



**MATURITY MODEL: ELOT1429
FINANCIAL IMPACT**

By
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To my family

Biography

I am currently employee of a security services company; I am working in the account department and my responsibilities are, among others, to communicate with the suppliers, foreign and from abroad, in order to control the purchases we conduct. Literally, this means that I am responsible to control the prices, on the invoices of our suppliers, in order to match them with the requisition that the procurement department prepares.

As far as the projects, that my company executes, are concerned, my responsibilities are to journalize all the expenditures of the projects in order to be easier to control the budget and to create monthly reports about their financial condition.

Abstract

The European Union, in order to help countries with low development, has created a Community Support Framework (CSF). Greece is one of the countries that will receive the fourth structural assistance budget. The period which this assistance budget will be active is between 2007 and 2013, and because of the fact that this will be the last one, the Greek government has decided to create a maturity model in order to ensure the success of the projects that will be conducted with those funds.

My intent is to research about the new maturity model designed from Hellenic Standardization Organization (ELOT), which is going to be adopted by Greek companies in order to gain sponsorship to perform projects with funds from the European Union. More specific what are the financial costs or earnings for the Greek companies by using the new maturity model both during its adoption? These results will be hypothetical as no company until now, has adopted the new model, and used it during the execution of a project.

Generally though, the adoption of a maturity model from a company usually influences negatively the financial condition of the projects. But in the long – term, the adoption of a maturity model leads to better quality for the company. This fact aids to the growth of the firm by gaining more projects.

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Chapter 1

Introduction

The European Union, in order to help countries with low development, has created a Community Support Framework (CSF). Greece is one of the countries that will receive the fourth structural assistance budget. The period which this assistance budget will be active is between 2007 and 2013, and because of the fact that this will be the last one, the Greek government has decided to create a maturity model in order to ensure the success of the projects that will be conducted with those funds.

Nature of the study

My intent is to research about a new maturity model designed from Hellenic Standardization Organization (ELOT), which is going to be adopted by Greek companies in order to gain sponsorship to perform projects from the European Union.

More specific what are the financial costs or earnings for the Greek companies by using the new maturity model both during its adoption? These results will be hypothetic as no company until now, has adopted the new model, and used it during the execution of a project.

Needs Assessment

Stakeholders for this thesis include the quality manager of my company from whom I expect information about the financial outcomes of several projects executed in the firm and the quality manager of another company of

the same field from whom I expect to get the same kind of information in order to compare them. Additionally stakeholders are those interested in the results of the thesis in order to decide whether the maturity model is worth adopting or not. Finally stakeholders are City University of Seattle and TEI Piraeus to whom this thesis is addressed.

Purpose of study

The purpose of this study will be identify whether the maturity model ELOT 1429 can prove profitable for a company and how it can influence the financial profit of a project undertaken by a Greek company.

Relation to the Program of Study

During my thesis I will deal with a maturity model designed from the Hellenic Standardization Organization. My research on a maturity model (ELOT 1429) has a great relation to the program of studies as it includes all the aspects of project management. Because though, of the complexity of a maturity model and the variety of the aspects included in the field, I will try to concentrate on the financial impact of the adoption and the execution of a maturity model, such as ELOT 1429, within a Greek organization.

Definition of terms

ROI: Return On Investment

PMI: Project Management Institute

OPM3: Organizational Project Management Maturity Model

SPM: Standardized Project Management

PM: Project Management

ISO: International Standards Organization

PMBOK Project Management Body of Knowledge

PMO: Project Management Office

TQM: Total Quality Management

BSC: Balance Scorecard

PSC: Project Scorecard

Chapter 2

Problem Statement

Companies require project management in order to be able to refine their business needs. The project management maturity model ELOT 1429, developed by the Hellenic Standardization Organization, could prove helpful in order to help them raise their organization's maturity. But what would be the financial impact on a private company by its implementation?

Rationale

ELOT 1429 is a maturity model developed by the Hellenic standardization organization that all companies have to be certificated with, in order to receive sponsorship from the European community in order to execute projects. Because it is a quite new model I will try to investigate the financial earnings or damages in a private company if they decide to adopt this maturity model. The first issue I will be dealing with is the cost of the adoption of such a model, such as training expenses or hiring an expert to help with the procedures that should be followed. Additionally another issue that I believe that is worth mentioning is the financial changes in this company.

I believe that this proposal will be a crucial advantage that will boost my progress in the company. I also believe that my occupation with a subject that includes all the processes of the project management can help me to become a better professional. My goal will also be, to make my thesis appropriate for

all the companies that are willing to adopt this maturity model. Finally I hope that this paper will help me to expand my knowledge on the subject.

Objectives or Hypothesis

The objective of the thesis is to show to the executives, that the adaptation of the specific maturity model can help a company to increase their profit and eliminate their expenses.

Chapter 3

Literature Review

This literature review is organized into three sections: project management, maturity models and financial analysis of maturity models.

Project Management.

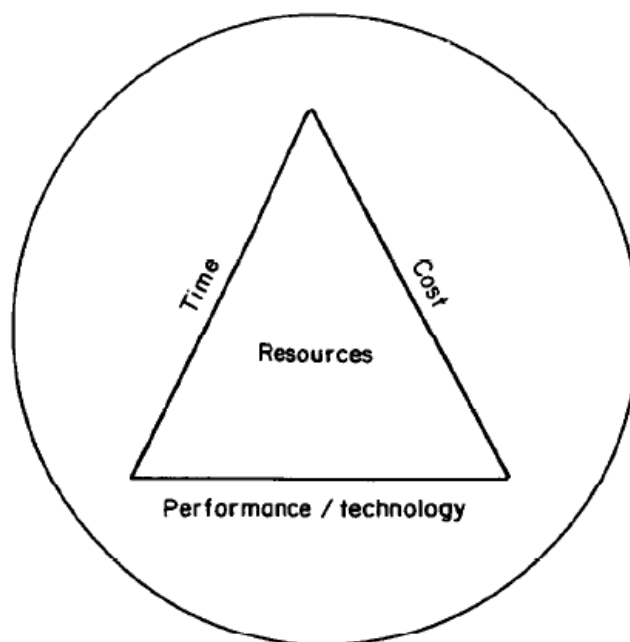


Figure 1: Overview of project management,
(Kerzner, 2000)

People have undertaken projects for more than 6000 years, and projects are the key instrument for the development of society, starting from the pyramids and the Great Wall of China, and this is not going to change: people will keep undertaking projects, and it is our duty to our children and grandchildren to continue developing project management. (Gerald & Turner & Maylor & Soderholm & Hobday & Brady, 2008)

“Project management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements” (PMBok, 2000, 8). “Project management is designed to make better use of existing resources by getting work to flow horizontally as well as vertically within the company” (Kerzner, 2006). As Jugdev and Mathur (2006) point out: “companies prefer to conduct projects in order to accomplish their goals in both operating and strategic level so that is the reason why they should pay more attention in their project management.”

“Project management has emerged as a field of practice that is being used increasingly by organisations to achieve their business goals. As organisations define more of their activities as projects, the demand for project managers grows, and there is increasing interest in project management competence. Competence of project management personnel is important as they are seen as having a major impact on project performance and therefore on business performance” (Beer & Eisenstat & Spectre, 1990; Karpin, 1995; Smith & Carson & Alexander, 1984; Pinto & Kharbanda, 1995) (Fig. x). As one senior manager says: “the key to project success is to pick the right project manager” (Toney, 1997).

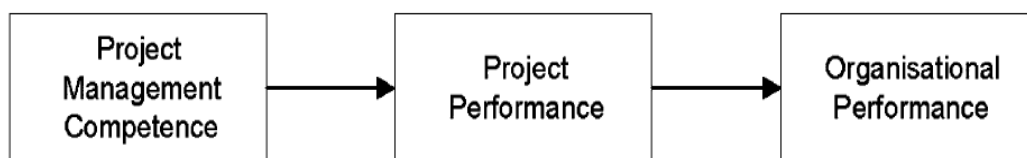


Figure 2: Relationship between project management competence and organisational performance..

(Crawford, 2005)

“There have been important efforts among international PM researchers and practitioners to identify and rethink PM (Smith, 2007), and the findings were disseminated widely within the PM community” (Kwak & Anbari, 2008).

“Interest in project management is growing significantly. Yet, projects continue to fail at an astonishing rate. At the same time, the role complexity, chaos and uncertainty play within our projects and project environments is gaining recognition in both research and practice. Hence, it is time to review our understanding of project management education and reflect about how we develop project managers to deal with the increasing level of complexity, chaos, and uncertainty in project environments.” (Thomas & Mengel, 2008)

“Large companies have invested significant sums (multi-million dollars) in developing their project management system and still do not fully benefit from that investment because the organization is “not fully aligned” to supporting project management” (Eve, 2007).

“Critical success factors can be described as characteristics, conditions, or variables that can have a significant impact on the success of the project when properly sustained, maintained, or managed” (Milosevic & Patanakul, 2004).

“Project management is also a key enabler with which companies adopting business improvement methodologies such as Six Sigma or lean manufacturing improve their efficiency and competitiveness” (Eve, 2007).

The terms project-oriented or project-based organization and the more generic term of managing by projects can be applied to organizations whose strategic business objectives rely on results from projects or programs (Gareis, 2004). This approach goes beyond the classic view of project

management structures that answers the question, “How should we manage this project within our organization?” (Hobbs & Menard, 1993; Larson, 2004). The classic project organization literature proposes three possibilities: functional organization, matrix organization, and organization by project (PMBok, 2004; Larson, 2004).

“Deciding when to adopt a new business model and what it might look like, choosing the most appropriate technologies and deciding when and how to implement them and, last but not least, deciding what organizational changes are needed to support other changes are very difficult decisions” (Duffy, 2001).

“Until now, very few methodologies or well-defined processes were available that impartially measures and implement PM practices both in the organization and against different industries. This has been a challenge for organizations that want to adapt PM as a major business practice” (Kwak & Ibbs, 2000).

“Cross-company product development projects are often managed without clearly defined project goals and business alignment. With a shift towards more decentralized and distributed development teams, and an increasing level of collaboration, project transparency is reduced and status measurement is more difficult. To overcome these difficulties, the quality of collaboration by companies engaged needs to be improved” (Niebecker & Eager & Kubitza, 2008).

PMO

“An organisational body or entity assigned various responsibilities related to the centralized and coordinated management of the projects under its domain. The responsibilities of the PMO can range from providing project management support functions to actually being responsible for the direct management of a project” (PMBok, 2008).

“The issue of alignment is associated with the need to join together portfolios of disparate, proliferating projects into an efficient, coherent whole “(Gareis, 2004). “This need for strategic alignment becomes a function within the organization. Organizations must adapt their strategic processes in order to face changes in their environment and they must adjust themselves quickly” (Hobbs & Aubry, 2007). “Project management at the strategic level (including program and project portfolio) is considered a means to implement corporate strategy. The translation of strategy into programs and projects is recognized as a core process” (Jameson & Moris, 2004).

“Organizations are just beginning to understand the complexity of factors that influence project management performance” (Subramanian et al., 2007).

Maturity Models.



Figure 3: Key elements

(Eve, 2007)

Brown and Eisenhardt (1997) suggested that “critical success factors can hinge on the degree of standardization of project practices”. Recently, the Project Management Institute (PMI) issued a new standard, the OPM3 (2004), which suggest SPM as a major strategy. These references suggest that SPM may have a significant place in many companies’ approach to PM.

“Although standardized project management is needed for companies in order to perform successful projects. Companies tend to standardize project management only up to a point, while they prefer to keep a certain level of flexibility” (Milosevic & Patanakul, 2005). “A highlight of the need for companies to develop a complete project management system” as Anthony Eve (2007) suggests is essential. “The adoption of a balanced scorecard to cross - company projects in any kind of projects is a new approach and would be of interest to all project managers aiming to increase transparency in their projects”(Niebecker & Eager& Kubitza, 2008). Additionally, as Duffy (2007)

points out, “maturity models are valuable tools which need a careful development set of criteria in order to help the companies to understand how they can transform them into modernized organizations”.

“Each maturity model is focused on the change associated with achieving excellence in managing key strategic business issues – things that keep executives awake at night. The most models address the following issues:

- Customer centricity
- e-business resilience
- IT/business alignment
- IT/ value, metrics and measurement” (Duffy, 2001)

“The quality indices are usually obtained from deviations to quality standards (e.g. CMMI or ISO 9001) and results of project quality audits. The continuous improvement process may include the number of proposals for improvements, collaborative patent applications or technical inventions, whereas the maturity of collaboration processes can be measured by deviations from standardized collaborative processes such as the ProSTEP-iViP reference model, VDA 4.3, or similar cross-company processes” (Niebecker & Eager & Kubitzka, 2008).

“Continuous process improvement is an on-going systematic effort to improve day-to-day operations to remain competitive and sustain profitability” (Foreman, 1990). “Productivity, quality, customer service, and flexibility in product design and schedule changes must continuously improve. It is possible to improve in all these dimensions simultaneously” (Huge &

Anderson, 1988). According to Foreman (1990), “continuous process improvement is based on the following major principles:

- The customer must be satisfied.
- Everything can be improved.
- Every problem identified in the process is an opportunity to improve.
- An on-going effort is needed in which everyone is allowed to help achieve the primary business goals of improved quality, cost and delivery.
- A systematic approach to evaluating processes produces better results than an unsystematic approach.”

Maturity Level One	Maturity Level Two	Maturity Level Three	Maturity Level Four
<p><i>Uneasy Alliance</i></p>	<p><i>Supplier/Consumer Relationship</i></p>	<p><i>Co-dependence/Grudging Respect</i></p>	<p><i>United we succeed, divided we fail</i></p>
<p>In this stage, there is a fundamental disconnect between the technology executive and the rest of corporate management. IT responds to business demands with little understanding of how the technology can contribute to value. IT is viewed primarily as something to make the company more efficient. Business units have little understanding of technology and prefer to hold the IT organization accountable for the success and/or failure of any IT-related project.</p>	<p>In this stage, IT is still not viewed as a strategic tool, and IT executives are unlikely to be involved in developing corporate strategy. If IT has a strategic plan, it is developed in response to the corporate strategy. IT is probably viewed as a cost center, and there is little appreciation of the value that IT contributes to corporate success.</p>	<p>In this stage, the business is dependent on IT, and there are early signs of recognition that it is a strategic tool. CIOs are becoming more knowledgeable about cross-functional business processes because of ERP, CRM, etc. The Internet and interest in e-business force early IT/business alignment. CEOs begin to recognize that IT is a competitive tool.</p>	<p>In this stage, IT and business are inextricably entwined. Business executives have less time to prove that they can deliver. Business cannot continue without IT, and IT has little real value, if it is not to support the corporate strategy. There is only a single strategy, and it incorporates both IT and business. Whether the business is a pure play Internet company or a "bricks and clicks" company, IT and business move in lockstep.</p>

Figure 4: Business resilience maturity model characteristics

(Duffy, 2001)

Somasundaram & Badiru (1992) points out that: “implementing a continuous quality improvement in projects has several advantages such as:

- Providing opportunities for people from all functional areas - design, process planning, manufacturing, maintenance to contribute suggestions and ideas to improve the quality of outgoing products.
- Improving an organization’s technology image from the high quality products.
- Increasing market share through increased customer satisfaction.
- Providing benefits to all employees of the company.”

According to Eve (2007) “Companies today are able to assess their level of maturity and performance in project management through the use of project management maturity models. Project management maturity models are designed around the company’s own environment, structure and needs, and usually comprises of four to five levels of maturity:

1. The first level usually reflects an informal and individualistic approach to project management with poor project definition and co-ordination.
2. The next level reflects a more functional application with some project co-ordination and where project management is mainly viewed as a tool or technique.
3. The following two levels address project management as being practiced with some degree of excellence, but either in a transitional or mature state. Here a “road map” for developing project management exists, senior management are developed, competency frameworks exist, project management is part of most peoples performance development reviews.

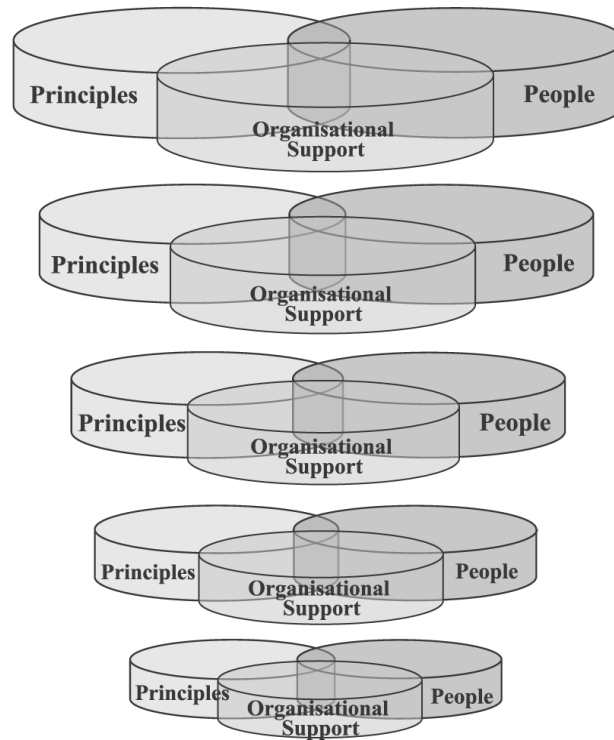


Figure 5: Levels of maturity

(Eve, 2007)

4. The final level addresses portfolio management and may not be applicable to all types of industry depending on their project types and numbers, i.e. the pharmaceutical industry would address this level – it continuously has to decide where best to invest company resources within the large number of developmental products in various stages of progress”

“The value of a maturity model lies in its use as an analysis and positioning tool” (Duffy, 2001).

Examples of best practices in standardized project management factors

Factors that may impact project success in SPM	Examples of best practices
Standardized PM Tools	<ul style="list-style-type: none"> ● Select mutually compatible tools that work in sync; use them consistently. ● Balance simple and advanced tools. ● Integrate tools with the standardized PM process; each process deliverable is supported by specific standardized PM tools. ● Start off with template tools; adapt the templates for use in a specific project.
Standardized Project Leadership	<ul style="list-style-type: none"> ● Both lead and manage; managing provides functions of planning, organizing, and controlling projects; leading adds the ability to develop project vision, communicate the vision, inspire and motivate project participants. ● Standardize business skills (e.g., customer intimacy or reading financial statements). ● Standardize process skills (e.g., project scope and schedule management). ● Standardize interpersonal skills (e.g., conflict management and negotiations) and intrapersonal skills (e.g., self-motivation). ● Standardize technical skills (e.g., knowledge of project product applications).
Standardized PM process	<ul style="list-style-type: none"> ● Build a shared process, where all project managers use the same standardized PM process. ● Build a repeatable process that provides the same sequence of project phases, end-of-phase gates, milestones, activities, and major deliverables to each project. ● Build a flexible process that clearly encourages and states how to adjust the standardized process to account for specifics of projects with significantly different size and complexity. ● Build an integrated PM process whose elements are linked with upstream and downstream processes (e.g., strategic planning) to provide the integration of the overall business process across the organization.

Figure 6: best practices in standardized project management factors

(Milosevic & Patanakul, 2005)

“The standard reassessment which led to the Vision 2000 project can be interpreted as an effect of a reorientation of factory management principles, induced by the increasing diffusion of TQM philosophy” (Laszo, 2000; Conti, 2000). “The similarity to TQM can be easily found in many aspects of the new standards. Basic concepts such as customer centrality and satisfaction, continuous improvement, employees’ valorization and involvement, process-organization-results integration, customers-suppliers-competitors connection, which represent the basis of TQM, have been assimilated and emphasized in the new ISO 9000 architecture.”

Year	World total	World growth	Number of countries/economies
December 2002	561,747 of which 9001:2000 167,210	51,131	159 of which 9001:2000 134
December 2001	510,616 of which 9001:2000 44,388	101,985	161 of which 9001:2000 98
December 2000	408,631	64,988	157
December 1999	343,643	71,796	150
December 1998	271,847	48,548	141
December 1997	223,299	60,698	126
December 1996	162,701	35,352	113
December 1995	127,349	32,232	96
March 1995	95,117	24,753	88
June 1994	70,364	23,793	75
Septemer 1993	46,571	18,755	60
January 1993	27,816		48

Source: ISO (2003)

Figure 7: Worldwide total of ISO 9000 certificates since 1993

(Franceshini & Galetto & Cecconi, 2006)

“Referring to the efficacy of the two models, the scientific literature is disagreeing and there is no common interpretation so far. Many empirical researches reveal in ISO 9000 standard application a potentiality for

valorization of TQM” (Beattie and Sohal, 1999; Ismail and Hashimi, 1999; Lee and Palmer, 1999), some others interpret “the ISO 9000 implementation as the starting point for the construction of a factory model for TQM” (Parr, 1999; Kanji, 1998). “Recent researches characterize the ISO 9000 standards as a tool for facilitating and implementing the adoption of TQM” (Sun et al., 2004), “but not as a necessary precondition” (Sun, 1999; Brown and van Der Wiele, 1996) “or as the signal of a natural migration towards its implementation” (Sun, 1999; Wiele et al., 1997). “They only give a set of general/generic guidelines, but they do not guarantee that the process is durable, capable and mature in the application of related constructs. Although the 2000 series of ISO 9000 standards is closer to TQM principles, the cultural gap between the two models still remains large and not easily fillable” (Laszo, 2000; Conti, 2000).

Project Scorecard

“The application of BSC to a project environment, a PSC, has already been investigated” (Stewart and Mohamed, 2001) and “recommendations on how to design the PSC have been provided but the application to cross-company project management has not been considered in the literature yet” (Horvath, 2003). “The scorecard must be built on communication, compliance, continuous improvement, and cooperation. A project can be considered as an organization with a vision, and strategies to meet project objectives” (Stewart, 2001).

“The PSC can be structured into three elements: levels, cause-and-effect relationships, and indicators. The levels are business strategies,

strategic project goals, project objectives (scope, quality, time, and costs), project processes and project potentials (team members, infrastructure, and external service provider). Figure 1 shows the hierarchical structure of the four levels” as defined by Selders and Markle (2003).

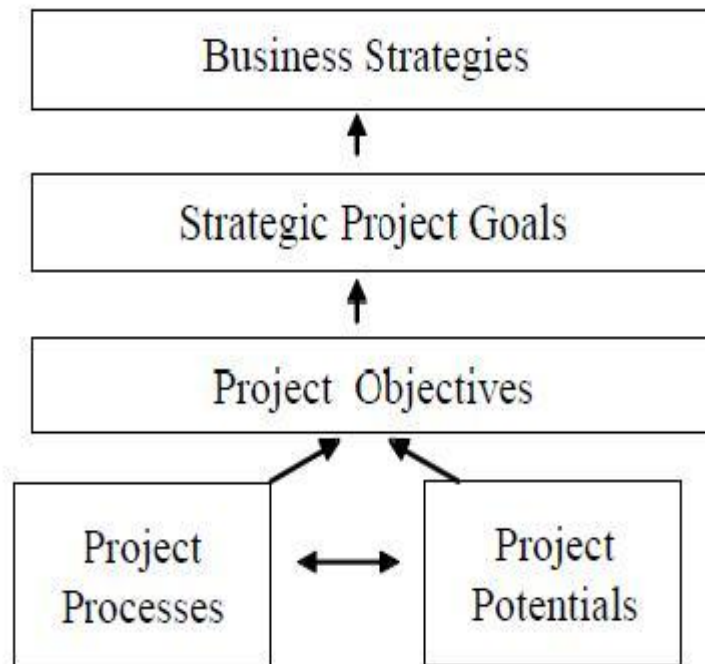


Figure 8: Four levels of a project scorecard
(Niebecker & Eager& Kubitza, 2008).

“A method to map networked and complex coherences, interdependencies, and dynamics in project management is developed to identify active and passive variables, as well as their controllability to identify and evaluate cause-and-effect relationships” (Raschke, 2007).

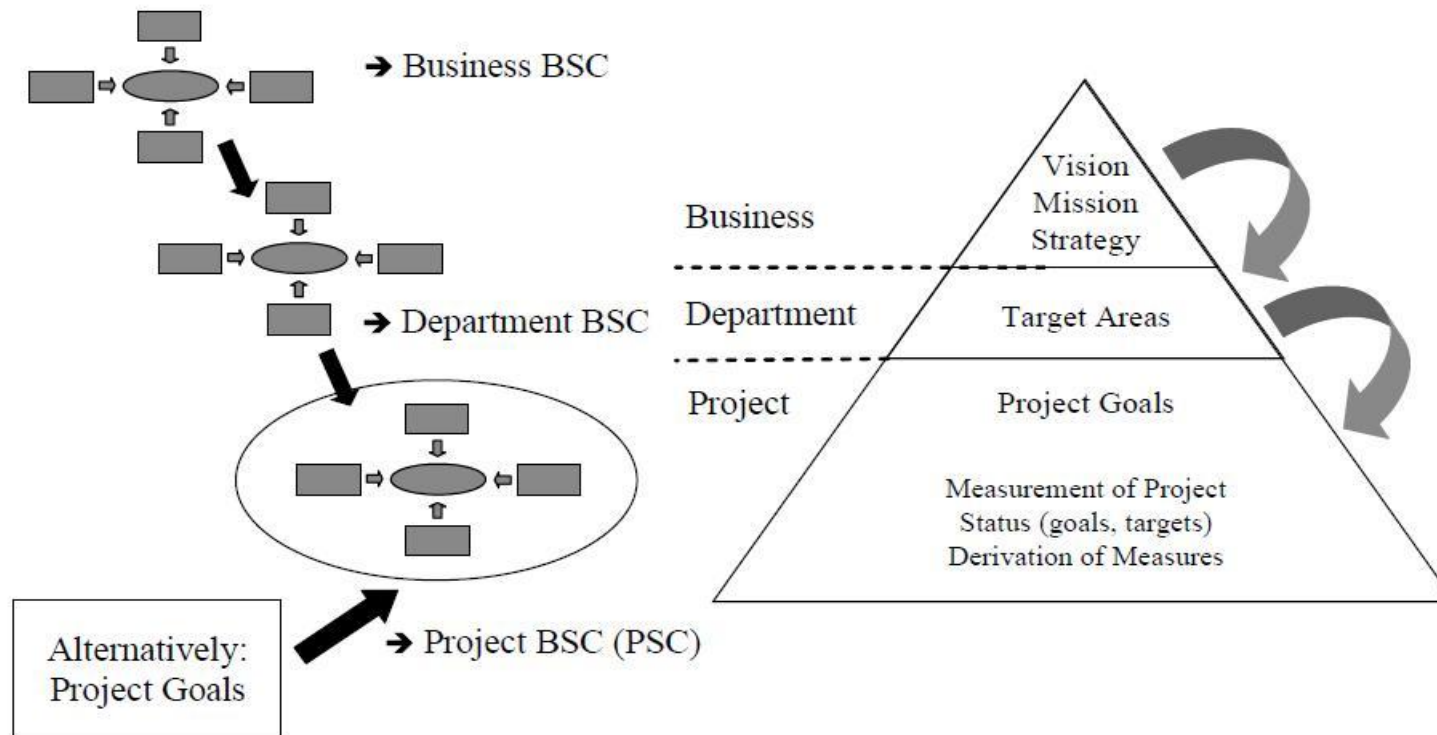


Figure 9: Derivation of a PSC
 (Niebecker & Eager & Kubitza, 2008).

Financial Analysis of Maturity Models.

“All businesses need to manage the health and safety, environmental and financial risks to which they are exposed and good risk management practice is now recognised as essential at the highest business level” (Turnbull, 1999).

The Hellenic standardization organization’s (ELOT) model 1429 (2008) “intend to control, among others, the financial administration of the projects. This can be achieved by monitoring the budget of the project and the control of the payments”. Additionally according to Somasundaram & Badiru (2008) “companies, in order to achieve their goals, must be in position and have the will to change and improve all the functions related, so an analysis of several changes that modern companies have to perform will be presented”. As Biazzo and Bernardi (2003, 164) suggest, “harmonizing normative requirements with a concept of quality management that is in line with developments in the field of TQM can be an important catalyst and stimulus for organizational (sic) innovation.”

“Different industries face different challenges while managing projects. For example, software development organizations have to deal with high technology uncertainty, while construction organizations are usually more troubled with engineering or finance problems. Moreover, same processes may have different boundaries in some industry types” (Plemmons and Lansford, 1994). “These differences end with as much as 30 percent in project cost and schedule among industries” (Lavingia, 2001).

Kwak and Ibbs (2000) declares that: “Management has trouble convincing top managers that PM investments results in financial and organizational benefits”

“Conventional wisdom has dictated the use of the same corporate valuation metrics for many years. But, as the economy continues to evolve and is increasingly defined by intangibles, it is difficult to rely entirely on traditional financial tools to measure progress” (Duffy, 2001).

According to Eve (2007) “managers today not only need to be aware of the development and investment of the procedures, tools, training and competency, but how this investment manifests itself into the behaviors of the workforce across the whole width of the company”. “The calculation of the return of investment (ROI) on a project makes it possible for managers to measure potential benefits of projectizing an organization or improving a company’s relative level of project management sophistication”. (Kwak & Ibbs, 2000).

“Some of the literature promotes project management maturity models (which assess tangible assets) as sources of competitive advantage” (Ibbs and Kwak, 2000; ESInternational, 2001; Hartman, 2000; MicroFrame, 2001). “Evidence that maturity models improve a company’s return on investment is weak, however, and the models do not address intangible assets” (Jugdev and Thomas, 2002).

Chapter 4

Methodology.

In this document I will make a brief presentation of the core aspects of my thesis, which is a financial analysis of the maturity model ELOT 1429. I will focus my paper on services providing companies in order to ensure more accurate results. Due to lack of information concerning the maturity model ELOT 1429 and because of the resemblance with the maturity model ISO9001:2000, I will find and analyze companies which have already adopted the second model.

I believe that the most appropriate way to collect information for my thesis is via evaluation method. In order to achieve this, I will gather data from a service providing company in which I am employee. I will be given this kind of information from the company's quality assurance manager, along with employees that are involved directly to projects executed from the firm. Moreover, I will try to seek information from another company from the same field through the quality assurance department or via the internet. Finally I will evaluate this information in order to reach to a conclusion.

The information that I will try to seek for my thesis are the costs of the adoption of the maturity model ISO 9001:2000 from my company and a comparison of how the projects were running before and after the adoption, as long as an analysis of the procedures. Concerning the other company of the same field, I will try to gather information about the procedures of a project.

Why a company chooses to adopt a maturity model such as ISO9001:2008?

There are number of reasons, which I will try to clarify below. In order, though, to achieve this, I will try to analyze the changes that took place in the company I am currently working in. It is a security services providing company, one of the biggest in her field, nationally and globally, with services such as static security, patrol security, alarm installation, telematix applications and cash transportation.

The situation before the adoption of the model in the specific company can be described as a bit of chaotic. No procedures were established, with much less forms and so it was very difficult to be able to control what was happening and which were the responsibilities of each employee. Of course, a certain philosophy was followed but that was not enough in order to examine if everything were according to what was planned.

After the adoption of the model the most valuable changes were, first of all that the specific philosophy that was followed were enriched with rules and instructions that should be followed and secondly everything that is happening is part of a certain procedure, which includes all the aspects of work that take place in the company. Of course, this situation has as a result the appearance of bureaucracy between the sections of the company but this has not always negative results. In fact, because of this, and because of the procedures that should be followed it is easier to perform better and more qualitative work.

In order to make it easier to understand the differences in the every day of the employees I will analyze the procedure when we purchase goods for a project.

Before the adoption: no requisition was made and anyone who was in need of a material for his project had to ask for permission from his supervisor and could buy it. This means that the only one who could be fully informed of what was truly spent on that project was himself and his supervisor. Additionally, no qualitative control was made on the merchandise.

After the adoption: first of all a purchase department was established which is the only responsible to purchase goods from the suppliers. Moreover, we only buy merchandise from specific suppliers which are accredited from the purchase department. As far as the procedure is concerned first of all

- A requisition is prepared, which is been approved from the supervisor, the purchase department and the financial department.
- Continually is transformed into a purchase order and sent to the supplier.
- When the goods arrive, with the dispatch note, they have been identified if they are what we ordered and pass through a qualitative and quantitative control from the warehouse.
- Finally the invoice is matched with the requisition and they are journalized.

So it is easy to understand that although more people have to participate in this procedure and it takes more time to perform a purchase, it is easier to

identify whether the merchandise is what we need, in the quantity we need and in the condition we request.

Following I will present some of the changes that took place after the adoption of the maturity model ISO9001:2008 that had direct impact to the finance of the projects undertaken from the company.

Bidding.

First of all: the procedure of bidding for a contract for a security services project or a patrol security services project.

- ❖ Before the adoption:

- a. Fewer forms to fulfill
- b. The bidding department was responsible to decide the total cost of the project.

- ❖ After the adoption:

- a. The procedure of bidding for a security services project has not great differences than before, the biggest change regards the forms that has to be fulfilled in order to identify the exact needs of the project
- b. This has as a result to create a more detailed bid by baring in mind more aspects of the project.
- c. Additionally the work that has to be performed and its aspects that are calculated in the bid procedure have better quality which results in the price by eliminating the mistakes.

d. Finally the total cost of the project, especially if it concerns big projects, more than 1 million €, is discussed with the top management in order to be clear how the cost was calculated and which were the assumptions.

Billing Procedure depending from:

- Shifts
 - Number of employees per zone (8 hour shift)
 - Contract period
 - Personnel wages (basic monthly wage – depending on the longevity, bonuses e.g. danger money/ medical benefits/ outfit allowance, public insurance/pension money)
 - Equipment: uniform, mobile, patrol vehicle etc
 - Miscellaneous charges: special training, supervision
-

Regarding projects of installation of security systems the calculation of the total cost is a bit different. So what was happening:

❖ Before the adoption of the model:

a. The representative from the sales department of the company was asking the client to give him the necessary details for the specific project.

b. And he prepared an economical offer, which he discussed with his supervisor.

❖ After the adoption:

a. The representative from the sales department of the company goes to the place where the installation will be proceeded and discuss the details of the project with the client. He may make some suggestions depending on what the client is asking and of what he truly needs.

b. The salesman fulfills all the necessary forms, depending on the scale of the project and on the needs of the client.

c. He is preparing his economical offer and finally.

d. He forwards it to his supervisor in order to check it, make any corrections, if necessary, and approve it.

Execution.

Second comes the fieldwork, and I will try to represent the changes that the ISO9001:2008 has brought to this section on the projects. In this part there are not great differences between the two types of projects that the specific company undertakes, the security / patrol services and the installation of a security system.

❖ Before the adoption:

a. The fieldwork was not organized as it should been, meaning there were lot of delays and the quality was not the best possible.

b. The forms that should be fulfilled were inadequate or absent.

c. The procedures, well there were not any, everything was empirical and according to the knowledge of each technician or supervisor.

d. But the number of the people, who were involved on each project, was much lower.

❖ After the adoption:

a. The greater change was that the forms was reestablished in order to cover every aspect of the work and everybody in the company was trained in order to understand their use and which is the reason of its existence. (Appendix A)

b. We are following a certain philosophy and anyone has a certain role on the project.

c. On the other hand, in order to be able to handle all these changes much more people are necessary in order, the project, to be completed successfully.

d. Control makes his appearance not only from the supervisors but also from the quality assurance department in every stage of the execution of the project.

Control.

The last part I would like to mention regarding the changes after the adoption of the maturity model is the control performed during the execution of the project.

- ❖ Before the adoption:

- a. As far as the security / patrol services projects the only control performed was the one from the supervisors and they did not even check all the responsibilities of the guard. It was kind of a typical control.

- b. Regarding the installation of the security systems projects, there were no controls performed, except the one in the end of the project in order to check if everything was as it was planned.

- ❖ After the adoption:

- a. The controls that were performed previously were not cut down but new forms are established in order to transform them from typical control into a more essential control.

- b. Additional to the forms that were established the control is not only performing now on from the supervisors but also from the quality assurance department.

- 1. The controls performed from the quality assurance department regarding projects of security / patrol security services included both distance and close surveillance of the guard in order to

certify that he is following the instructions and he is updating the papers required.

2. As far as the installation projects are concerned the quality assurance department performs controls not only by the end of the project but also during the execution in order to be certain that the deliverables are within the specifications required from the client.

Additional to what mention above, another aspect of controlling, shown after the adoption of the specific maturity model. The financial condition of each project executed in the company is being controlled every month either from the financial department, if it regards a project in which the customer is billed every month with the same amount, or from the sales department after gathering the necessary information from the corporate department.

Differences between companies having adopt ISO9001:2008 and companies that have not.

In the second part of my methodology I will try to compare the differences between companies that have adopted the maturity model ISO9001:2008, for this case I will use as an example the company I am working in, and companies that do not have adopted the model.

From the information I have gather through interviews with executives of other security services companies, I have come to the conclusion that the situation in these firms is pretty much the same as the condition in the company; I am currently employee, before the adoption.

More analytically, some key elements of the model seem to be absent in those companies, such as:

- ❖ There are no certain procedures established in order to make it easier for them to control the execution of the project.

- ❖ The forms that these companies are using although, they are moving to the right direction are not complete, and in some cases provide useless information. The reason, why this happens is that, in all kind of projects, no matter how big or small the project is, the forms are the same.

- ❖ Moreover during the execution of the project there is no quality control performed. In fact the only control performed in those projects is the one the customer requests, that is to say from the supervisors.

- ❖ On the other hand companies that do not have adopt a maturity model, and because of the lack of specific administrative work, request fewer employees in order to execute their project.

Generally, if we want to analyze what are the benefits of the adoption of a maturity model from a company today we should think first of what the company aims to achieve. Literally, this means if the company wants to perform more qualitative projects should adopt such a model, if the firm prefers to cut down the budget of the projects she undertakes, then maybe it is preferable not to adopt one. In any case, the adoption of such model is a serious decision for the company and before the top management makes it, it should answer the following question: “Do they prefer to have better quality or they prefer to conduct cheaper projects?”

Why should a company choose the maturity model ELOT 1429?

Especially when she already has adopted another model such as ISO901:2008?

European Union, in order to support countries with low development, such as Greece, has established a Community Support Framework in order to perform new projects. In the past years though, such efforts, from the Greek government, had not proved beneficiary for the economy, as the companies that performed those projects were not qualified appropriately, and the projects they performed were not successful. For that reason the Greek government has establish a new standard that would certify that the organizations involved with the fourth structural assistance budget (2007-2013) would have the managerial competency in order to perform those projects.

ELOT 1429 is the model that was created for this reason and every company that wants to perform a project with funds from the European Community will have to be certified with.

How much will the adoption cost?

The adoption of a maturity model from a company requests first of all the co-operation of everyone in the company and a lot of time. In fact, the adoption of the maturity model ELOT 1429 is a critical decision for an organization as it requests that the entire philosophy of executing projects should change. On the other hand though, ELOT 1429, has great similarities with ISO9001:2008, which means that companies that already have adopted the second one, will be able to adjust to the new procedures easier. For the

rest, a quality assurance expertise could prove very helpful, as new forms will have to be created and new procedures will have to be adopted, and his experience could help to decrease the adoption period.

It is a fact that, the administration costs for a company which operates according to a maturity model are increased, but on the other hand, ELOT 1429 is a great opportunity to undertake more projects with funds from the European Community, and it is also a fact that such maturity models leads to higher project success, which helps the company to, generally, expand her portfolio and so eliminate the additional operating costs.

To sum up, the maturity model, ELOT 1429, can prove very helpful for the economical condition of a company, even if she already has adopted another maturity model, as it provides her the opportunity to co-operate with the Greek government in new projects, and helps to create more successful projects.

Chapter 5

Results

From the previous analysis of the condition appearing in the security services companies and the changes a maturity model brings in the way they are conducting their projects, I would like to make some remarks about the fact that a maturity model affect the financial condition of the firms.

But before that, from the interviews I conducted, I had the chance to have a more clear view about how important is for a company the adoption of a maturity model. This view I could sum them up in the next few lines.

- First of all, maturity model's goal is to automate the procedures within the company.

- Secondly, although more people are requested to perform the same work as before, because of the rise of the forms and the procedures, a more qualitative work has been conducted, and this affect the project and helps the company to be more competitive.

- Moreover, what came as a surprise for me from the interviews, is that in order to achieve a more efficient adoption of a maturity model from a company, everyone should be well- informed about the new procedures and primarily top management should embraces it in order not make it work as it should be.

- Finally, I would like to point out that the adoption can be conducted immediately. In fact, several years have to pass in order everyone in the company to be able to adopt the changes. This period

differs from company to company, depending on the workforce, and how they are willing to follow the new instructions, and depending on the management, how well they can persuade their employees that this model is selected in order to make the company work more efficiently and help them in their everyday routine.

Conclusions

To sum up the adoption of a maturity model from a company usually influences negatively the financial condition of the projects, in fact it is calculated that the percentage budgeted for the administrative work on a project is raised approximately 25%, at least, in the beginning. But in the long – term, the adoption of a maturity model leads to better quality for the company. This fact aids to the growth of the firm by gaining more projects. Finally it is a fact that the administrative costs are grown because of the adoption, but we should not forget that the extra administrative work is essential if we want to have a successful and qualitative project, and that maturity models aim to standardize the procedures, so subsequently these administrative costs are getting less and less.

Recommendations

The interviews that I have conducted and the information that I have gather helped me to create a clear view of the conditions under which the projects are running in several security services companies. But, although several organizations conduct projects according to ISO9001:2008 or other maturity model, no company does not calculate the return on investment of her projects.

Measuring the ROI is a powerful tool for business in that it ensures that the actions that a manager approves will be profitable and beneficial. The ROI calculation is a tool that applies to nearly everything. The PM / ROI calculation makes it possible for manager to measure potential benefits of projectizing an organization or improving a company's relative level of PM sophistication (Kwak & Ibbs, 2000).

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Appendix A

FORM OF PROJECT CONTROL

NAME _____	PROJECT TYPE _____
INSTALLATION CODE _____	
DATE _____	NAME/SIGNATURE _____

1st CONTROL - B2C DEPARTMENT			
	Y	N	N/A
Client's Information (name, address, telephone)			
Agreement, Financial Offer:			
PO form:			
Connection with Central Station Form:			
Service Order Form			
Miscellaneous:			
Remarks			
Date of Check: _____ Responsible: _____			

Scheduling:		Date _____	Name/Signature _____
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Customize Schedule	<input type="checkbox"/>	Date _____	Name/Signature _____
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2nd CONTROL - B2C DEPARTMENT			
	Y	N	N/A
Copy of Technical Support Form			
Copy of Delivery Form			
Special Features			
Copy of Delivery Note			
Remarks			
Date of Check: _____ Responsible: _____			

Termination:	<input type="checkbox"/>	Date _____	Name/Signature _____
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Priority	<input type="checkbox"/>	Date _____	Name/Signature _____
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FORM OF PROJECT CONTROL

Remarks - Vendor

Credit control Department Date _____ Name/Signature _____

3rd CONTROL - ACCOUNT DEPARTMENT

Request for Invoice	Y	N	N/A
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Remarks

Date of Check: _____ Responsible: _____

Account Department Date _____ Name/Signature _____

4th Control - Filing department

Connection with Central Station Form:	Y	N	N/A
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Remarks - Filing Department

Job No: _____

Filing Department Date _____ Name/Signature _____

B03V A03.D1

