Towards Global Assessment of Innovative Projects: The MagicEye Method*

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Abstract

This article and its associated "MagicEye" tool describe a method for assessing the value of a collective project, for instance a running partners based project or proposal, a R&D program or any socio-economic dynamics that behaves as an identifiable system owned by stakeholders. The value is analyzed in a cohesive, multi-dimensional way and the cohesion is obtained from the inherent structural polarization of the dimensions to be analyzed. Gauging scales enable the quantification of the assessment, hence the possibility to compare such collective projects between themselves. Beyond the immediate analytical observations and comparisons obtained, this method is unique in bringing a "gestalt-mapping" that enhances the global value of a complex, multi-faceted project under observation, and hence enables a decision process at a high level, without having to resort to exclusively analytical methods.

Keywords: Futures science, predictive analysis, global, structure, complexity sciences, cultural pattern scheme, consciousness, aesthetics, knowledge representation, meaning, form, psychodynamics, Gestalt-theory, Leonardo da Vinci (thought processes of), symbolic thinking. Innovative projects, project value, evaluation methods, proposals assessment, problem solving, decision making, European funded R&D projects, proposals, projects structure, quality, assessing complex projects.

Introduction: What's in the Method?

The primary context of this paper is to focus on some of the leadership challenges that innovation project managers and their teams face as they work collaboratively. In particular as they strive to impact their environments in time, having new results to exploit effectively and preferred futures to safeguard.

As an early version of the *MagicEye* method was originally conceived by the author in 1993, a reference document "Introducing the MagicEye Method: The Way towards Global Evaluation of R&D Ideas" was first released and used at experts meetings at the European Commission in the same year. After repeated observations of successes and failures in European funded R&D projects dealing with innovative software and their relative merits (Corsi, 2000), the Method has been further and extensively used for assessing complex projects and ideas in high technology fields since then. After some training and practice, it can be articulated by practitioners for reflecting the value that perspires through innovative projects.

What's in a MagicEye diagram?

We will first explain the foundations of this cognitive method, which is based on simple principles from Gestalt (Brett King, 2005) and on symbolic levels of knowledge representations. However, we take a broader view and are not limited to cognitive rationalizations: it is the whole field of psychodynamics that can be brought into the experience and cognition is only one aspect, the others being notions that can less be measurable under common scales and value systems, such as management style or human behaviour. Pretty much in a move to reunite the two complementary (scientific and artistic) sides of the brain, which effect is to empower the experimenter to witness a sort of Intelligence Amplifier.

One source for our inspiration was the legacy work of universal genius Leonardo da Vinci (1452-1518) which has been studied for five centuries and in which interest seems to grow over time. Yet, while a few recent investigations studied the "*mind of Leonardo*" such as Galluzzi (2006) they showed how difficult it is not to follow the traditional scholarly narrative, compilation or extensive catalogue-based approaches.

However, right from the beginning of our investigation we decisively departed from compilation based investigations and rather engaged a methodological line. To put it simply and sketchily, we viewed Leonardo as a unique genuine multidimensional thinker capable of visualizing and transforming inherently complex realms into the only available 2D worlds in an immersive and global way. To be so vastly contents-oriented and at the same time crisscrossing an array of disciplines simultaneously, he must also have been ahead *method-wise*. Leonardo was genuinely multi-faceted, non reducible to any of the single human work dimensions he has nevertheless touched upon. Scholars unfortunately so far tended to study the dimensional projections of his work and not the "hyper planes" that he seems proposing.

What is it about?

There is nothing magic in a MagicEye diagram. To see what it is about first, let's take an example: the assessment of a R&D proposal in the framework of a European

funded project, which supposes a consortium of actors – this is a usual term designing a formal group of laboratories, companies, universities or other players - with a joint commitment. Originally, the MagicEye diagram was fully based on the assessable items of the main evaluation form for such proposals. While it never replaced the standard evaluation method, it was tested in parallel to it about 700 times through the first years, through stable, week-long appointed evaluation teams composed of 6 to 9 evaluators covering topical fields of technological and managerial expertise and business experience. After evaluating a proposal, the score reached by a given proposal on each of the assessed items was marked from 1 to 5, as required by evaluation forms. Eight resulting dots were radially spread in as many directions along four axes and were then linked to obtain a form of radar-shaped figure, which was then subjected to interpretation.

What is it for?

The purpose of drawing such a diagram is to enhance a global view of a given proposal assessment. The MagicEye diagram goes however further: it organizes the items under evaluation so to make a global and faithful picture emerge that reflects the proposal assessment. In turn, it provides a sharable mean for reporting about projects. It is anticipated such a diagram can help in tracing back the main lines of the contents of the evaluation relative to the proposal. By widening its use, we get to a more global level of perception of complex entities and systems evolving within a contextual ecosystem and which behavior cannot be reduced to the analysis of their structural components.

How is it built?

Leonardo da Vinci's notebooks are well-known e.g. (Richter, 1998) and Schneiderman (2002) and contain these intriguing phrases (Gelb, 1998, 2004): "*Be sure you know the structure of all you wish to depict*". "*Every part is disposed to unite with the whole that it may thereby escape from its own incompleteness.*" The structure and layout of the MagicEye system is entirely symbolic, i.e. it makes no contingent hypothesis which could obscure the quality of the assessment obtained by regular evaluation process. The reason behind is that its internal coherency is such that it stays genuinely independent of usual cultural phenomena. While the latter often appear as cultural presuppositions that often underpin whatever working hypothesis in problem solving or decision making, the MagicEye system, being defined at an abstract level, roots itself independently of any contingent supposition.

When is it used?

This global view is then best used when comparing and sorting the project's merits, strengths and weaknesses (internal analysis) or the surrounding opportunities and threats within their current or evolving socio-economic context (external analysis). The proposed system is therefore a tool for ranking projects and provides a fast way to back and argument a given position about them, also relatively to another project of a similar type. It should be stressed that this method is directly suited for assessing proposals, in other words concepts of projects definitions before a project is run. A strate-

gy and its corresponding execution route are seen as two sided phases of a same global concept. For instance, the word 'results' in a proposal is only a perception about what a tangible outcome can come out as, while in a project the idea must become a reality through tangible effects.

Remarks and main characteristics

Here we delineate the preconditions that usually underpin a MagicEye analysis.

The foundational remarks that make sense out of the structural pattern

Any object that comes from a living set of elements, be it an electronic sensory component or a complex biological signature pattern, an ecosystem or a focused human endeavor called 'project' expresses a "form" that reveals its internal structure and quality. The theory of form suggests that meaning is as much embodied in shapes as in the contents of the object. Form becomes meaning as much as content. However, the approach to decode the meaning usually does not resist an analytical method. Analysis is suited to components exploration and classification, while sensing – not a mere synthesis - is more perceptual and global. For a synthesis is to be based on meaning, i.e. values and culture and perception, i.e. subjectivity and forms. Isn't the essence of being to boast a perceptive capability first? The two approaches remain however complementary and should, in our opinion, be used alternatively -through time- or in combination -in space- in order to involve both executive (global decisions) and engineering descriptions (componential decisions).

We recall Leonardo da Vinci being capable to extract knowledge because he could "*interplay structure and contents*" (Gelb, 1998, 2004). But for him, interaction is not enough until it produces opportunity - opportunity of knowledge, of realization and of feedback, therefore of consciousness. It's all like if our neuro-vegetative system is capable to respond to a triggered intuition. And we begin to move formally as dependent upon this immediate communication channel. The term 'formal' here means visual, informative and formative concurrently, that is a) the images or contents, b) the message or communication that provides information and c) the goal or knowledge-level aim of the whole process.

The analysis principles

The primary conditions that make an object eligible for playing the MagicEye method are few. Most importantly, three considerations predominate.

- The object represents a focused and "living" entity -an evolving system, i.e. serves a shared purpose. Although we experienced only in proposals assessment, it would quite probably work for a "living" body, such as an organization, a company or an association; the important aspect behind being the "parallel" co-evolution of the body and the context of reference.
- The object components may be tuned and concurrently optimized towards reaching a hopeful better purpose. By better purpose we intend the increase of expected satisfaction from the use or execution of the object.
- The object under assessment may suffer a predictive analysis in so far as the likely outcome can be organically derived from the quality of the set of compo-

nents. The prediction comes from the meaning attached to the emerging shape and from nothing else.

This amounts to a consideration of and distinction between *goal*, *process and result*. From an intended goal, a process is enabled that can lead to either failure or success. One can say that the always evidenced methodological feature in Leonardo's work is the concurrent consideration of goal dimensions in terms of a) intention, objectives, plans, or process, b) machinery and mechanism, or transformation of movement and c) the "experimentable" result in a given embodiment, be it a target machine, device, map, object, or drawing etc.

The pairing of *Analytical accuracy* and *Systemic overview* leads the observer of the diagram to the key Leonardian feature of using the two brain hemispheres in dynamic conjunction. The degree of precision obtained is a result of following a scientific method (and scientists are reputed to not develop artistic skills to a vast extent or perhaps to not insist on aesthetics). Not enough the balance, but the interplay between the two brain hemispheres, can lead to inter-hemispheric thinking that amounts to a whole mind mapping. In short, the approach balances (if not accentuates) *form* with (instead of) *contents*. Therefore, by accentuating *patterns* instead of *numbers* the method makes collective decisions attractive and reasonable. Explanation power is enhanced and this directly benefits the executive action. In this way, approaches that complement each other will bring a sense of completeness that enables left and right-side brain based methods. Left-brain and right-brain integration does transcend hemispheric polarization.

The qualification of the assessable objects

The range of objects entitled to be analyzed though the MagicEye method is:

- Human endeavors such as concepts proposals and running projects.
- Research investigations, e.g. future and emerging technologies and their likely impact on society.
- Business plans, e.g. enterprise start-up and development plans, for instance the actual business plans produced for seeking investments or other resources. These plans evidently include a collaborative dimension.

By opposition, the method does not apply to the case of individual plans, even if and when a single person project may be bound to potential collective impact through his/her actions.

A Functional Analysis of the Method

In this section, we will delineate the functional mechanism underpinning the method.

Interpreting through the MagicEye system

Basically, the key to the emergence of a potential global picture through the MagicEye diagram holds in its essential structure. This structure holds on premises that are entirely symbolic, hence are independent of the evaluation process and cultural or else nature. This shows that the method extends the nominal case of an assessment and can potentially target the design of systems, their evolution and redesign.

Two principles govern its structure which is entirely based on four polar opposites.

To enhance output

The nominal layout of the *MagicEye* makes no contingent hypothesis that could obscure the quality of the assessment obtained by the regular evaluation process. In this way, it is possible to reflect and feedback a highly informative picture of the reality to the management, in a record time. A comprehensive, les than one page report is produced that can be used as an executive summary of the assessment. Additionally, remedy actions or alternative plans can be, if needed, suggested, based on a complementary understanding of the operational context of the client. In this way, the client time can be saved for a safer development of its project.

To explain quality

The input necessary for assessment should be made clear to the client and detailed information about the eight input dimensions should be provided. The underlying methodology is capable to transform such input into a global result in less time than by standard linear evaluation methods. What you have to do is to provide the right input - such information is usually binding for the client - as the assessment is entirely dependent on it. In such cases as when input is fuzzy, incomplete, missing or otherwise remains hard to obtain, alternative questioning methods are put into action for eliciting the missing input. These should be restricted to a low number of aspects, perhaps one.

The first principles of the MagicEye system

Here are described the first principles which underpin the method:
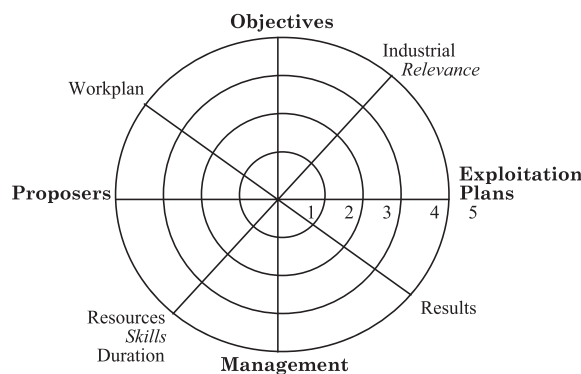
Principle 1: Four hemispheres

Figure 1. The basic MagicEye diagram

- Left side of the diagram. This represents the symbolic "past" i.e. the background, the baseline, the resources, the culture and original business of the stakeholders, the original idea, etc.
- Right hand side of the diagram. This represents the symbolic "future" i.e. what the project aims at, the promise of the proposal, its results, its propensity to be fielded in industrial or economic settings, in a nutshell the potential return on the investment.
- Upper hemisphere. This represents the "objective view" about the proposal i.e. what it tells when it speaks about itself (goals, plan of work and relevancy of the endeavor, i.e. all items that one can take up and assess). This side is independent from people's attitudes and behaviors.
- Lower hemisphere. This represents the "subjective ore" of the proposal i.e. what establishes confidence for supporting the upper hemisphere (competencies, intensity of effort needed, organizational issues, and the sought results). Results appear here because they are an expression of the ambition of the plan, not tangible elements yet. Only the project could give flesh to results and not the proposal. This side is dependent on the people.

By combining these hemispheres, we obtain the following four fundamental axes.

Principle 2: Four axes

a) The horizontal axis is the "*lifeline*" axis: Proposers – Exploitation Plans. In the beginning are the assembled stakeholders (people with perhaps a vision, a consortium, partners often gathered around a visionary person who has first ideated the project and perhaps wants to champion it). A champion is a leader agent, often en entrepreneur capable to make manage a project efficiently. The champion is moved by an inner vision of the future and is leading others through establishing the polarity stakeholders ←→ future vision, business and owners, users, etc. If the champion is successful, he/she makes other people *conscious* of what [value] is at stakes from what could otherwise be just an idea. This is why he/she is empowered with an executive ability.

b) The vertical axis is the "*power*" axis: Management – Objectives. Then, if the actors backing the proposal want to act up the idea that they share and endorse, they must indeed *decide* to act. In other words, they must organize a structured way to *link* the proposers and the future business. This speaks of setting up management methods and tools, as well as the objectives to polarize such management. One goes with the other. This is the leveraging axis to the previous horizontal axis and hence the 90° layout.

These two crossing lines are drawn in bold to insist on the necessity of an organized whole for any proposal (its skeleton). Even the best proposal would bear little confidence in yielding tangible results in time if not grounded on these initial firm foundations.

The bisecting axes

Now come the embodiments which flesh the project with two bisecting axis. In the end, the proposal will appear to be assessed on the perception of its body features. An axis relevant to the outcome from the proposal comes first:

c) The ascending bisecting axis is the "*relevance axis*": Resources –Industrial/ Economic Relevance. The *distributive means* (resources, competencies, intensity of effort versus its distribution in time, etc.) are one polarity. The dual counterpart is the workplan (the 'objectivization' of the distributed means) found right up in the upper hemisphere.

These means must be assessed by their polar opposite, the relevance of these means. Relevance is found in the upper hemisphere (i.e. objectively assessable) and offers an adequateness between the objectives and the intended business plans. The dual counterpart is formed by the results seek (how useful can the results be) found right down in the lower hemisphere.

As a summary, the means should be articulated with respect to the best possible relevance that can be found in the evolving markets. A dual bisecting axis, which is akin to the internal way of the proposal, then comes in:

d) The "*work way*" axis: Workplan – Results. Proposers then need to work out the workplan and hopefully seek to obtain results. This *way of work* axis is orthogonal to the *relevance* axis as it is making the skills and relevance actual, through the standard hard way, i.e. plain work. Results are opposed to the workplan as they constitute the ore that can be extracted from it. They constitute again two polar opposites.

Accent on form

A shape isn't just a geometrical figure that we could categorize via some pre-established ontology. A shape in a "living" system has a structure that means something and reveals its capacity for adaptation (Massotte, 2006). Scientists studying applications of complexity sciences to decision making in industry know the existence of deep relationships between a system's evolutionary dynamics and its appearances.

What are the benefits of the MagicEye method?

There are several benefits that rise from the use of the MagicEye system. From experience, it is confirmed that the MagicEye system:

- Critically reduces the time needed for project or business analysis.
- Enhances the dominant strongest and weakest factors behind the proposal or project, thus supports the focusing on the aspects needing rework in a project, with a view to improve its definition.
- Makes reveal the relations between dimensions while these are usually hidden in textual form. It makes easier the reporting about a project.
- Fuels the discussion and supports the sharing of relevant considerations about the given project.
- Helps comparing two or more projects (e.g. see comparison below), hence founds a decision based on more equitable grounds, as the basis for comparison is made both transparent and homogeneous. This is a useful and important service to many institutions such as research funding agencies, innovation agencies, R&D programs, etc. and corporate programs in large companies.

The MagicEye Method therefore constitutes a strategic tool for gradually putting the classical four elements of an enterprise strategy in harmony, i.e. describing and relating the plans, listening to the people's cultures, assessing the structures and imple-

menting the structures. As enterprises business plans are typically a strategic mapping between:

- The vision, i.e. the strategic plans.
- The market and technical cultures that surround and dwell in the project.
- The systems, i.e. information, control, compensation and other systems that resolve the functions of the enterprise and render it effective.
- The structures, i.e. the specific organization that is suited to the objectives set.

As a tool it can also be used by entrepreneurs as a continuous companion and an assistant. It makes the enterprise essential, renders the entrepreneur approach more strategic and effective. The MagicEye is a primary tool to collaboratively resolve strategic conflicts within the enterprise, for instance, yet not only:

- Commercial and manufacturing interests are usually opposing although they lead to the same global objectives.
- Persons may sometimes oppose between themselves, yet if a higher level of consideration can be enhanced, it may often reconcile them. In this way, an enterprise is no longer a set of persons but becomes a functioning *system*, in which the maturity level gets increased. Furthermore, the structure may determine the choice of right persons.

Illustrating the MagicEye Method through a Collection of Profiled Cases

Having described the above, we will illustrate the theory on a few concrete examples.

Interpreting methodology

A number of methodological principles must first be explained that ground the actual assessment phase.

Methodology for using the MagicEye Method

Nominal cases in which there exists a degree of homogeneity by design remain rather self-explanatory and do not have to be bound to long analysis. We will therefore exemplify those particular instances in which a number of inhomogeneous patterns are commonly found. This is the case for "living" projects as they are the result of adaptation, survival strategies, more generally of co-evolution (often through an untold combination competition or cooperation schemes). Furthermore, the reader will notice that the overlapping of two diagrams leads to further comments of comparative scope. The animation of small size project assessment groups usually goes by successively eliciting six factors.

- The **Why** of the project: its relevant foundations, its socio-economic, industrial relevance, and the vision that justifies the set objectives. There is a concern for sustainability too that we shall investigate in future studies.
- The **Who** and the **Where**: the gathering partners and their common localizing (languages, geography); also the networks that link them in an integrated whole, i.e. the intended or running project.

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- The **What** and the **When**: the workplan and the milestones.
- The **How Much**: what resources are needed (time duration, efforts level, funds, competencies and equipments).
- The **How**: the role of management in harnessing the objectives.
- The **Now Then**: future exploitation based on planned and achieved results.

Each sub-group works at each of the six aspects and delivers its findings. This is then fed in the MagicEye diagram.

Using the MagicEye Method through six typical cases

We use as templates six cases drawn from a basket of proposals that were submitted in the software engineering area of the Information Technologies domain of the community funded Third Framework Programme (1990-1994) of the then European Community (now the European Union). Out of the six proposals, three were dealing with basic software engineering issues such as design for reuse of software components, software quality development and verification and validation of software components. The other three dealt with intelligent software components development such as artificial intelligence based agents, reasoning mechanisms for expert systems and neural networks. All names used in this paper are fancy codenames.

For each case, assessment experts indicate the *outcome status*:

- Accepted: the proposal can fly on its own without major modifications to bring to its description. In the present cycle of assessments, the project was normally funded.
- Under Consideration: the proposal is believed to be acceptable for funding, however a number of important or major modifications were deemed indispensable. The purpose of the assessment was then to provide a number of guidelines in order to restore a better integrity and fit to the proposal for running the project.
- Rejected: the proposal assessment evidenced major flaws that were not convincingly amenable to restoration. The purpose of the assessment was to reflect the basic shortcomings.

In this paper, we provide the basic understanding for drawing initial conclusions from the direct reading of the diagram. Most of the comments provided below can be considered independently of the nature and contents of the proposal under assessment. In practice however, one always needs to relate the findings with the actual determining factors ruling or explaining the state of-the-art in a particular domain of investigation. For the purpose of this paper, we cover here only the first part (out-of-context assessment) and do not process the second (contextual field meaning) as the latter would have to be considered as confidential matter at the time of assessment.

The assessment grid

The wheel was built by plotting 8 dots representing the score obtained on the following questions put to assessment:

Proposers
Objective
Workplan

Resources
Results
Industrial relevance
Exploitation plans
Management

Scores range from 1 -non existent or very poor to 2 -poor, 3 -fair, 4 -good and 5 -excellent.

Six profiles cases interpreted

Six cases that belonged to the portfolio of projects proposals assessed in the Third Framework Programme of the European community funded projects are drawn that represent as many typical profiles for a subsequent typology of assessable forms. The acronym and numbers shown below do not correspond to any specific proposal that may or may not have existed.

RAGTIME

The MagicEye diagram outlook for this proposal. Outcome status: This proposal was rejected

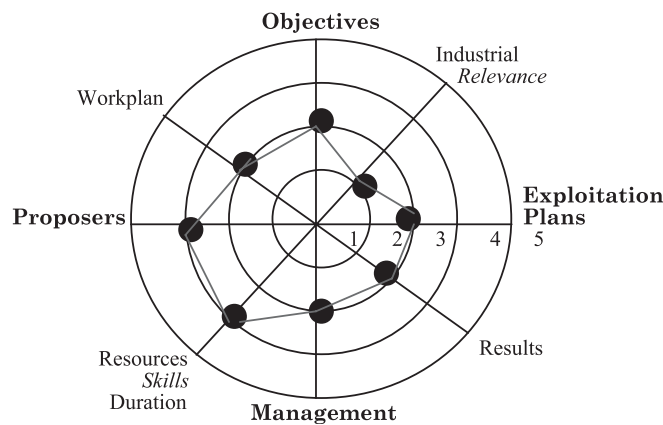| PROPOSAL: **RAGTIME**	NUMBER: **21087**

Figure 2. The MagicEye diagram for the RAGTIME proposal.

Which comments and results the MagicEye method shows. Comments: The RAGTIME set of founding partners -usually called the consortium- is appropriate for the objectives set out and the proposal rests upon substantial competence in the partners. However, the workplan is weak and the management is rather inappropriate. The results to be yielded are few and so are the possibilities of exploitation.

Results: Proposal lacks technical scope and business relevance.

On the basis of the results, we have here a typical shape for a 《 quick recipe 》 project definition that will not resist the pressure of time.

Case profile: a specific application to early turn-of-the-century dot.com companies. This diagram is interesting for another reason that came to our attention when observing many dot.com companies formed during the latter years of the nineties. The MagicEye diagram of RAGTIME proposal was found to be typical of an important number of early dot.com companies which showed the following features concurrently.

- Weak management: an easier capital funding period led to forgetting the paramount importance of a superior and sustained management control.
- Unclear market objectives: the differentiation power of these companies was loosened by a lack of focus on a particularly crisp set of benefits for clients with respect to competition.
- As a result from the above point, the lack of a well-defined business model capable of securing a sustainable revenue stream.
- Lack of financial control in front of abundance of often granted funds.

Overall, the objective of most of these early dot-com companies was to build perceived and often illusory shareholder value, rather than building value through sales of services. When the optimistic assessment of demand failed to appear at end of 2000 (first in Silicon Valley) and in 2001 (in the rest of the world), the bubbles could only burst and the companies behind soon failed (Corsi, 2001). The story of the Internet bubble has long been narrated about in the literature since then, but little has been brought to the fore as per the intrinsic and organic reasons for such failure. We believe we have brought here a few further intrinsic elements.

TWIST

The MagicEye diagram outlook for this proposal. Outcome status: This proposal was rejected

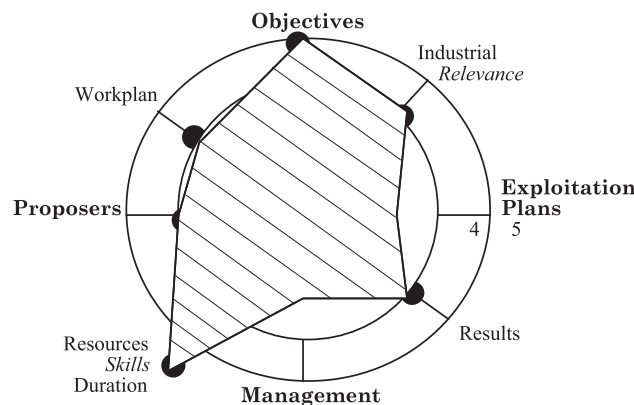| PROPOSAL: **TWIST**	NUMBER: 20564

Figure 3. The MagicEye diagram for the TWIST proposal.

Which comments and results the MagicEye method shows. Comments: TWIST proposal uses considerable technical expertise and gathers appropriate partners. The objectives set forth are sound and ambitious. However, it lacks the proper managerial structure to organize the competence at hand in view of the far reaching objectives. The materializing of the sought ambitious results therefore might be difficult to achieve. The socio-economic (here industrial) relevance of the latter is weak and so rests the plan for exploitation.

Results: Overall, the proposal is unbalanced in that it falls short of installing the proper confidence in realizing its potential.

Case profile: the bells and the whistles less the muscles. The TWIST case can assuredly be found in those far-stretched and longer-term endeavors that often secure the part-time participation of prestigious personalities – e.g. for attracting vast amounts of venture money or exceptional grants- yet do not properly engineer the de-multiplying mechanisms for actualizing the top-notch luminaries' visions. Hosting a couple of Nobel Prizes in the boardroom isn't necessarily a cure for quarterly profits and it is not rare that ambitious, community-oriented projects °Vsuch as foundations, visionary public and governmental projects and actions- to end up with extra costs, delays and other drifts that dilute the sought impact. It is a collective responsibility to detect the management imbalance before the losses happen.

SALSA

The MagicEye diagram outlook for this proposal. Outcome status: *This proposal was kept Under Consideration*
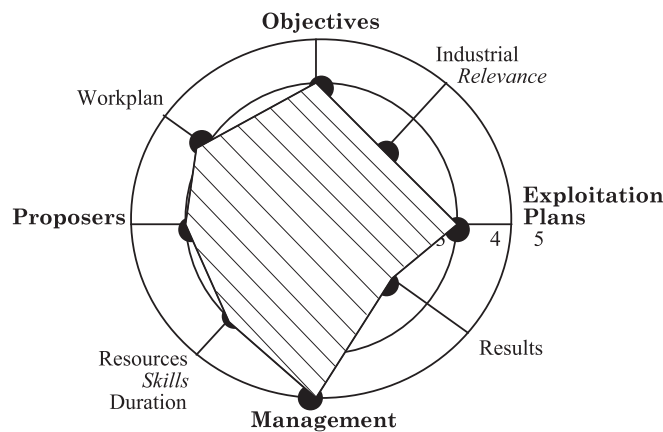
PROPOSAL: SALSA	NUMBER: 20075

Figure 4. The MagicEye diagram for the SALSA proposal.

Which comments and results the MagicEye method shows. Comments: The. SALSA proposal features a consistent consortium, with sound skills and a viable workplan. The objectives are acceptable. The management structure is excellent and can and should be more committed to ambitious exploitation plans.

Results: Should the proposal be retained for further consideration, it must: 1 - realign its industrial relevance with actual needs, 2 -reinforce the results that can be obtained through the workplan, and 3 -design further the exploitation plans time wise and contents wise.

Case profile: to do the things right or to do the right things? The SALSA case is typical of the host of technically good projects that perhaps would timely benefit from an enhanced vision in order to optimize what they can tangibly deliver. The vision plus the action, that's key to optimum. It isn't strictly sufficient to have managers just do things right anymore as our ever more complex environment compels broader views. We need to think beyond the set boundaries and out-of-the-box. Some grand vision, or, at least, some inspiration, must accompany our daily steps and routine jobs that will provide much rationale and downstream motivation to the humans acting the project. Otherwise, the creative forces orienting the future for setting the right things risk of not being pulled. And emotional intelligence has recently been recognized as an essential ingredient to successful ventures. Together, they confer that *supplément d'âme*, that "something else" that stirs possibilities further and push the envelope towards more and valuable results.

BOLERO

The MagicEye diagram outlook for this proposal. Outcome status: This proposal was rejected

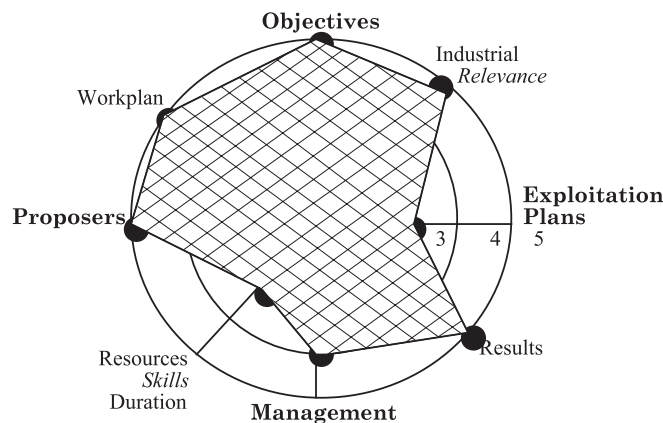| PROPOSAL: BOLERO	NUMBER: 20092

Figure 5. The MagicEye diagram for the BOLERO proposal.

Which comments and results the MagicEye method shows. Comments: The BOLERO consortium is adequate and looks professional. The objectives are quite sound and the content of workplan is well-made. This proposal could possibly produce very good results and with acceptable industrial relevance. It however places a heavy dependency on inappropriate resources which may undermine the whole scope of the project. The workplan and management structures are therefore questionable. The exploitation plans of any salient results are moreover unrealistically described.

Results: The proposal would have to secure adequate resources before any further consideration be given to it.

Case profile: mere collage is not good assemblage. The BOLERO case was sometimes found in good looking and well-written proposal that incorporated all seemingly necessary ingredients to rather impress the funding mechanism. Such construction got sometimes repetitious and revealed a collage approach. To dismount the construction, experts have to exert further scrutiny and put to test the true level of these three features: the coherency of the whole description that is proposed, the actual competencies that are clearly committed to the project and the density of the vision that is propagated. Contradictions, holes and a dose of hot air are instead found in such proposals that alert the acute observer to the somewhat unreal world proposed. With the advent of professional proposals writers and related software systems, it may seem to become less easy to detect collages. We have observed that the exploitation plans, to name one aspect, have thus become much standardized and tell little of actual dedicated moves. Fortunately or unfortunately, impacting markets and setting the marketing mix of a new product or service requires a quite intimate understanding of the targeted fields that only insiders can provide. Here lies the proposal that reveals either incoherencies or nebulous statements.

TANGO

The MagicEye diagram outlook for this proposal. Outcome status: This proposal was accepted.

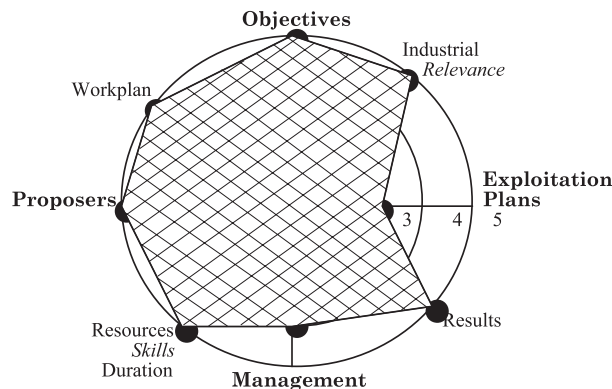| PROPOSAL:	TANGO	NUMBER:	21301

Figure 6. The MagicEye diagram for the TANGO proposal.

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Which comments and results the MagicEye method shows. Comments: The TANGO consortium is adequate and features good competencies. The proposal objectives are ambitious yet realistic and the management structure is sound. The proposal should yield considerable results which are highly relevant to the industrial sectors that the proposal endeavors to target.

Results: Should this proposal be retained for further consideration, it should develop further its exploitation plans, as based on those results already envisaged.

Case profile: a typical excellence syndrome. The TANGO case is frequently found in academic led projects that excel in what they are supposed to excel, i.e. scientific and technical clarity, skills and development ability. Strong academic leaders instill the culture of excellence, which means of *scientific* reference. Sometimes protective attitudes in academic or business management insulate the best elements too long and, while a given team may win short-term, the whole looses opportunities longer-term. We reckon with respect our past career at IBM, a company that set the principle of more internal moves more success for its promising employees. When academic teams flank themselves with technology transfer teams – be they internal or external – they ensure a capacity to go "beyond the box" and to impact markets. It is a pity that smaller research centers still often do not have access to technology transfer skills and also that market-oriented institutes and bodies are too rarely tasked with the mission of exploiting the valuable scientific and technical results. These appear to be unique ways to accelerate the market take-up. A little more exposure to experts from the "other side" gets to the point, saves time and instills confidence in success to many technical staff that don't usually get that opportunity, for both their career and their project.

CHA³

The MagicEye diagram outlook for this proposal. Outcome status: This proposal was rejected

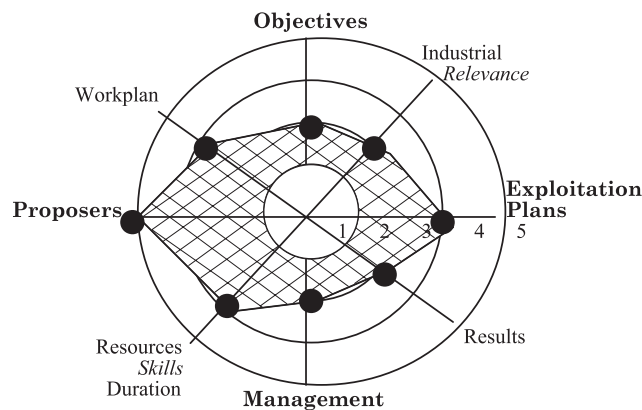| PROPOSAL: CHA³	NUMBER: 20002

Figure 7. The MagicEye diagram for the CHA-CHA-CHA (CHA³) proposal.

Which comments and results the MagicEye method shows. Comments: The CHA[3] consortium assembles competent partners with much experience. The workplan seems realistic. However, its objectives are doubtful and the management structure is improper. The results from CHA[3] that are indicated are too discrete and their relevance to real needs is questionable. The exploitation plans are not based on solid foundations.

Results: The proposal is still at an undeveloped stage.

Case profile: an under-developed project cannot fly?. The CHA[3] case is provided in order to filter out the frequent semi-baked proposals based on one or more criteria. All evaluations procedures obey one basic principle in common: to eliminate most the soonest. Here, the MagicEye is used as a grid to scan the deficiencies found, report about them and stop them. Only more sophisticated proposals must strictly be allowed to pass this stage or the entire system will be polluted at some later point in time, through e.g. bad project definition that leads to too long start-up phase, poor project reviews, all sort of sanctions and it happens, aggravated resentment. Recuperating ill-defined projects is costly, painful for all parties, project members and reviewers alike and never ensured as string actions create second-order effects in project lives. We have been through several recuperation procedures, at project contracting, launch, review, or ultimatum phase and we can't report a case that totally resolved the initially poor conditions. When taken for corrective action, an initially deeply defective project definition leads to a collective hurdle that takes a regular toll on those wanting to restore it. It is easier in business than for publicly funded bodies to stop bad projects as the latter context requires a dose of courage as well as a strict and fast procedure to act up. This is nonetheless necessary in both contexts, also having in view that industry and public environment mesh ever further in global webs equalizing funding responsibilities.

How and When to Use the Method? (Evidencing a Cultural Pattern Scheme)

A conceptual widening of the method

By relinquishing the original proposals and contract assessment context, we can transcend the eight dimensional wheel labels with more general notions that provide extended value to the method. We seek to generalize and enrich the model by evidencing a Cultural Pattern Scheme (CPS) that can be used in wide decisional situations.

We propose the following axis substitutions following a generalization path:

- It is the notion of People that entails the one of Proposers, i.e. the collective body of resources.
- It is the concept of Actions that subsume the notion of Exploitations plans, i.e. employing and practising results at large.
- Together become the decisional life line of any endeavor. Then:
- The apprehension of Objectives leads to the notion of time-based Vision, i.e. the aim.
- The representation of Management implies the notion of Tension, i.e. capaciting the Vision.

Together form the power line that ensures that the vision is still in sight;
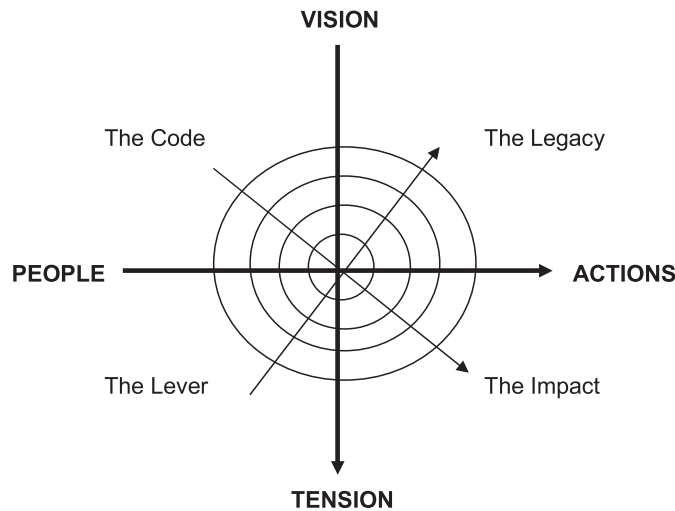We obtain the following diagram:

Figure 8. The generalized MagicEye diagram as a cultural pattern scheme.

Let's discuss the mediation between the four major notions that frame the CPS (cultural pattern system). While management aims at stretching the alignment with the Vision, it routinely works at monitoring the rapport between teams (People) and tasks (Actions). Conversely, People reach their accomplishment by consideration of the aims and the executive directions that are set for them. Then four interplays appear that signify the dynamic rapports between the four basic generalized notions:

- In order to act up, People embody the Vision through an explicit system that we call a Code. The Code is clothed with varied names in specialized fields. It can be the reference cooking book from a visionary chef, a business plan from a new entrepreneur or the guiding textbook for students.
- The resulting effect of putting the Code into use is termed Impact. This measures the potential effectiveness of the Code.

Together, these two secondary notions form the Method axis. A suitable method - the particular way to work something out- can free man from tedious trials and errors. An experiment without a method is at best silly and at worst evil. The genuine power of a method is to transcend natural man's abilities. Then:

- The right ingredients to focus upon in order to realize the Vision are called the Lever. All actions are performed through a kind of chemistry that is not amenable to a mere Code. The Code plus the Lever can stir and project what People inherently have.
- What ensues is the development of a testimony (the meaning of a result) that finds its true place – i.e. its significance- in society. We call this "testimony" the Legacy and it represents the major contribution of the CPS at hand.

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Together, these two secondary notions form the Interest or Significance axis. This reveals the degree of meaningfulness of a given cultural pattern scheme to its authors or stakeholders. A scheme without a meaning is useless and it is meaning that founds entire societies and knowledge societies.

A when and where to use the method?

When to use the Method?

Along the life cycle, the project team can acquire a particular and sharable new appreciation for their own capacity for leadership. Namely the capacity to globally sense and value the weaknesses against successful outcomes for their projects. The method brings an awareness that is seldom redirected to the team but to the project..?

The global view is then best used when comparing and sorting projects merits, strengths and weaknesses. It is therefore a tool for ranking proposals, sorting out alternatives, and provides a fast way to justify a final position about a proposal, also relatively to another similar proposal. Here are a few typical situations when to use the tool.

- **Value assessment.** This is the assessment of value of industrial and market value of a given innovative project and the assimilation of given documentation (one day minimum) plus assessment and delivery of report (one day).
- **Evaluation of alternatives.** This is alternative definitions and choices for projects: assimilation of given documentation (one day minimum) plus assessment and delivery of "comparing alternatives" report (two days).
- **Training Classes.** These are workshops for acquiring proficiency in the *MagicEye* methodology, a typically one full day onsite training, plus one day follow-on that can be actuated remotely. Contains: theoretical principles behind the methodology, the structure and the logic inherent to the methodology and working examples and discussions. Participants bring their examples and discuss them. The training privileges an immediate feedback for the benefit of the participants.
- **Articulation into other contexts.** The *MagicEye* methodology can be used in a number of industrial contexts, e.g. in conjunction with projects strategy within a client Company. It can also work by effectuating comparisons within a basket of competitive projects from which to operate a selection. Each case should nevertheless be discussed first separately through appropriate assessment or scrutiny.

Widening the practice

Why a global method for assessing projects? Assessing the value of a collective project is a complex task. For instance, a proposal for consortium-based R&D activities requires assessing the competencies of its partners, their adequateness to the common goals, and, naturally, their actual deliveries. Problem is, if we analyze the merits on the separate components, a global value still escapes the analysis. How then to combine the different dimensions of a complex innovative project, in synergy (with a Gestalt orientation) and how to cast a meaning that is based on the respective dimensional values, are the single two core issue to solve.

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Why a tool for Innovation business consulting? Normally, an evaluation cannot be performed by the project initiator or the concept owner: a business concept, a public policy or a vision. We therefore need tools that enable the practice of such evaluation. Our practice has however shown a major lack in the existing tools, an organized capability for "sensing" the global directions", hence for making decisions at a more global level, and the rationale for founding it and sharing it with colleagues and stakeholders. It is common that newborn ventures definitions need be iterated with the founders. Often, this is the realm of hype, excitation and cultural bias, where strong personalities have the better say. Not to reject this, we have found that mistakes can and should be detected earlier than it is customary, to save precious time among business leaders, investors and stakeholders in general. This has been tested on the said R&D projects and hence the profiles that merged out of this decade of practice.

This practice in the assessment field has shown to us that, in so far as other enterprise projects than European funded R&D may be concerned, the tool retained value at a higher level. It is the level of appreciation that is also akin to evaluation and cultural patterns.

Many consultancies today develop and promote innovation consulting methods and systems by which a difference with a unique value can be created for markets. One such method is indeed the *MagicEye* presented in this paper. This method is interesting in bringing a "*Gestalt-mapping*" effect that can enhance the global value of a complex, multi-faceted vision-project, and hence enable the often difficult-to-grasp, high-level decision capability. The role of the champion-with-vision should be here enhanced that positions well with added-value towards realizing the project.

In short, the approach accentuates *form* instead of *contents*. Therefore, by accentuating patterns instead of numbers our method makes collective decisions attractive and reasonable. Explanation power is enhanced and this directly benefits the executive action. In this way, approaches that complement each other well bring a sense of completeness that enables left and right-side of brain methods. In our modern age of behavioral techniques for motivating project management teams, we believe the MagicEye method clearly brings a specific contribution. Leaders can benefit with a global tool that does not add a cognitive load to their already highly stressed mental pictures for their projects.

How to put the method into frequent practice? A given project gets evaluated in a qualitative and quantitative way in a number of independent dimensions (these are 8: the componential expertise and know-how assembled, the objectives, the quality of the management, the plan of work, etc.). The level reached in each dimension is marked and contributes to a global figure. Given that the dimensions are ordered in a meaningful way, a global picture emerges that signs the entire project, at a given point in its timeline.

A tool for futures analysis

When Applications

The purpose of this article is not to present a new approach to the unfolding of the future but to engage managers and responsible persons dealing with projects to think to the essence of it: what makes a future, what's in the present, and what are some

dynamics. As a process gathering understanding from instinctive, implicit patterns to more documented cases, it can seed a further work on alternative futures scenarios. This is the specific process definition of "la prospective" retained by (Gaudin, 2005). For futurists (futures thinkers), the article engages with the scripting of scenarios through metaphoric fiction and a dialogue between present – as product from the past- and future. Let's analyse these two engagements.

Metaphoric Fictions. The MagicEye method is an approach that re-absorbs a man-in-project into his "intense" present. "Reading" a MagicEye is a narrative storytelling exercise that projects from the present. A present that man possibly lost as 20th century technological developments took over, drifting him away from his harmonic, wholeness legacy. Fact is that man is essentially a mostly perceptive being who restrictively believes he reasons above all, and in spite of his perceptions; nevertheless, we assert that man first of all *perceives*. To harness a future, evolution now requires us to transcend reason (almost a quotation from French philosopher Henri BERGSON) and the proposed tool can make use of imagination, sensation, perception (interpretation), adaptation, and consciousness. It has been said that the tool visually articulates the future from the right brain, as humans change their consciousness, more than their reasoning. Fact is that classical foresight tends to freeze scenarios, then forces a normative opt-out; while the nature of foresight that we advocate requires fluidity in the present and letting it unfold dynamically, recreating it permanently. The "best" unfolding pattern follows a gradient that is the most wanted scenario trajectory that we individually or collectively take, depending on our choices, will and... courage. Any moment in time is another instant big-bang that we can exploit from nothingness. This theoretically produces enthalpy (i.e. heat) instead of entropy, to make an analogy with thermodynamics' first law.

Reconciliation between present and future. The main challenge of futures studies resides in providing the link between present and future. Yet for man-in-the-street these studies talk about the future, so while they detach themselves from the present, get abstracted at best, become frightening at worst. The eight axes we described earlier are futures axes and yet they help reinstalling a present to which the project can be identified to. How? By abandoning any projective action that would detach from a genuine interaction with the present. The transformation of the present is the work that brings transformation and evolution. The diagram helps signaling whether the project takes up the challenge to be pointed in the right set direction. If a future exists, it must (potentially) exist in the present otherwise it remains an idea. Because the *linear* continuity of time is merely an illusion that creates past-present-future alignments, it is our view that not anchoring on the present leads to depleted futures. Therefore, the diagram exacerbates a relationship between structural time wise evolution and the notion of present. Does a future exist outside the mind of the one who thinks there is one? We believe not. Linear thinking, sequential models have long invaded our cultures and, unavoidably, inoculated our minds, and impacted our in-ability to "see" things. But the decision-making process is about *constantly resolving the tension between the present and its potentialities*, even before looking at the consequences The constant reinterpretation of possibilities transcends the linear models and calls for a new way of doing "futuring". In a nutshell, the diagram unfolds the present, *from* the present *to* the future.

In conclusion, the methodology that goes along the MagicEye diagram is a three-fold process:

A support to formulating (the right) questions as interrelationships between elemental factors (the eight axes for instance) force to consider several dimensions at once.

A polarizing of the Now by a specific problematic (e.g. the question at hand singled out above). This, instead of the common so-called backcasting approach, we prefer to call it the Rooting method as it reverses a *possible future* back into its generating process (the seeds of becoming).

Thus, the dynamic reinterpretation of the present onto itself supports:

"*Global and levelled foresight*" - addressing multi levels and their correspondences from personal to local to regional up to supranational levels. This aligns micro and macro levels and perhaps can someday lead to better actionable understanding of the meso level.

"*Organic foresight*" - enhancing interrelationships and their dynamics between concepts as much as concepts themselves. This enables the true evolution of models from the present. The forming of interrelations induces a complex becoming that deeply impacts a futures thinker work (in the sense of complexity sciences) and as a way to elaborate adaptive behaviors (Massotte, 2006, 2008).

In conclusion, the tool can support a new art of change by smoothing out the classical change management, business process reengineering, total quality management, etc. methods. It helps entering a non-notional analysis phase, a phase of methods and of becoming. And, isn't Futures Science definitely *the science of becoming*, not merely of thinking the future? Most probably so as the future starts now and the MagicEye is a remainder of what presides over the becoming.

Widening the results

When Applications

One recent application was made by Regas (2004) when analyzing Silicon Valley start-ups during the period summer to fall of 2003. When assessing the compared potential value of start-ups in Silicon Valley before and enough time after the Internet bubble to de-correlate from its causes, this author found a number of interesting observations (see Figure 8).

He concluded that the typical start-up of the year 1998 was securing lots of resources, including financial. Its business plan wasn't that much compelling, yet its owners could realize IPO exits (Initial Public Offerings i.e. were proposing the company for quotation in high tech public markets) thanks to the over exploiting of their results. It must be said that the latter results were however not that impressive hence the extremely profiled horizontal oval shape obtained in Figure 8. The prevalent high responsive culture to results at that time lead to their going through rational limits of well-founded plans.

Contrary to those times, the typical start-up of 2003 has learned new effects. It is defined as a much more balanced endeavor, leading to the securing of all ingredients for success (hence a rounder shape). Its objectives are certainly well-chosen and the workplan well dosed and clarified. The economical relevance is key to success, which

takes into account the market conditions and their evolutions by balancing opportunities and feasibilities. An interesting point is that the 2003 teams constitute the weakest element at the time of the author's study.

He then suggests the interesting explanation whereby entrepreneurial spirit is not unleashed yet to full extent as workers may have desynchronized with their original markets by ways of layoffs and other changes, and that venture capitalists had become more suspicious about the entrepreneurship quality of the leaders. Perhaps also it is the measure of the risk akin to completely new concepts that is still less ventured in by them.

Perspectives

The proposed method has been mainly validated in the context of European funded proposals and projects. It has been shown that it nevertheless reveals a much wider potential. As one example it has been consistently used within the ISTIA (Institut des Sciences et de l'Ingénieur d'Angers) Laboratory of University of Angers in France and within students' projects and workshops developed by the students of the Innovation Department of that University each year during period 1997-2005.

The potential of the MagicEye method is high and to the extent that it constitutes a tool that remains easy and fast to put into use. A sound performance can be obtained after a short training. Higher performance is available to heavier users. We propose the tool to the professional community as freeware and in this way wish it can be put into wider use in miscellaneous application contexts.
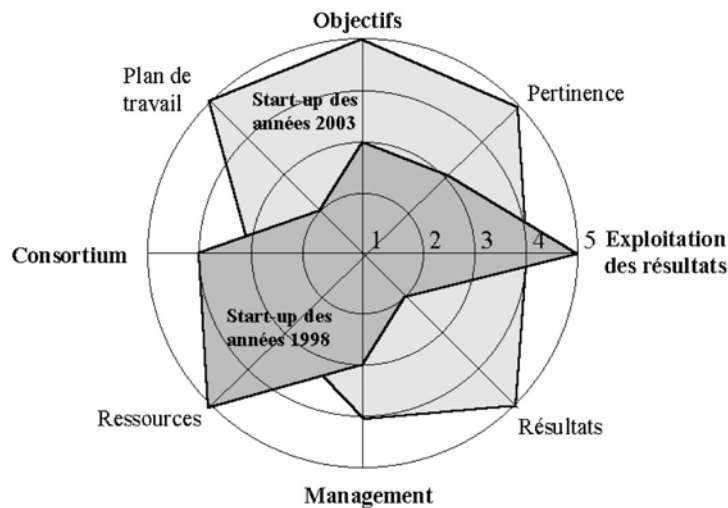

Figure 9. Compared diagrams of typical Silicon Valley based start-up.

Dark grey is typical of the years 1998 and light grey of those of 2003. From Charles REGAS, 2003, with permission.

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Notes

1. Nota Bene. Gestalt theory dates back to 1890 as a way to oppose the atomism or reductionist trend that stated that parts can be put back together to make wholes. Instead, Gestalt theorists reject this "absolute" view and stress the dependence on context – especially in perception - as the whole is something else than the sum of their parts. Gestalt underpins the cognitivist theories. See resources centers such as http://www.geocities.com/Athens/Cyprus/2926/ or http://www.usask.ca/education/coursework/skaalid/theory/gestalt/gestalt.htm.

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