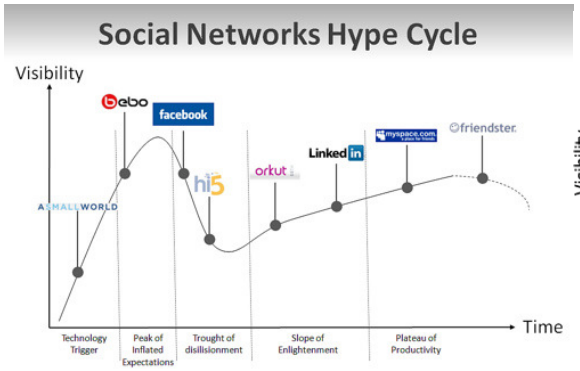

Figure 17. The Social Network Hype cycle [15]

Figure 18. The Indian Hype Cycle [16]

Some users have also proposed improved versions: for example Hugo E. Martin, a consultant, produced a Hype Cycle with arrows pointing to the technologies under discussion (Fig. 19) in order to direct the focus of the readers. Conversely, the blog "about: things" offers an ironic modification of the diagram, depicting a Second Life Hype Cycle (Fig. 20), with an additional path that does not reach the productivity phase, but rather goes out of visibility, ironically below the zero level, to emphasize the negative future for this application.

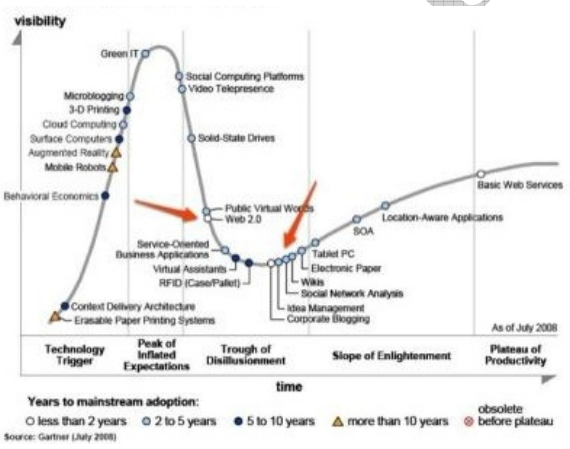

Figure 19. Modified Hype Cycle with directed focus [17]

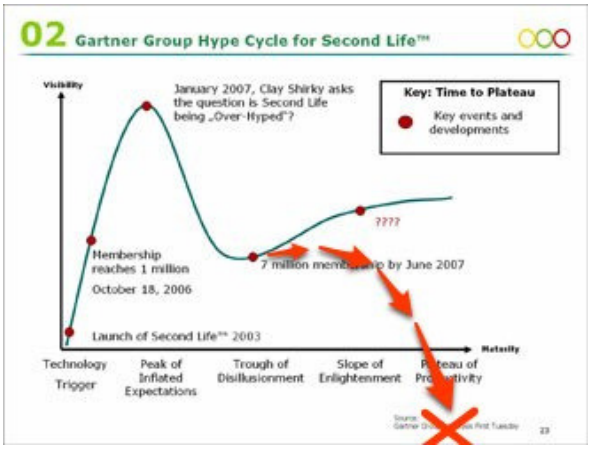

Figure 20. Second Life ironic Hype Cycle [18]

Nick Denton [19] goes further and proposes a "New Hype Cycle" (Fig. 21) with three curves denoting different possible trajectories of development that do not always lead to productivity. He explains that "some ventures, such as Google, expand so fast that they outrace any backlash [Unstoppable]; some, like Open

Table, spend years out of favor before coming good [Back from the dead]; and some, such as Linden Lab's Second Life, will almost certainly never live up the initial hype [Flameout].”

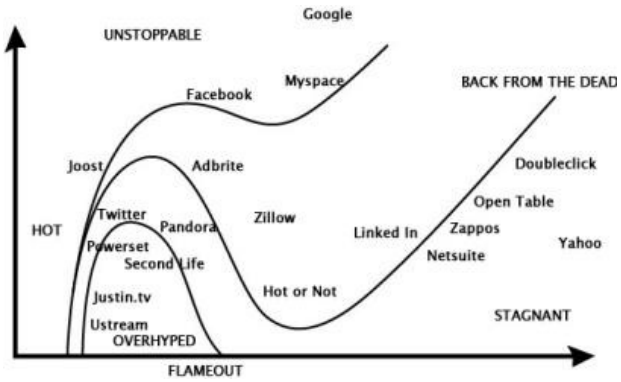

Figure 21. The “New Hype cycle” by Nick Denton [19]

4.3 Evaluation: benefits and risks

The Hype Cycle shows a rather large amount of information in a condensed graphic form. From a first look at the diagram it is possible to gain an overview on the status of several technologies. From a closer look, it shows more detailed information about the relative positioning (easily allowing comparison) and the timeframe of each technology to reach the productivity phase. The insights offered by this visualization are numerous (as it presents a large amount of information in a limited space), but as a trade-off [20] the clarity is rather poor: more information leads to more time to understand the visualization, but also to more accurate information. The other collaborative dimensions of the framework (Fig. 22) are very similar to the previously considered Magic Quadrant. The visual impact of the visualization is medium, while its perceived finishedness is extremely high, therefore appearing as a highly polished final product. Directed focus is low because all the analyzed technologies have the same visual relevance: as we have seen from the previous section, some users have improved the Hype Cycle by adding arrows that point to the technology under discussion (directed focus). This has to be done through a graphic software, because the Gartner’s diagram itself does not offer any support for modifiability and discourse management. As a consequence it is difficult for managers to keep track of the discussion that is typically involved in IT decision making supported by the Hype Cycle.

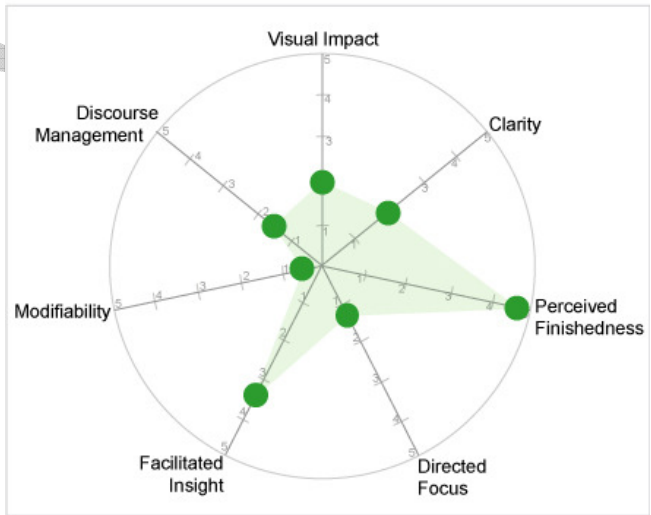

Figure 22. Collaborative Dimensions Framework of the Hype Cycle

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5. Conclusions

As IT executives are more and more under pressure to make complex investments decisions quickly, they need high quality, clear and immediate tools that help them to take such decisions. In this case study, we have seen two success stories of visualizations that support strategic decision making in organizations. We have analyzed their typical use and their functionalities. We have also highlighted the main advantages and disadvantages of such visualizations. Future development of Gartner's visualizations, in order to be up to date with the general trend on collaboration and online meetings in organizations, might include improvements to the Magic Quadrant and to the Hype Curve, for example by making the diagrams more suitable for (virtual) group discussion and collaboration in general.

Case Questions

1. What is the added value of these diagrams? What do you think are their main characteristics that make them so widely accepted and used?

2. What are the risks inherent in these two visualizations?

3. Have the visual dimensions been chosen judiciously (size, color, shape, position, density, etc.)?

4. Choose either the Magic Quadrant or the Hype Cycle and discuss the following questions:
How can the diagram be made more collaborative? Which features should be added in order to support virtual (online) group discussions? Please propose an improvement of the visualization in order to support group decision making.

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