



**PROJECT MANAGEMENT IN CHALLENGING TIMES:  
EXPLORING IT PROJECT MANAGEMENT ADAPTATION TO  
THE ECONOMIC CRISIS SITUATION**

**By**

**Matthiopoulou Panagiota**

**A THESIS REPORT  
Presented to the Project Management Program in the  
School of Management of  
City University of Seattle  
In Partial Fulfillment of the Requirements  
For the Degree of  
MASTER OF SCIENCE in PROJECT MANAGEMENT**



June/2011



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*This Master Thesis was elaborated in the frame of the collaboration of the City University of Seattle and the Graduate Technological Education Institute (T.E.I.) of Piraeus to fully implement at TEI of Piraeus Campus the CU's MS in Project Management Program approved by the Hellenic Ministry of National Education and Religion Affairs as by decision E5/58291 published in the Hellenic Government Gazette (FEK) B/924/5- July-2005.*



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## **Dedication**

*To my beloved son, Thanos*

### **Acknowledgements**

*To begin with, I would like to express my gratitude towards to all my instructors, and especially my advisor Dr. Athanasios Spyridakos, whose knowledge and remarks guided me throughout the development of the thesis.*

*Finally, I am grateful for my family, my father, my mother and my sister who offered me continuous and valuable support throughout the duration of my studies.*

## **Biography**

Matthiopoulou Panagiota, Professional

The author has a BSc in Mathematics (University of Patras) and a two- years' certificate in Computer Information Systems and Programming (Control Data Greece Inc.). She has 17 years professional experience in the IT sectors of Financial Services industry's organizations, expertise in Core Banking Applications and extensive experience in business requirements gathering and analysis, functional and technical design and cross functional team leading. Currently, she works for a group banking organization with presence in ten countries. During these years, she participated in many IT projects initially as analyst/programmer and team member and later as a team leader and project manager.

The author determined to attend the program to learn methods to improve her project management performance. Additionally, she considers that she obtained skills that assist her to expand her organizational influence, impact decisions for change initiatives and assist her exercise her new role as a Business Architect of the Group IT Architecture Sector. Hence, she plans to share her findings within the organization and initiate changes that will hopefully improve IT performance, embrace learning and creativity and increase efficiency and business satisfaction!

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**Abstract**

Today's economic crisis demands introducing efficiencies to succeed cost reductions and improving return on assets. Furthermore, it reinforces business competition and creates a mandate for innovation, flexibility, adaptability and improvement of time to market. The author perceives the current economic crisis as an opportunity for organizational change and learning and conducts a qualitative analysis research by interviewing professional experts with experience in IT projects of organizations in the financial services industry, to explore whether and how they have changed and afterwards, to identify those practices and tools that will support them to face the crisis-induced challenges but also increase team morale, achieve advanced business results and internal customer satisfaction.

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## **Introduction**

### **Nature of the Study**

Today's economic crisis demands introducing efficiencies to succeed cost reductions and improving return on assets. Furthermore, it reinforces business competition and creates a mandate for innovation, flexibility, adaptability and improvement of time to market. Internal customers demand for business value and results delivery, efficient operations and costs minimizations and they pressure IT Sectors to support their strategy and their business initiatives. Thus, there is a need to achieve alignment between business and IT, manage effectively the available resources, and improve responsiveness and flexibility to the changing environment.

The author hopes to arrive to a customized project management framework of practices, and tools that will support in a practical but systematic way the project managers to overcome obstacles related with the economic crisis and implement successfully the competitive strategy of large organizations.

### **Needs Assessment**

Project managers and change agents who may be interested in delivering timely business results through IT projects will obtain a set of tools and best practices that will hopefully assist them to overcome limited resources, low team morale and other challenges introduced by the current economic crisis, and also to improve organization's competitiveness. To accomplish this, the author will present:

- An overview of academic research on the subjects of crisis management, polarity management, learning organization and systems thinking, theory of constraints, program and project management frameworks and best practices related to the challenges induced by the current economic crisis.

- A qualitative content analysis of the interviews given by business representatives, senior managers, project managers and team members regarding their organizations' response and their personal recommendations relative to challenging economic times.
- A set of tools and practices to facilitate learning and change and thrive in selecting, planning, leading and implementing projects and delivering business value in the current volatile environment.

### **Purpose of the Study**

The author perceives the current economic crisis as an opportunity for organizational change and learning. She expects that the research and interviews conducted for this thesis will provide a set of practices and tools that will support large organizations to face the crisis-induced challenges but also to increase team morale, achieve advanced business results and internal customer satisfaction.

### **Relation to the Program of Study**

Throughout PM513 – Project Managers as Change Agents, we have learned that project managers are change agents who should realize that organizations cannot remain static in today's ever-changing business environment, they should be able to conduct an organization diagnosis by adopting a systems thinking perspective, and determine the need and the type of required change. In the same course, we discussed the importance of viewing organizations as open systems and of building a learning organization. Moreover, in PM 506 Leading Domestic and Global Teams the value of motivation and collaboration among diverse team members was empathized. Finally, in PM512 - Applying Advanced Project Management Tools and Methods course, we have learned various project management methodologies, strategic and tools to use in varying business and project situations to ensure alignment with business goal achievement.

**Definitions of Terms**

MSP	Managing Successful Programmes
PDA	Personal Digital Assistant
PDCA	Plan Do Check Act
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PRINCE2	Projects in a Controlled Environment
POOGI	Process Of On Going Improvement
RFC	Request for Change
ROI	Return on Investment
TOC	Theory of Constraints

## **Problem Statement**

Organizations struggle not only to survive in the current economic crisis situation but also to thrive, so they have a unique interest in changing and adapting their IT project management to improve and facilitate learning and change, enhance their flexibility and dynamics and deliver improved business results.

## **Rationale**

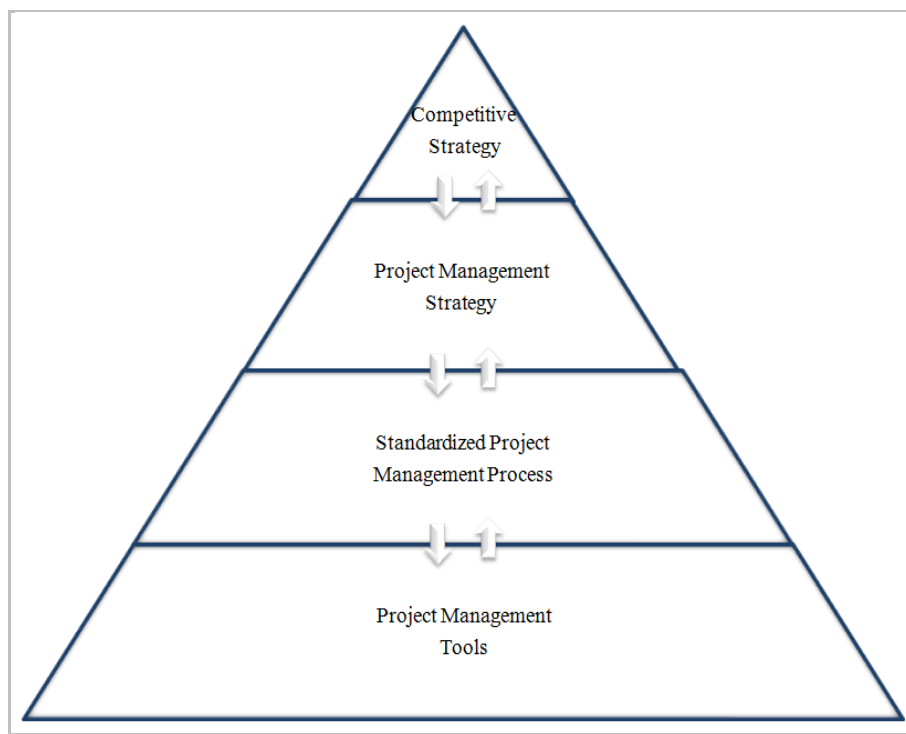
Today's economic crisis demands introducing efficiencies to succeed cost reductions and improving return on assets. Furthermore, it reinforces business competition and creates a mandate for flexibility, adaptability and innovation. Wauter (2009) claims that even leading companies, responding to the current financial crisis, lay people off or drastically diminish costs and their survival depends on time-to-market.

Additionally, Gale (2009) declares about the innovation or death of the organizations and that "to remain relevant, organizations must innovate even now", and that "innovation may be the only way to survive the slump" (Gale, 2009, p.60).

Furthermore,, Sull (1999) supports that in the ever-changing business environment, the strategy, the culture and the practices that led leading organizations to their positions will eventually become barriers and obstacles for them to take actions to the right direction for their survival and he discusses about "active inertia" and the "failure of success" (Sull, 1999, p.42).

The author currently works at the IT Sector of a large international banking group that uses traditional project management methods and tools to deliver IT projects. Traditional approaches encompass standardized activities and high levels of project management maturity level. On the other hand, traditional project management methods for software development, beside the long development life cycle, can be efficient in projects with certain, consistent and steady

requirements. Therefore, the balanced incorporation of agile or extreme project management techniques into the projects may foster learning and better business results and it will lead to project and organization success. At the same time, organizations will achieve and keep high levels of project management maturity. According to Milosevic (2003), the competitive strategy of an organization is supported by its Project Management Strategy. However, the Project Management Strategy is based on the standardized project management processes and tools. Figure 1 illustrates the relationships among them.

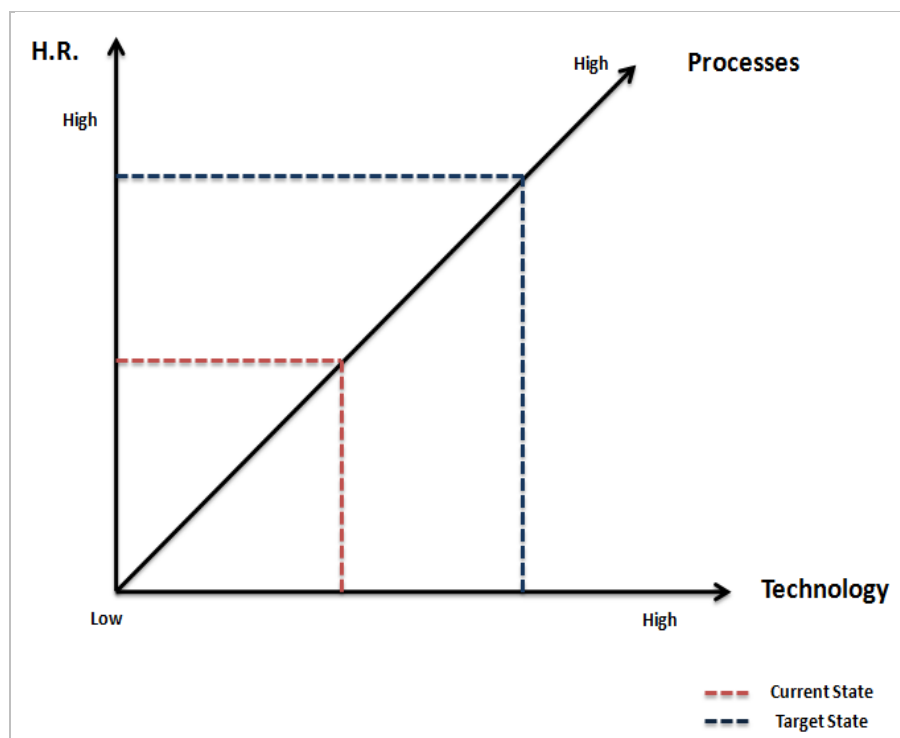


*Figure 1. The Project Management Pyramid. Adapted from: Milosevic (2003)*

Consequently, adapting and changing IT Project Management tools and processes is significant for organizations to remain competent and overcome the crisis-induced challenges.

## Objective

The objective of the thesis is to identify a set of tools and practices that facilitate cost-reductions, learning, change and innovation, which will support large organizations to adapt their IT project management, so as to overcome the crisis-induced challenges and not only to survive but also to thrive.

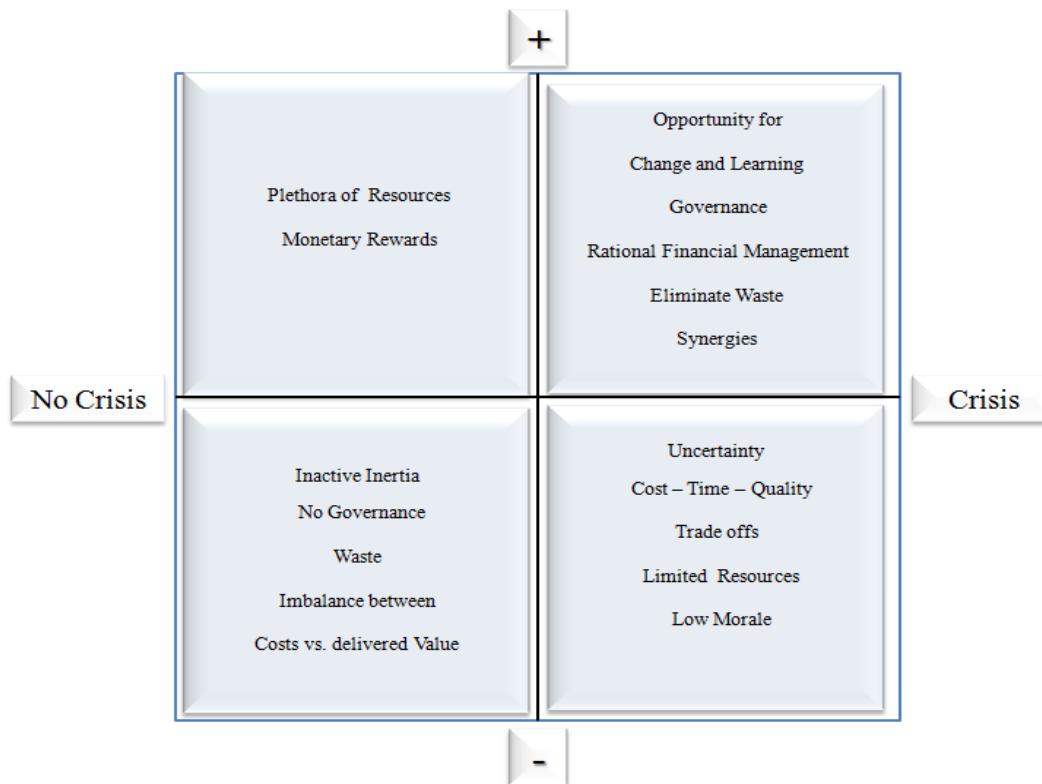


**Figure 2.** Current and target capability of implementing the organization's strategy through projects, related with Human Resources, Processes and Technology.

## Literature Review

### Polarity Management

Organizations implement their strategy through project management, which is based on the triangle of cost, time and quality. The cost reductions that the economic crisis enforces create severe problems to organizations in implementing their strategy. “Polarity Management” model is consisted of principles for dealing with inevitable, unsolvable, continuing and persistent issues otherwise polarities, which are not feasible to resolve with traditional problem solving techniques. Polarities have two or more interdependent answers.



*Figure 3. A Polarity Map of economic crisis.*

Figure 3 illustrates the two poles of economic crisis with their negative and positive impacts. The value of Polarity Management is significant when increased complexity, diversity, speed and resistance of change exist and it can:

- Simplify the complexity, while avoiding simplicity
- Benefit from diversity, without disaffecting the diverse elements
- Predict and provide steadiness, without slowing down change
- Transform resistance to change to sustainable and continual adaptability (Johnson, 1996).

### **Crisis Management**

Crisis is a time pressuring and uncertain condition that threatens the basic structures or underlying norms and values of the organizations and reinforces making crucial decisions (Boin & 't Hart, 2006). The research on crisis management is extensive, but the author focuses on the positive polarity of crisis and specifically on the possibility of crisis as a chance for change and learning.

According to economist Paul Romer, “a crisis is a terrible thing to waste” (Rosenthal, 2009). Moreover, Roux-Dufort (2007) supports that organizations are defects generators because any evolution, progress or growth generates its own weaknesses; consequently crisis is intrinsic to any development process. Crises usually reflect organizational and societal imbalances, dependencies and weaknesses and offer the significant advantage of exposing organizations to extreme situations; therefore they reveal a stage beyond which the organization can no longer be managed similarly as before and organizational phenomena which cannot be identified in normal conditions (Roux-Dufort, 2007). Stern (1997) states, that findings from social psychology explain why crisis may have beneficial and valuable impacts on encouraging “rigorous thinking and rethinking” under certain relative conditions (p.74). In addition, he supports that decision-makers may be forced by crisis stress to deal with issues and trade-offs that under other conditions, they might opt to avoid (Stern, 1997). Moreover, Cawsey and Deszca (2007) argue



that the urgency of a crisis is a great opportunity for the organizations to “unfreeze” systems and people and to make unpalatable changes feasible (p.41).

All types of crises, either public or organizational, are illustrated by volatility, urgency, and by significant pressure to life, well-being and other standards (Falkheimer & Heide, 2006). The first aforementioned type of crisis has macro-level social and economic impacts and involves the cooperation and collaboration of both private and public organizations to achieve crisis resolution and survival (Turoff et al., 2004).

Learning from experience involves extraction of essential lessons learned by reviewing from a constructive point of view the way a difficult situation was handled. Therefore the difficult experience is treated as an opportunity for progress and even less a chance to place blames (Lagadec, 1997). According to Moynihan (2008), there are two kinds of learning related to the crisis-learning paradox; “intercrisis learning”, which refers to “learning from one crisis and making changes to prepare for another”, and the “intracrisis learning”, which “seeks to improve response during a single crisis episode” (p.352). Both types of crisis learning are valuable, as organizations seek to capitalize lessons-learned from past experiences but also proceed with continuing evaluations regarding the appropriateness and effectiveness of the current response (Moynihan, 2009).

During a crisis, the participants should evaluate the nature of the situation and search for the proper reaction under limited time and extreme pressure, whereas in post crisis periods, the meaning, the scope and the nature of the event is acknowledged and defined, which makes it straightforward to diagnose appropriate and suitable change initiatives (Boin, ‘t Hart, Stern & Sundelius, 2006). Due to the dynamic and complex nature of crisis, it is recognized that intracrisis learning is very complex, as it occurs under uncertainty and pressure and requires

rapid action, but both crisis-induced learning types require the adoption of new behavioral patterns, norms, routines and procedures or other changes (Deverell, 2009).

Following Holmes (2009), the participants should take small tactical decisions before they make greater strategic moves with confidence, since adaptability is a compulsory element for handling crisis. The objective of crisis management is to stabilize the organization, to assess the damage and the available resources and to determine the feasible actions that will permit the implementation of a new strategy (Holmes, 2009). Lalonde (2007), supports that sharing of experiences in crisis management is inadequate but Jaques (2007) argues that although learning and evaluation should occur at every phase of the crisis, real organization learning and systems modification can above all flourish during the post-crisis phase and that after a crisis a preparation for the next one should be initiated. In addition, Jaques (2009) supports that during the “post-crisis discourse of renewal”, the focus should be: on a) the future; b) overcoming crisis induced limitations and c) exploration of new opportunities (p.37), and that organizations which adopt conventional crisis response and fail in managing the transition with appropriate processes for long-term management of post-crisis issues, will face additional real risks (Jaques, 2009).

Nevertheless, prerequisite for this is to abandon the attitude of fatalism and victim's and to recognize of one's own responsibility for acting; the organization's vulnerability relies on the ignorance of its weaknesses as and not on the actual weaknesses. Unfortunately, this ignorance is supported by managers' threatened self-esteem defense mechanisms (Argyris, 1982) but crisis advantageous environments can grow and strengthen only when management allow ignorance about the evolution of weaknesses and imbalances into crises to exist. (Roux-Dufort, 2007).

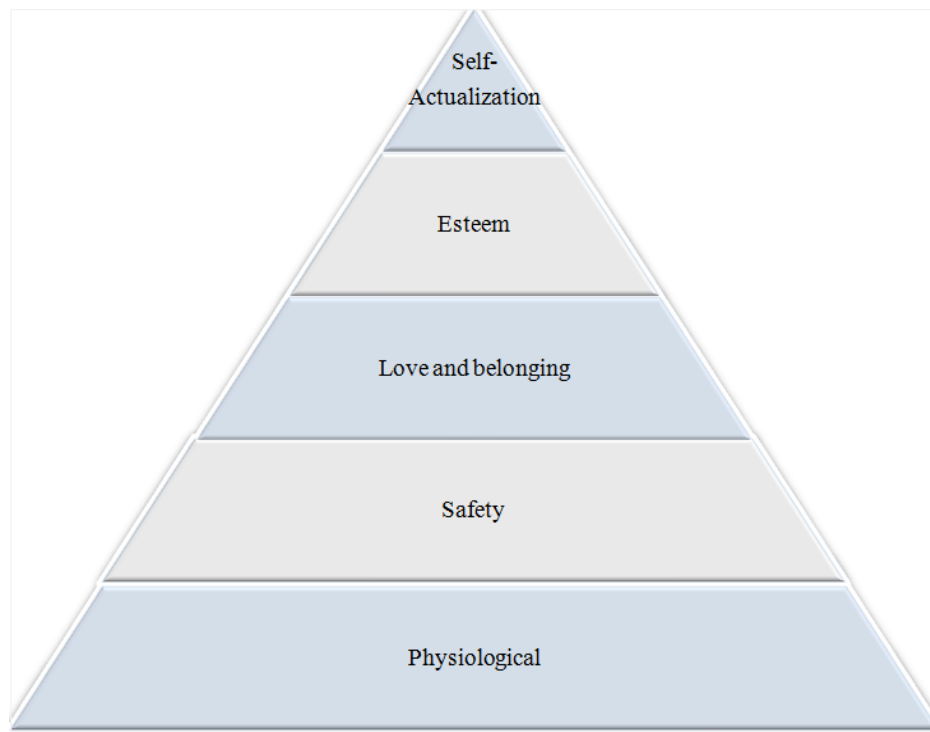
Reform leaders should have to multiple stakeholders that their proposal reform is good, realistic, and inevitable and its benefits justify the costs of changing existing procedures and

structures (Boin & 't Hart, 2003).

In conclusion, as Penrose (2000) also supports, those organizations, which achieve to survive in crises, are even more prepared for future challenges.

## Motivation

Many theories exist worldwide – vast majority of them are highly respected and implemented within organisations.

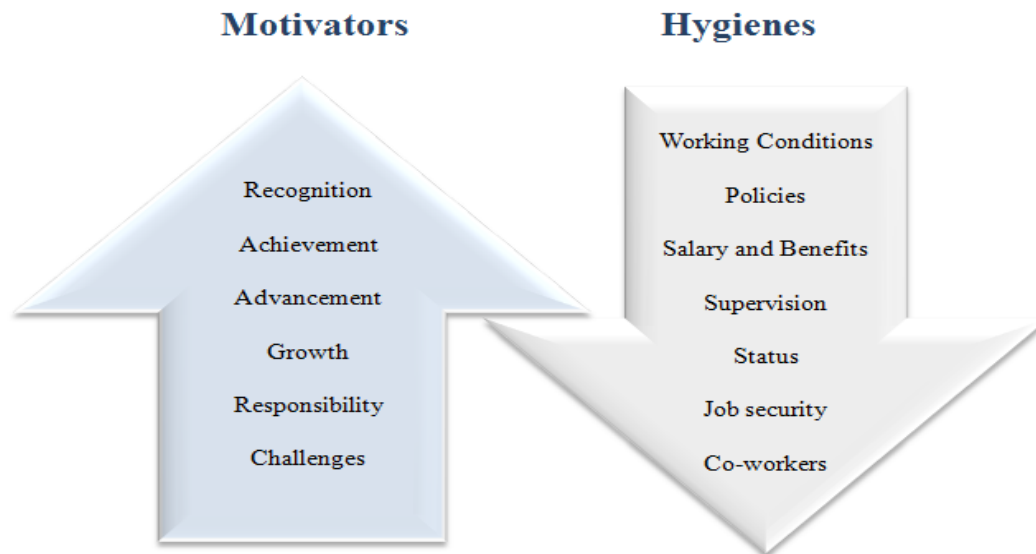


**Figure 4:** *A Maslow's Hierarchy of Needs Pyramid*

*Maslow* (1943) considered people's needs as the mainstream that motivational efforts should be directed. He supported that those needs are satisfied progressively. The first needs that need to be satisfied to be able to proceed to the next level are the psychological needs e.g. food, drink, shelter, sleep; the next level is consisted of the needs for safety, protection and security; next come the love needs e.g. belongingness and recognition among those individuals comprising the organization; beyond that level esteem needs exists, e.g. prestige, achievement

and mastery; on the final stage self-actualization and fulfillment exist which include realizing our perceived personal potential, peaking experiences and looking positively to a better future.

Motivation is increased by the desire for achievement and maintenance of the various conditions upon which these basic and intellectual need rest (Maslow, 1943).



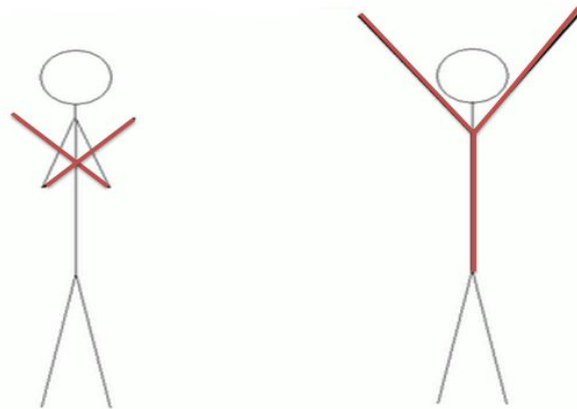
**Figure 5:** *Herzberg's Motivators and Hygienes*

*Herzberg's* (1959) significant research showed that although people are made dissatisfied by bad environment, the extrinsic factors of the job, they seldom become satisfied because of them. The “*hygienes*” as he called them only are responsible for causing negative or demotivated feelings to individuals and include: company policy and administration, status, security, working conditions, personal life, salary, supervision and relationship with peers.

On the other hand, there are the “*motivators*” based on intrinsic qualities of human nature, include those factors that can make individuals feel satisfaction, create positive motivation and

include: achievement, recognition, advancement, growth, responsibility and challenges (Sandler, 2008).

*McGregor* (1960) defined and documented that the relationship between the human behavior and the organizational life can be expressed by the famous *Theory X-Y* he proposed. According to Theory X individuals do interest in work, they are lazy, they avoid responsibility and thus they must be forced or reward to work towards the organizational objectives. Contradictory, Theory Y assumes individuals enjoy achievement, get pleasure and fulfillment from work and responsibility and they have a natural tendency to seek ways of transforming their work to a positive experience.

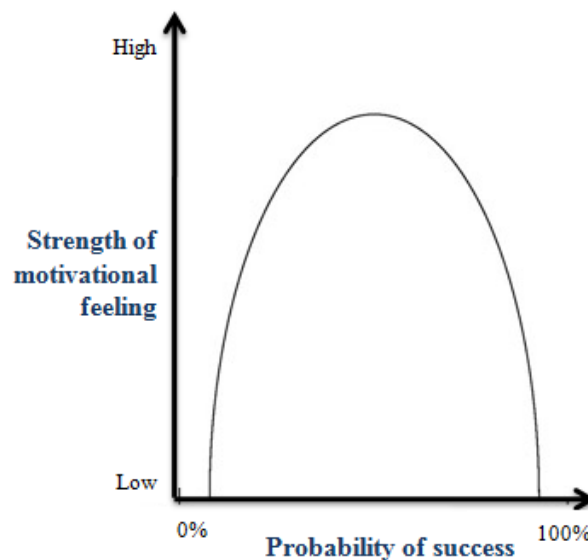


**Figure 6:** A *McGregor's theory X-Y* illustration.

Theory X and Y express the extreme positions that individuals may have. Although, it is obviously easier to motivate those individuals who are doing more interesting work from those who are doing some jobs inherently boring and mundane, according to Forsyth (2010) everything is a matter of perspective, as even the most boring work can become interesting. He shares an old story of a downhearted group of prisoners breaking rocks being asked about their feelings concerning their work. Everyone expressed negative thoughts, but one said it was supportive to

keep the end result in mind; he was helping to build a cathedral (Forsyth, 2010).

*Victor Vroom's expectancy theory* (1964) links achievements with the according goals. According to this theory having clear goals in mind encourage individuals to achieve the desired results and to continue the iterative process by setting new goals and objectives. Efforts affect actions and actions dictate results. Consequently, the strength of the motivational feeling increases and acts as a catalyst as long as the targets are challenging but also achievable (Forsyth, 2010).

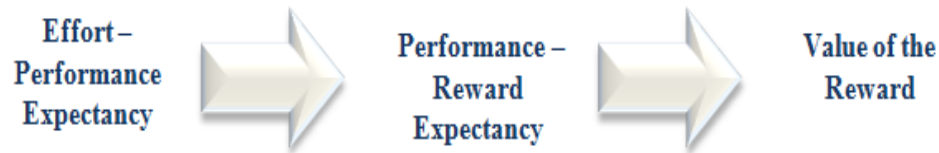


**Figure 7:** Impact of probability of success on motivation Adapted from: Forsyth (2010)

Moreover, according to Sandler (2008), expectancy theory combines effort, performance, and rewards:

- *Effort - performance expectancy.* The individual expects that more efforts lead to higher performance.
- *Performance - reward expectancy.* The individual expects that higher performance will lead to desired rewards.

- *Value of the reward.* The respect of the individual for the high performance reward.



**Figure 8:** Vroom's theory: Expectations, outcomes regarding effort, performance, and rewards.

*Skinner's Positive Reinforcement theory* relies on the principle that rewards acts as reinforcement and that individuals tend to repeat something if they are rewarded for the act. Consequently, the actions of an individual can be controlled by controlling the responses the individual gets for his action. Positive reinforcement achieves the best long-term results while negative reinforcement or ignoring a behavior usually generates undesirable side effects such as tension and feelings of hostility and aggression. The notion of "conditioned response" was an outcome of psychology research and it was initially popularized by Pavlov's experiments and observations of how behavior is strongly influenced by the external environment (Sandler, 2008).

*Adam's Equity theory* (1965) relies on the notion that one's ratio of inputs to outputs is weighed against to the ratios of others individuals in similar situations and determines both the job satisfaction and the individual's contribution efforts. Individuals tend to be satisfied with the received returned when the ratios are close whereas they generally act to bring them back into balance when they are different (Sandler, 2008). Therefore, high performance and poor performance should be rewarded accordingly so as to satisfy the high performers.



**Figure 9:** Adam's Equity theory. Adapted from: Sandler (2008)

McClelland's theory of needs (1961) describes three motives related to motivation to work:

- Individuals with the “*need for achievement*” are those who focus on personal accomplishment by setting realistic but challenging goals, and by seeking competitive situations. Those persons are motivated by: a) accomplishing something unique; b) outperforming his colleagues by implementing something faster and better than them; c) meeting a self-imposed standard of high quality performance; d) achieving long-term goals; e) overcoming barriers and obstacles.
- Individuals with the “*need for affiliation*” are those who focus on sharing mutual friendship. These persons are motivated by: a) being part of a group and enjoy the teams' relationships; b) being accepted by establishing warm relationships; c) avoiding conflict and uncomfortable interpersonal situations.
- Individuals with the “*need for influence*” are those who focus on getting power or control over or power others. Those persons are motivated by: a) influencing behavior of their subordinates through policies; b) creating strong feelings, emotions and reactions; c) getting a powerful position or having high status d) seeking situations or positions that can attain control over people (Sandler, 2008).



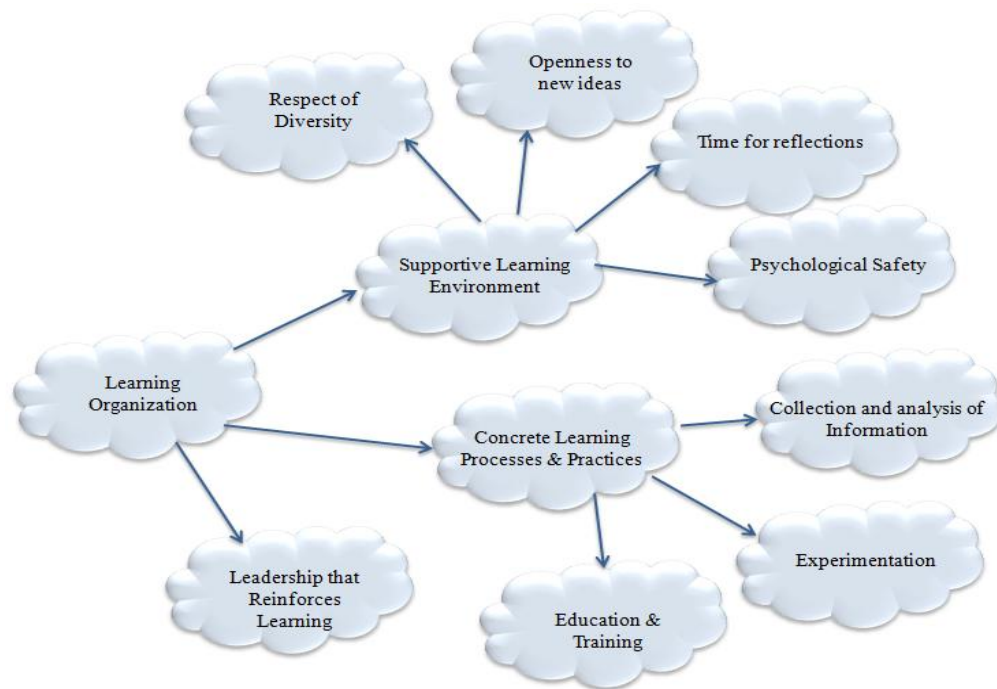
## Learning Organization

Cawsey and Deszca (2007) support that when increased complexity and environmental instability exist decisive success factor for the organizations' flexibility is the learning ability to develop adaptive systems and structures.

According to Nevis (1995) organizations should be considered as learning systems and consequently proposes the subsequent principles that make organizational learning possible:

- “Scanning Imperative”, which concerns both internal and external environmental scanning and awareness of their differentiations
- “Performance Gap”, which concerns the identification of the gap between the present and the future state and its perception as an opportunity for development and improvement.
- “Concern for Measurement”, by investing in defining key performance indicators and quantifiable measures
- “Experimental Mind-set”, which can be succeeded by supporting trials of new ideas and receiving failures as opportunity for learning
- “Climate of Openness”, which concerns promotion of communicating openly and , sharing knowledge and lessons learned
- “Continuous education”, which concerns the educational and developmental engagement and commitment at all organizational levels.
- “Operational Variety”, which concerns respect and appreciation to diversity and to variety of methods and procedures to operate
- “Multiple Advocates”, which concerns the number of the employees who support and advance new creative ideas and techniques

- “Involved Leadership”, which concerns communicating clearly the vision, being engaged, and interacting and becoming actively with others for its accomplishment
- “Systems Perspective”, which concerns understanding of the interdependences and interrelations of the organizational divisions (Nevis, 1995, p.77).



**Figure 10.** *The learning organization*

According to Senge (2006), prerequisite for building learning organizations is the integration of the following disciplines:

- “Personal Mastery”, that extends beyond personal skills and competence, requires courage, creative patience to reach a broader vision beyond self-interest, continuously challenging and broadening one’s theories and awareness, compassion and empathy (p.139)
- “Mental Models”, that embrace learning and assist people to adjust to changes (p.174)

- “Shared Vision”, which is crucial for achieving aspiration and accelerating generative learning (p.205)
- “Team Learning” that facilitates team members to grow faster than individually (p.233)
- “Systems Thinking”, that permits seeing the interrelations of the complex environment (p.5)

Moreover, according to Maxwell (2005), a learning-oriented leader should have a genuine concern about people and value them as human beings, not just as team members, who can accomplish specific tasks for his project. He should respect and value them and have a positive uplifting attitude and recognition of their potentials. An effective learning leader gets more of his people because he thinks more of his people, he builds them up, he encourages them believe in themselves, he gives them sincere praise and positive reinforcement by catching them doing something right instead of something wrong. He should develop each team member as a person by helping acquiring personal qualities, by cultivating discipline or a positive attitude, by teaching them to manage their time more effectively or improve their people skills also. People’s development is a long-term process that a learning leader should make a consistent regular schedule activity. It should be based on their desires and needs. Finally, he should help them to obtain self awareness for their potentials by realizing their position first and discovering their strengths and place them to the right position (Maxwell, 2005).

Furthermore, Schein (2010) argues about the need of building a learning culture that:

- Embraces proactivity in problem solving and solutions generating
- Commits to learning to evolve, improve and learn about the internal and external environment by getting positive feedback and experimenting

- Espouses positive beliefs and assumption about humans
- Adopts positive belief about their ability to handle their environment
- Recognizes the need for continuous learning and shares responsibility about it
- Balances time orientation among the far future to recognize and evaluate the consequences of actions and decisions systemically, and the near future to be able to function in accordance with the volatile environment
- Embraces open communication and trust
- Understands, respects, values and desires cultural diversity;
- Adopts systemic thinking;
- Recognizes that cultural analysis is significant to reveal the creation and evolvement of organizations.

Moreover, Kelly (2008) connects learning with innovation and creativity. He supports that in a learning organization leaders should be enables and learning directors and advance individuals by giving opportunities to learn and grow. They should learn to remove obstacles and challenge their own assumptions. These individuals will eventually think new ideas and innovate (Kelly, 2008). Teamwork, collaboration value and trust are also ingredients of creative teams.

### **Systems Thinking**

A project can be perceived as a complex system with many components and variety of technologies with such high interaction and interconnectivity that it is tough to separate one part from another entirely. Systems thinking is a valuable way for managing complexity because it concerns the system's decomposition in more manageable subsystems, the concurrent development of the subsystems, and finally its re-composition into a coherent and consistent solution within an existing architecture (Sapolsky, 2004).

Leach (2005) warns that changing any part of the system - due to the linkage and correlation between parts of a system - will influence other parts, probably in a not desired direction, and therefore caution is necessary when someone poses changes to a system to eliminate certain negative effects and not intended consequences elsewhere. Furthermore, he illustrates examples of undesirable but predictable consequences in a project system when a task is delivered later than it should be: a) additions of contingencies to subsequent estimations and b) undesirable impact on other tasks due to quality issues (Leach, 2005). According to Beer (1993), adopting a systems thinking is compulsory an effective organizational analysis and the improvement of its quality.

Organizations should be viewed and structured as “open systems” that exist in a stable status of interactions with their environment and react to the changes in a complex and dynamic way to maintain their value and survive (Cawsey, 2007, p.58). Nevertheless, organizations have multiple subcomponents that are interrelated with each other and it is vital to know their complexity, interactivity, interdependence, and finally their interactions.

Sterman (2001) introduces the Systems Dynamics Model and perceives organizations as constantly changing “nonlinear” systems, which are “tightly coupled” and interact, are “governed by feedback” which determines our assessments and management decisions, “history-dependent” because actions are non invertible and influence the future, “self-organizing”, “adaptive”, “characterized by trade-offs”, are “counterintuitive” and “policy resistant” (Sterman, 2001, p.12).

The ability to see interdependencies instead of linear cause effect chains, and change processes instead of quick and without consideration snaps, is the essence of the discipline of systems thinking and contemporary requirement (Senge, 2006). The following Senge’s (2006)

list summarizes how dynamic systems work:

- Today's problems come from yesterday's "solutions."
- The harder you push, the harder the system pushes back.
- Behavior grows better before it grows worse.
- The easy way out usually leads back in.
- The cure can be worse than the disease.
- Faster is slower.
- Cause and effect are not closely related in time and space.
- Small changes can produce big results, but the areas of highest leverage are often the least obvious.
- You can have your cake and eat it too, but not all at once.
- Dividing an elephant in half does not produce two small elephants (Senge, 2006).

### **Theory of Constraints**

According to Blackstone and Cox (2004), constraint can be defined as any factor or element of a system that prevents it from accomplishing improved performance regarding its goal.

According to Bentley and Davis (2010) the Theory of Constraints (TOC) fundamentally builds on *Liebig's law of the minimum*, which states that growth is controlled by the limiting factor and the most inadequate resource and not by the total of the available resources.

Management by applying TOC gets a toolset to:

- Accomplish a comprehensive assessment of the business systems,
- Focus on the constraints that may prevent or limit success and to achieve continuous improvement (Goldratt, 1990).

On the other hand, Mabin and Balderstone (2000) support that the TOC, should be seen as a paradigm shift that demands leaders to think differently organizations' problems and solutions, their goals and objectives, policies, procedures and measurements; not just as a set of tools and methods. Watson et. al (2007) state that the primary principle of TOC is that every system has at least one constraint that limits its ability to perform higher than its objectives. Therefore, better constraint's utilization leads to better performance and final results. The specific concept is even more current and valid during this period in which the resources are reduced. No organization has unlimited resources but each organization has at least one constraint such as time, budget or human resources that limits its performance relative to its goal, at any given point in time (Bentley and Davis, 2010). TOC has introduced the effective *Process of Ongoing Improvement* that integrates the following prerequisites:

- The definition of system which is under investigation and the identification of its objective
- The definition of measurements that permit the alignment of the system to its objective, and

the *Five Focusing Steps* (Watson et. al, 2007):

- Identify the limiting factor that becomes an obstacle to the organization in achieving its objectives as a constraint determine the performance of a system
- Determine how to exploit the constraint to get the highest throughput within the limitations of existing resources
- Subordinate and align all processes to the previous step's outcome to eliminate waste
- Elevate the constraint when additional output required

- If, the previous steps resulted in constraint's removal start over and do not permit inertia turn out to be the constraint (Dirgo, 2006).

A TOC system aims to thrive financially currently and in the future. Net Profit (NP), Return on Investment (ROI), and Cash Flow (CF) are three global traditional measures that TOCs utilizes, to ensure that the system will reach its targets (Watson et. al, 2007). Nevertheless, the aforementioned measures are not applicable at subsystem level (Dirgo, 2006).

For this reason, TOC introduced three subsystem level performance measurements *Throughput*, *Inventory*, and *Operating Expense* (Bentley, 2010). According to Levinson (2007) *Throughput* consists of sold goods and more is better, *Inventory* includes all the investments made and less is better, and finally since it is not a viable business strategy to transfer operating costs to customers, less is also better for *Operating Expense*.

Although TOC is interested in reducing Operating Expense, mainly focuses on increasing Throughput, by utilizing the *Thinking Processes* that facilitate the discovery of "novel solutions to complex unstructured problems" (Watson et. al, 2007, p.394).

In addition to this, Schragenheim and Dettmer (2000) also state that the Thinking Process tools are a thorough and systematic way to deal with identification and resolution of unstructured business problems relative to organizational policies:

- *Current Reality Trees*, which is a flowchart used to reveal root causes, and to identify and solve core constraints by starting with the undesirable effects and the available knowledge.
- *Evaporating Clouds*, which is another flowchart that builds on the output of the Current Reality Tree, and is used to expose conflict and to arrive at a win-win solution.



- *Future Reality Trees*, which is a tool used to build and assess proposed changes or solutions to achieve the final expected outcome.
- *Prerequisites Trees*, which is a tool that can be used independently or in concert with the previous tools to identify obstacles and overcome roadblocks or concerns that would prevent implementation of proposed changes or solutions and the achievement of the ultimate objective.
- *Transition Trees*, which is a tool used to execute initiated changes and proposed solutions (Dirgo, 2006).

According to Bentley and Davis (2010) this processes can assist in the initiation and implementation of a project and that along with the Process of OnGoing Improvement is a PDCA methodology. Scheinkopf (1999) has categorized the aforementioned tools in two categories: a) the current reality tree, the future reality tree and the transition tree belong to the effect-cause-effect logic category whereas b) the evaporating cloud, the prerequisite tree belong to the condition logic category and the recognition of hidden assumptions that prevent the finding and application of valuable resolutions.

Moreover, Walker and Cox (2006) also support that these tools assist in:

- Discovering the core problem
- Identifying and testing a win-win solution
- Building an implementation plan
- Communicating by managing effectively resistance

Applying the scientific method to this basic understanding of the TOC leads to many principles. Dettmer (1997) combines the Theory of Constraints with a systems approach and concludes:

- Change Management and Problem Solving require more system than analytical thinking. The maintenance of the effectiveness of a solution requires ongoing improvement processes as even the best possible system solution loses its strength as the system's environment changes.
- A system just like a chains have its "weakest link" or constraint that eventually limits the success of the entire system. Consequently, the only way to strengthen the whole chain is to strengthen its weakest link.
- A thorough understanding of the system's current status, its vision, and the roadmap between them is a prerequisite for identify what to change
- Few core problems are responsible for most of the undesirable effects within a system. Therefore, by solving the core problem, the resulting undesirable effects are eliminated at once..The concluded solutions tend to be a factor that empowers inertia and resistance of change and process of ongoing improvement.

### **Lean, Six Sigma, Lean Six Sigma**

According to Leach (2005) Womack, Jones, and Roos in 1995 introduced the principles of Lean production and included teamwork, waste elimination, communication, and finally continuous improvement. Moreover he refers to the principles' expansion that emphasizes the Lean focus on waste: Specification of value; Identification of the value stream; Focusing on flow of work; customer pull implementation, and finally striving for perfection.

According to Knapp (2010), Six Sigma is a data-driven method that targets on eliminating defects, improving processes and reducing variations based on a strategy of measurements and the implementation of the according Six Sigma projects and the application of two Six Sigma sub-methodologies:

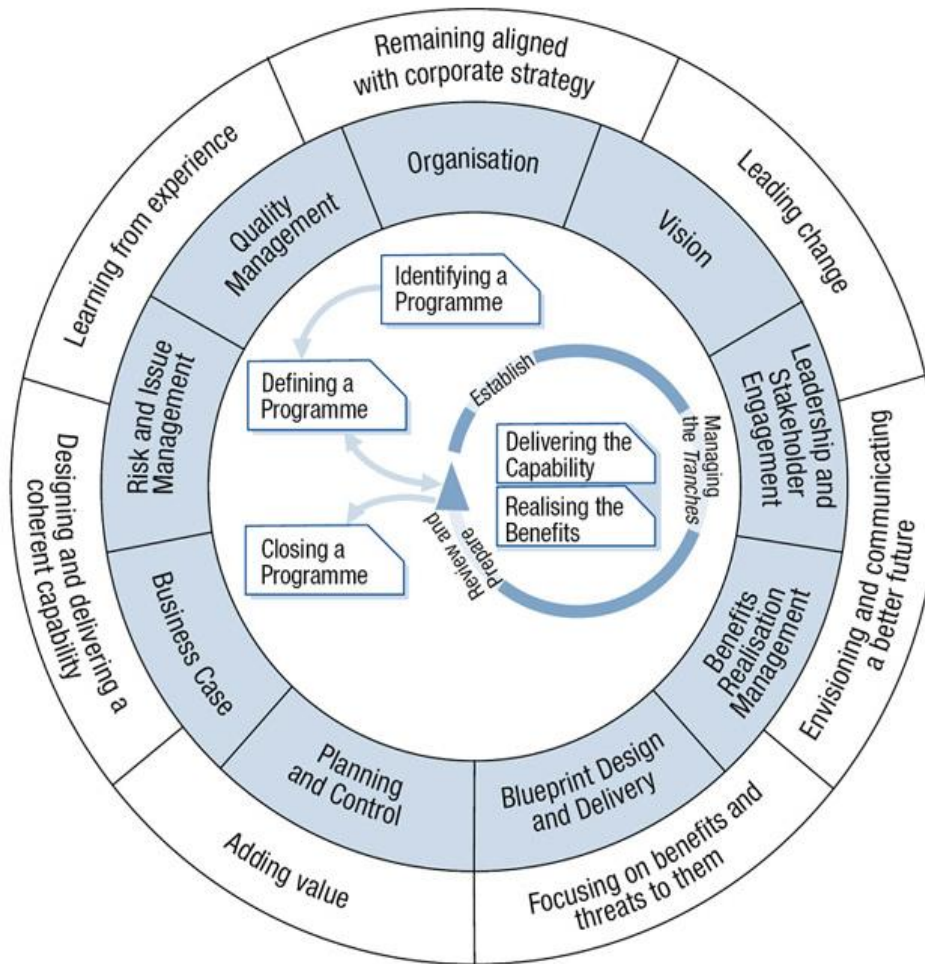
- Six Sigma DMAIC is used to incrementally improve existing processes that are failing to meet performance specifications. DMAIC steps include: Define, Measure, Analyze, Improve and finally Control.
- Six Sigma DMADV is applicable for new processes or products development. DMADV can also be used for incremental process improvement. DMADV steps include: Define, Measure, Analyze, Design and finally Verify.

Lean Six Sigma combines the concepts of Lean Manufacturing and Six Sigma. Lean Manufacturing focuses on removing waste and improving the flow of processes and procedures. Six Sigma focuses on reducing defects by measuring standard deviations from an expected norm. Lean Six Sigma is metric driven, relying on critical success factors and key performance indicators. The Six Sigma DMAIC process is an active component of Lean Six Sigma (Knapp, 2010).

### **Program and Project Management**

**MSP Framework.** According to OGC (2007), Managing Successful Programmes is a framework that assists organizations to deliver aligned with their long-term strategies complex programs. MSP defines program “as a temporary, flexible organization created to coordinate, direct and oversee the implementation of a set of related projects and activities in order to deliver outcomes and benefits related to the organization’s strategic objectives” (OGC, 2007, p.4).

Organizational strategy, methods for implementing change, and business environment are aligned through Program management.



**Figure 11:** MSP Framework and Concepts. Source: ISACA (2009).

The MSP framework and concepts are illustrated in Figure 11. Its principles are included in the outer sphere to strengthen and assist in implementing successfully major transformational change. The principles are:

- *”Remaining aligned with corporate strategy”*: A program should contribute and facilitate the achievement of the organizational goals and consistently be aligned with the volatile organizational strategy.
- *”Leading change”*: by giving clear roadmap and direction, creating a trust environment,

managing stakeholders and creating engagement, involve timely the right people, and being able to reside uncertainty.

- *”Envisioning and communicating a better future”*: Leaders should consistently be able to communicate and shared their vision for a better future.
- *“Focusing on the benefits and threats to them”*: It is important as alignment with the strategic objectives is realized by the program’s benefits whereas it is threatened by the programs
- *“Adding value”*: Otherwise, it is better to close it and the independent coordination of its projects will be handled by the portfolio management.
- *“Designing and delivering a coherent capability”*: Maximum incremental capability and benefits should be delivered with minimal operational impact.
- *“Learning from experience”*: Review and self improving is required to regularly adjust and adapt on the basis of lessons learned.

**PRINCE2.** According to ISACA (2009), PRINCE2 is a process-based project management methodology which covers and integrates the diverse disciplines and activities that a project requires, and it can be scalable and tailored according to project complexity and risk to meet organizations’ needs. PRINCE2 (2009) defines a project as “a temporary organisation that is created for the purpose of delivering one or more business products according to an agreed Business Case” (OGC, 2009). The business justification and the rationale for the project which is implemented through the business case is the main notion of PRINCE2. PRINCE2 methodology covers six project performance areas that constantly should be managed: Timescale, Cost, Benefit,

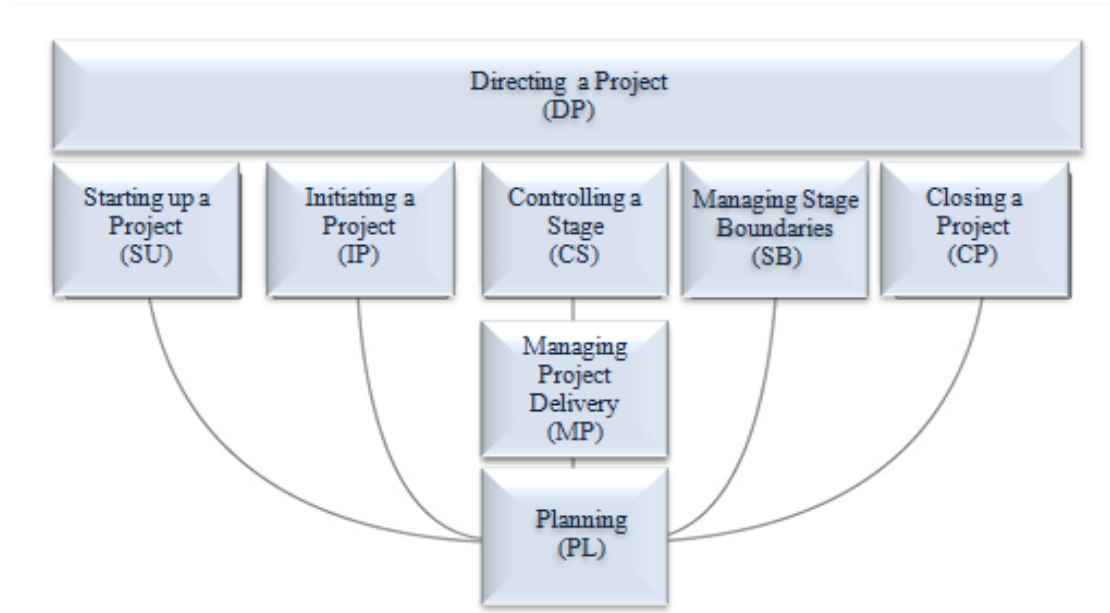
Quality, Scope and Risk, whereas its structure includes: Principles, Themes, Processes, and finally Tailoring PRINCE2 (OGC, 2009).

Delivering results and not just schedules of the project activities is the priority of planning. Furthermore, part of planning process is the identification of the quality criteria and the incorporation to the project plan to assure that the product will meet quality requirements and expectations. Project segmentation is also a core concept of the methodology to facilitate competent control of resources and standard progress monitoring during the project (ISACA, 2009). Figure 12 illustrates the eight processes of the PRINCE 2 process model and indicates that the planning (PL) process is common and also used by four of the other processes.

The eight processes of the PRINCE2 process model are:

- **Starting up a project.** This process ensures that the prerequisites for project initiation are ready. During this process: an executive and a project manager is appointed, a project management team is designed and also appointed, a project brief is prepared, a project approach is defined and finally an initiation stage is planned.
- **Directing a project.** This process is undertaken by the project board throughout the project lifecycle to authorize initiation, a stage or an exception, provide direction when necessary and confirm the closure of the project.
- **Initiating a project.** This process involves planning project and quality, refining and confirming the business case and the associated risks, providing a baseline and preparing the project initiation document.
- **Managing stage boundaries.** During this process a stage is planned, the project plan, the project business case and the risk log is updated, the completion of the stage is

reported and an exception plan might be produced.

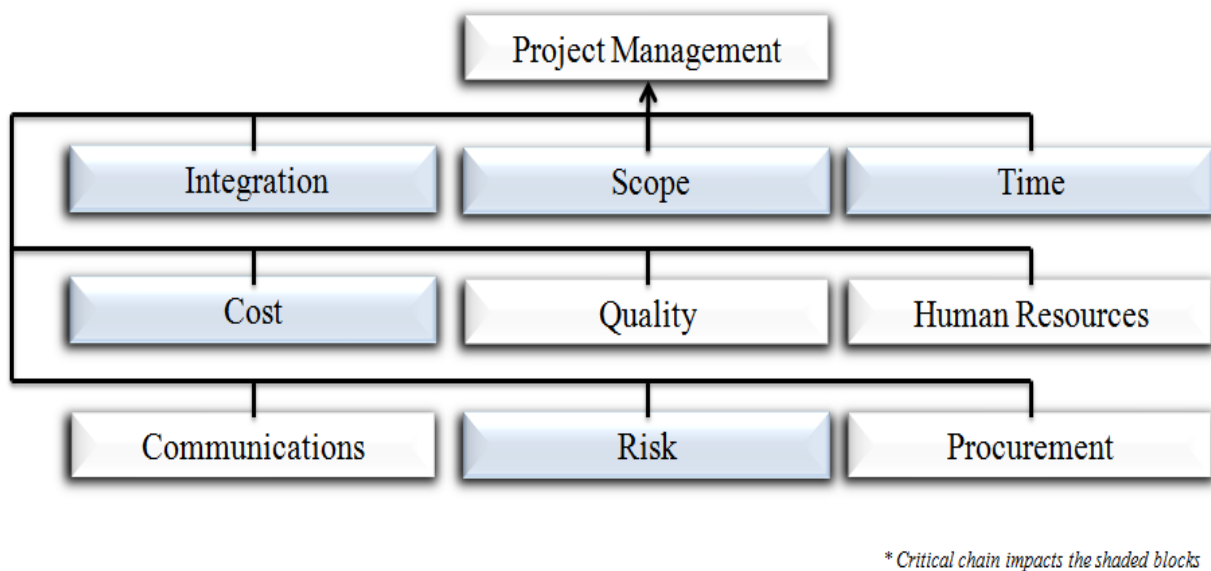


*Figure 12: The PRINCE2 Processes. Adapted from: ISACA (2009).*

- **Controlling a stage.** During this process a work package is authorized, progress is assessed, issues are captured, examine or escalated, the status is reviewed and corrective measures are taken.
- **Managing product delivery.** includes sub processes regarding the acceptance, the execution and the delivery of a work package.
- **Closing a project.** The specific process includes all the sub process related with the project decommission, evaluation and the identification of follow-up actions.
- **Planning.** The process includes activities to design and complete the plan, analyze and define the product, identify activities and their interdependencies, prepare estimations, schedules, analyze project risks (Bentley, 2009).

The method embraces the following seven principles which verify that a project is actually

being managed using PRINCE2: continued business justification, defined roles and responsibilities, focus on products, manage by stages, manage by exception, learn from experience, and finally tailor to suit the project environment (OGC, 2009). The aforementioned principles have been characterized as “universal”, because they are appropriate and suitable to every project, “self-validating”, because they have been confirmed over many years of use and finally “empowering”, because they give organizations the advantage of tailoring and shaping their project management practices according to the project’s needs (Bentley, 2009).



**Figure 13:** The PMBOK areas identify the project system. Adapted from: (Leach, 2005)

**PMBOK.** The Project Management Body of Knowledge (PMBOK Guide) “is a recognized standard” guide and not a methodology. Consequently, one can apply different methodologies and tools to implement a framework. (Project Management Institute, 2008).

According to Saladis and Kerzner (2009) the PMBOK Guide provides the project manager with a basis of improved project management by explaining key principles and organizing it into a



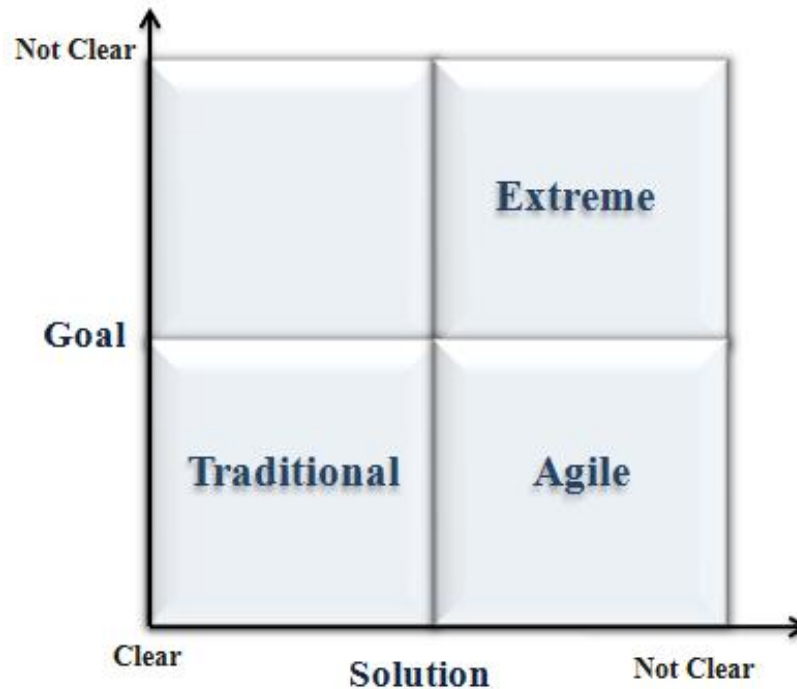
logical system that is integrated by processes.

The PMBOK is organized into nine knowledge areas : Integration Management, Scope Management, Time Management, Cost Management, Quality Management, Risk Management, Human Resources Management, Communications Management, and Procurement management, which are integrated through five processes: Initiating, Planning, Executing, Monitoring and controlling, and Closing (Project Management Institute, 2008).

**Agile.** Organizations use project management to achieve innovation, accomplishment of their strategic goals and improvement of their competitiveness. Change is inevitable in projects, the longer-duration project or in a volatile market or business climate the probability of change increases (Wysocki, 2009). Increased uncertainty and complexity leads to the need of creativity and adaptation. As uncertainty increases, so does the need to receive and process change requests, which is inconsistent with traditional project management practices. Thus, the project management landscape has changed and continues to change and adapting the discipline has become more demanding, challenging and decisive for the survival of the organizations (Wysocki, 2009).

Agile project management practices have been established and their frontiers claim that their returns are multiple and imperative and include short life cycle time, high stability of resources utilization, adaptability to changes and high quality due to early participation, involvement, and feedback from the business. By delivering early and continuously, having the ability to meet the changing conditions, collaborating with the customer, business value is delivered through the project (Beck et. al, 2001). Agile project management methods welcome feedback and facilitate changes at the end of each iteration through collaborative discussions and the use of a flexible ranked backlog as a change response tool of the project team (Sliger and

Broderic, 2008).

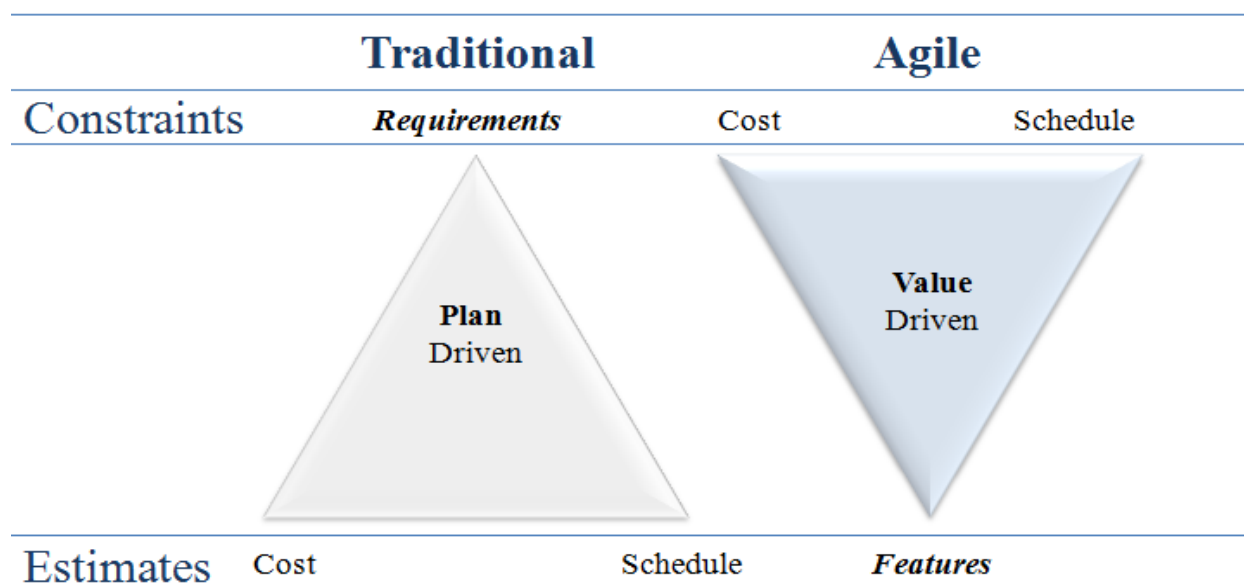


**Figure 14:** *The Project Management Landscape – Traditional, Agile, Extreme.*  
Adapted from: Wysocki (2009)

Regarding scope management, they recognize the fact that customers generally find it hard to completely give all the requirements in the beginning of the project and they expect and incorporate change. The agile strategy is to fix resources and schedule and then develop the highest features according to the client. Work is iterative and individual and team learning is achieved as the project progress. Flipcharts and whiteboards have replaced the creation of a formal project WBS. In fact, implementing projects in an agile environment means that, the WBS is realized by the release or iteration plan, whereas changes in the roadmap and in the release plans are expected, evaluated and reviewed on a regular basis (Sliger, 2008).

Moreover, in agile the team work on fixed-time, variable scope model where the time and cost is initially predefined whereas the scope is delivered in small iterations according the

priorities of the customer. The agile teams do not waste time planning for uncertainty and they in the beginning identify and prioritize the features in accordance with the expected business value, and afterwards, they produce the high risk components of the project and implement the highest value features first (Hass, 2007). In addition, a release plan is a high-level strategic plan for a series of iterations; each iteration can be seen as a mini-waterfall with a more detailed tactical plan. Hence, time management is a negotiation between the customer and the team; from one iteration to the next, based on the product feedback, changing market conditions, and insight into team's velocity; task dependencies are managed by the team and no changes are allowed in the iteration once the iteration has been planned (Sliger, 2008).



**Figure 15.** *Traditional & Agile Scope Management. Adapted from: Sliger (2008)*

In agile projects the team estimates the costs top-down with detail and accuracy appropriate to the time horizon by using just in time elaboration of details. The farther away the deadline, the grosser the estimate, whereas costs estimates become more refined throughout the project's lifecycle. Cost control occurs at release level; cost baselines are updated based on the

deliverables of each iteration, velocity and customer changes to scope. Besides, agile projects have the ability to always be on time and within budget, since the scope is flexible.

The customer and the team define the quality policies and the standards they will use in the project and the quality in the product is monitored by automated tests and confirmed by customer acceptance; quality in the process is monitored by metrics and confirmed by the review and retrospective audit. Moreover, agile teams use test-driven development and generally build up test plans simultaneously with the requirements definition; if a specific requirement isn't testable, then it is not yet completely developed (Hass, 2007). Although, burndown charts and root cause analysis are standard quality control tools used, agile methodologies encourage lean thinking, waste and overhead elimination, especially documentation.

Agile requires gathering a small high-performing team preferable co-located, including the customer, fully dedicated to the project for its duration, self motivated and able to work in a collaborative way. In agile environments "the team balances on the edge of chaos – a concept from complexity theory" (Augustine, 2005, p.87). The teams are autonomous within the bounds of the iteration.. Agile places emphasis on self organizing teams and the leader who brings the right people together, and trusts them to get the job done (Sliger, 2008). Chin (2004) asserts that the project manager's role becomes that of a shaper and motivator in such projects and decisions are made by any team member involved with agile projects.

Although, there is lack of defined risk management activities, the framework foster organic or naturally emerging risk management by making it an intrinsic part of the project lifecycle. The agile and extreme frameworks both increase positive events and decreases negative events by constantly reviewing the product functionality, the project plans, and the process itself. The constant team planning and reevaluation of the release plan at the end of each iteration, the

stopping points build in to handle change, the involvement of all team members of solving the problem which leads to higher moral and the use of a velocity measurement are successfully mitigations to core risks.

### **Summary**

The chapter provided an extensive academic research and literature review regarding the crisis as an opportunity for learning and change, motivation, learning organization and systems thinking.

Furthermore, managing polarities, problem solving and process improvements methods that support organizations to take decisions, increase their performance, reduce waste, and eliminate variations were presented. As Bentley and Davis (2010) concluded Lean aims to reduce waste, Six Sigma intends to reduce variation, whereas Theory of Constraints focuses on improving throughput of the entire system.

Finally, an overview of program and project management methods and frameworks was also presented to conclude that “at its heart, project management, whether you are doing traditional or agile has very similar principles. It’s about doing a good job for the customer. It’s about leading a team. It’s about delivering measurable business results, says Augustine” (Hass, 2007, p.7).

## Methodology

### Overview

The author researches for an integrated set of tools and practices that will successfully support and assist IT organizations to adapt, and not only to overcome the limited resources and the challenges of the current economic crisis environment, but also to thrive in selecting, planning, leading and implementing projects and delivering business value and results.

### The Sample

Although, a convenience sampling procedure was followed through the author's professional network, the selection was carefully planned and the participants were determined purposely to include PMO, program, project, and senior managers, and other IT experts and business representatives to enrich and deepen further the research by sharing their diverse perspectives, knowledge and experiences relative to the subject. Having enough rich data from diverse sources without overwhelming is rather significant (Kvale, 1996) for reaching the necessary for the qualitative analysis research data saturation point at which no new data are being identified.

**Table 1.** The Sample's Eligibility Criteria.

Eligibility Criterion	Value
Years of Experience	Minimum 10 years
Relative Experience	Project management and/or team leading
Organization Industry	IT & Financial Services

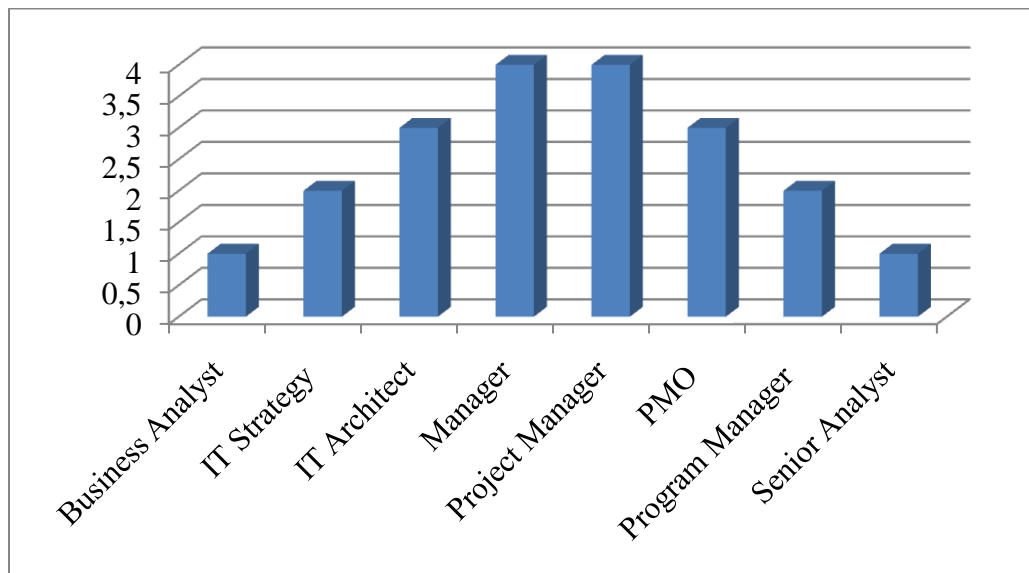
Following Patton advice (2002) who proposes to “select information-rich cases strategically and purposefully”, the sample of the participants was based on selection specific criteria to ensure that eligible relative information will be derived from their involvement

(p.243). The eligibility criteria are detailed described in Table 1- The sample's eligibility criteria. The eligibility criteria were validated by initially asking the participants control questions regarding their professional experience and background such as:

- How many years of professional experience do you have and in what roles?
- How would you describe your current role within this organization?
- How long have you been in this role?

Afterwards, they were asked a second set of questions relative to the profile of the organization:

- Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?
- How would you rate your organization's ability and maturity to deliver projects and why?
- Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?



*Figure 16. Distribution of participants per role.*

**Table 2.** The Sample's profiling

<b>Part.</b>	<b>Current Role</b>	<b>Yrs</b>	<b>Org.</b>	<b>Sector</b>	<b>Location</b>	<b>Domain</b>
1	Project Manager	11	A	Private	Belgium	Depository
2	IT Strategy	10	B	Private	Greece	Banking
3	IT Architect Manager	13	B	Private	Greece	Banking
4	Business Analyst	11	B	Private	Greece	Banking
5	Project Manager	15	C	Private	Greece/Cyprus	Banking
6	Program Manager	15	D	Public	Greece	Banking
7	Testing Factory Manager	23	B	Private	Greece	Banking
8	Business Develop. Manager	14	E	Private	Greece	IT Services
9	Senior Analyst	14	F	Private	Greece	Banking
10	IT Architect Manager	11	G	Private	Greece	Payments
11	PMO	12	H	Private	Greece/Cyprus	Banking
12	Project Manager	13	I	Private	Greece	Banking
13	IT Software Manager	14	J	Private	Greece/Germany	Insurance
14	Program Manager	15	B	Private	Greece	Banking
15	PMO	11	F	Private	Greece	Banking
16	Senior Manager	15	B	Private	Greece	Banking
17	PMO	15	B	Private	Greece	Banking
18	Project Manager	18	K	Public	Greece	Banking
19	IT Strategy Manager	20	B	Private	Greece	Banking
20	IT Architect Manager	16	B	Private	Greece	Banking

Patton (2002) argues that “rules for sample size in qualitative inquiry” do not exist (p.244).

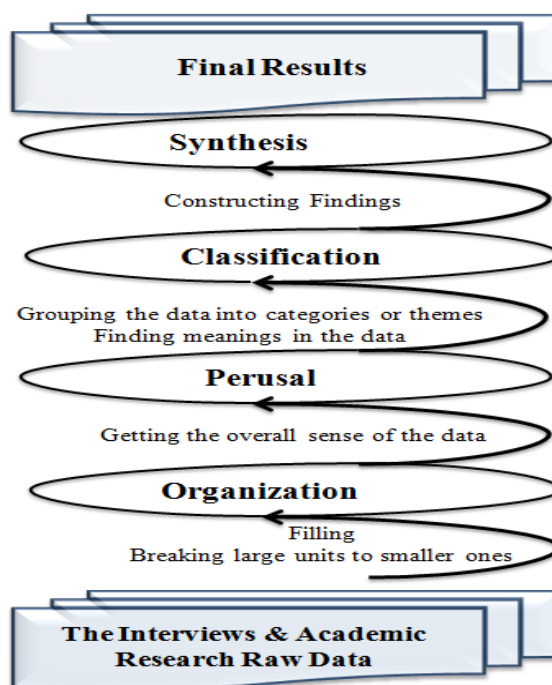
Hence, the precise size of the sample was not initially predetermined, and the interviews and data



analysis continued until no new conclusions could be reached. Nevertheless, the author followed the advice of Josselson and Lieblich (2003) that a minimum of five and a maximum of thirty interviews are required in qualitative research and interviewed twenty professional experts of eleven organizations. Table 2, illustrates for each participant the current role, the years of professional experience (Yrs), the label of the organization he currently works for (Org.), the indication for public or private sector (Sector), its location and finally its domain.

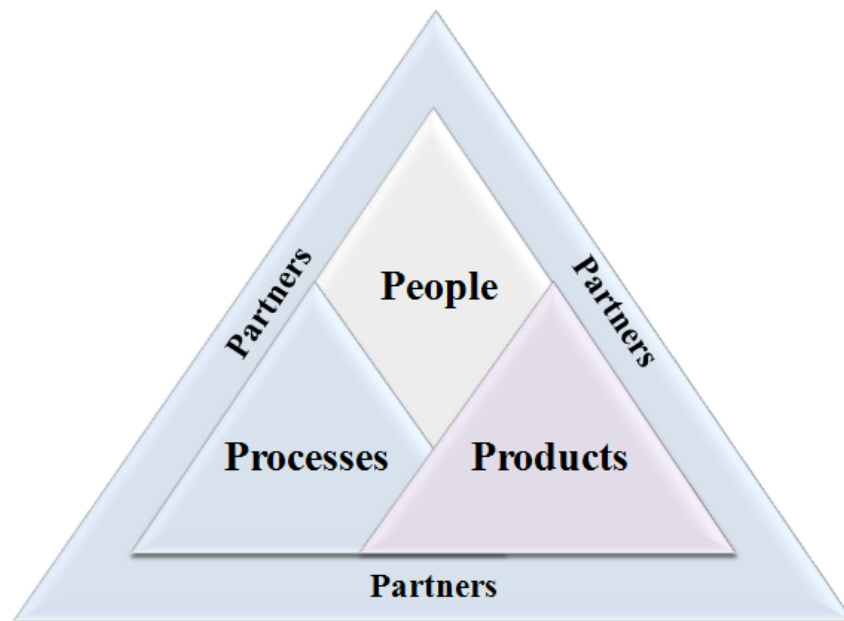
### The Procedure

According to Leedy and Ormrod (2010), a lot of experience is needed to conduct unstructured interviews. Therefore, the anonymous interviews were semi-structured to maintain focus in the subject, but also to allow the knowledge and experience of the interviewees to become apparent. During the meetings with each interviewee the questions were open-ended. At the end each meeting the key points of the content were summarized and reviewed.



*Figure 17. The data analysis spiral. Adapted from: Leedy & Ormrod (2010)*

For the content analysis, the author reviewed the data from the interviews looking for similarities and commonalities and went through the transcripts to identify and code categories and their properties from the data. By adopting a holistic approach the findings are classified, synthesized and presented in four large categories by using the ITIL's 4 Ps for People, Processes, Products, and Partners (OGC, 2008). Figure 18 illustrates the specific classification.



*Figure 18. The ITIL "Four Ps" (OGC, 2008)*

### **Summary**

The author researches for a set of tools and practices that will effectively assist IT organizations to adapt and overcome the current economic situation induced challenges and adopted a qualitative analysis research method through semi-structure interviews of 20 professional experts with an average of 15 years experience who currently work at 11 different organizations. The findings were classified, synthesized and presented by using the holistic approach of the ITIL's 4 Ps classification.

## Results

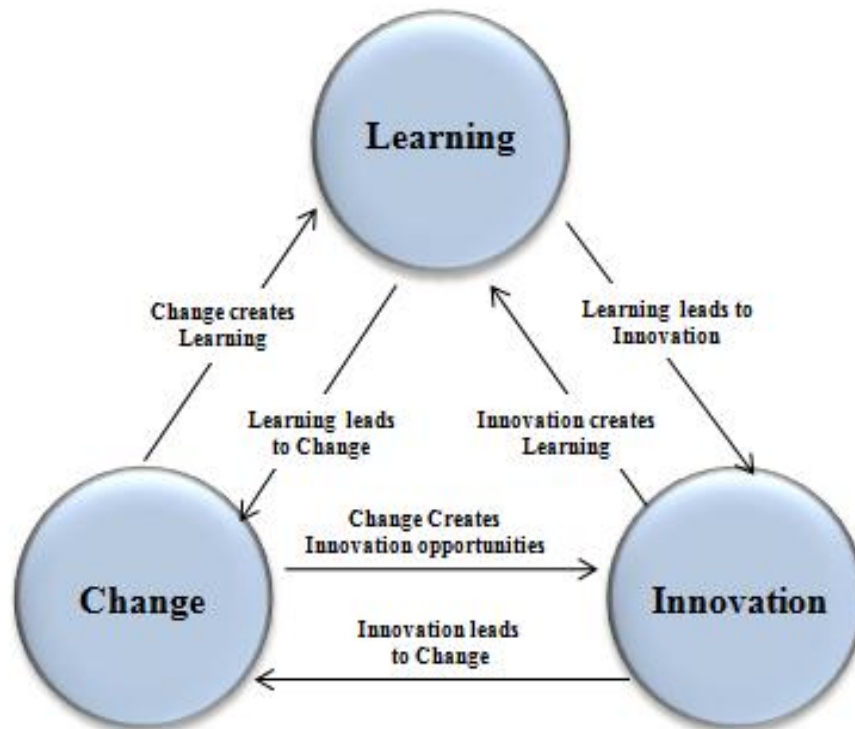
### Overview

The author began the research to identify a set of practices and tools that will support in a practical but systematic way the organizations to overcome obstacles related with the economic crisis and implement successfully their business strategy. The analysis of the collected information and the literature review indicate that the economic crisis has enforced reductions of cost, introductions of efficiencies and return on assets improvements, whereas the intense business competition mandates innovation, flexibility and adaptability.

Many interviewees agreed that one of the challenges that the current economic crisis environment has introduced is to continue supporting the organization and delivering IT services with substantially reduced resources. People are forced to re-examine the way they develop and implement changes but also the way they deliver new services to customers. “It is an opportunity for housekeeping. This definitely includes change, not only in the organizational structure but also in mentality; the process also involves learning”, an interviewee mentions. Beside this, every interviewee perceives this period as an opportunity for change and learning and many large organizations have launched major transformation programs.

Moreover, they pointed that organizations should never cut R&D projects that deliver innovative products or services. Moreover, innovation and technology is enabling organizations to improve, advance and increase their efficiency and effectiveness. Therefore, steering committees that prioritized projects should evaluate the benefits and give the right priority to IT for IT projects. Otherwise, IT investments and projects will have a lower priority when compared to business initiatives and will not get financial support (Cassidy & Cassidy, 2010). Govindarajan and Trimble (2010) regarding innovation argue that organizations achieve better

results when they pay attention on learning and solutions rather than results or problems.



*Figure 19: Learning, innovation and change. Adapted from: Kelly (2008).*

All the interviewees stated that their organizations had clear and consistent cost reduction strategies to achieve sustainable reductions while improving efficiency. Cassidy & Cassidy (2010) argue that although projects add value to the business, support the organization's direction, growth, and competitive advantage, when cost reductions are needed usually the first short term reaction is to cut or freeze them which can be counterproductive, damage competitive advantages and consequently have a negative impact on an organization's long term success. Contradictory, they insist that organizations can sustain the same level of service by combining long term strategies with cost cutting efforts and an average of 10 to 30 percent decrease of IT operational expenses (Cassidy & Cassidy, 2010).

**Table 3:** Synopsis of Results

<b>Classification</b>	<b>Result</b>
People	Communication, Trust, Emotional Intelligence, Online and Internal Training, Coaching and Mentoring, Mentality Patterns Innovation.
Processes	Program, Portfolio Management and IT Governance Business Case, Project Segmentation, 80/20 Rule Lean Principles, IT Service Management Agile Project Management, V-Model, Lessons Learned
Products	Enterprise Change Management Tools, Prototyping and Testing Management Tools, Estimation Tools, Open Sourcing, Service Oriented Architecture, Cloud Computing, Web 2.0
Partners	IT Vendors Management Outsourcing/Offshoring Customer Value

Moreover, as the interviewees mentioned, IT should work proactively with the business to propose change initiatives and projects that might increase its costs to achieve costs reductions in other units of the organization. Therefore, management should adopt a systemic and strategic approach on cost reductions and consider how technology and IT projects can enable the business to cut costs overall as well as the total cost of ownership. Nevertheless, IT projects are prerequisites for developing and maintaining business efficiency.

## **People**

According to the majority of the participants, people are the most important asset of an organization. Furthermore, an interviewee argue about the role of people in organizations and project management practices that should be further recognized and respective actions should be taken to foster creativity, innovation and unique organizational cultures and communities. In addition, motivation and engagement can be achieved through:

**Shared vision.** According to the participants the creation of a shared vision regarding the future performance of their organization related to their contribution, assists leaders to motivate their team members during these turbulent times. Furthermore, it creates psychological safety which is also a necessity during this period (Schein, 2010).

**Communication.** As an interviewee said it is significant to earn the buy-in of the personnel of the required changes and necessary culture shift. Overcoming resistance and denial to change needs survival and learning anxiety reduction which can be achieved by achieving the feeling of being “psychologically safe” (Schein , 2010, p.313). Educative communication creates “psychological safety” (Schein, 2010, p.300) and individuals feel engaged and motivated to embrace changes compulsory for the survival of the organization. Lack of sufficient and accurate information creates a destructive environment that creates mistrust.

**Trust.** No quality or characteristic is more significant than trust. Trust is a foundation for building a team. People who are not afraid to admit the truth about them are not going to engage in political behaviors and waste time and energy. Unfortunately, vulnerability-based trust is so rare because human beings desire self-preservation (Lencioni, 2007a).

In addition, Lencioni (2007b) provides some trust team assessment items: a) team members admit their mistakes; b) they acknowledge their weaknesses to one another; c) they ask for help without hesitation; d) they ask one another for input regarding their areas of responsibility; e) they acknowledge and tap into one another's skills and expertise; f) they are unguarded and genuine with one another g) they are comfortable to discuss their personal lives with one another.

Furthermore, he provides the Personal History Exercise, but he mentions that asking individuals to be exposed too quickly is fair and it may create a resistance difficult to overcome later. Beside the fact that it helps team members to open up, it also helps everyone to overcome the tendency to attribute negative behaviors of other individuals to their character, whereas they attribute their own negative behaviors to their external environment (Lencioni, 2007b).

Moreover, he suggests the use of a Behavioral Profiling Tool like the Myers-Briggs Type Indicator because increases the likelihood that team members admit their weaknesses and strengths to one another and provides a common vocabulary for describing their differences and similarities. Finally, he concludes that although trust takes time, the process can be greatly accelerated. But trust on team is never complete; it must be maintained over time (Lencioni, 2007a).

**Trainings.** Some of the participants declared that leaders should never cut down on training as people are the most important asset of the organization. Training support team members to build new skills obtain knowledge and feel "psychologically safe" (Schein, 2010, p.313). Furthermore, the involvement of the trainees in designing their learning process and the

design of practicing fields where the individuals can learn and receive positive feedback are also significant (Schein, 2010). The blending of online and internal face-to-face training on both technical but also soft skills can boost organization performance.

**Coaching.** Timothy Gallwey explained the essence of coaching by the following definition: “Coaching is unlocking a person’s potential to maximize their own performance. It is helping them to learn rather than teaching them” (Whitmore, 2008, p.8). Whitmore (2008) argues that individuals should be seen by their potential and not by their past performance. In addition he claims that people should not be seen as empty vessels that knowledge has to be poured in but as acorns that by encouragement can grow to become outstanding oak trees. Coaching is one of the most business friendly skills for human growth as it builds awareness, responsibility and Maslow’s self-actualization and self-esteem.

John Whitmore proposes the “*GROW*” model as a tool that facilitates sequencing a coaching session:

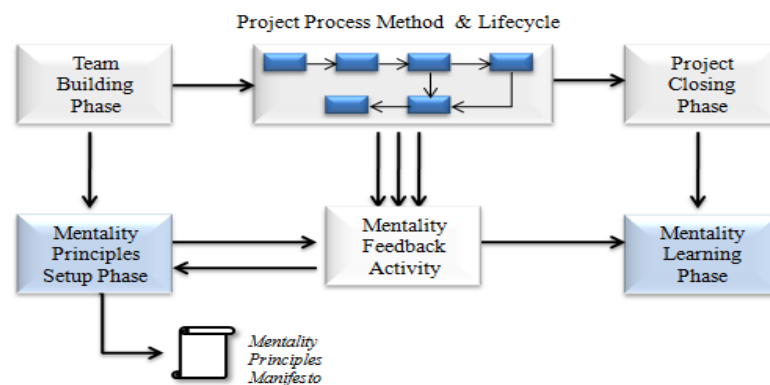
- “*Goal*”: stands for long-term, short-term and finally session goal setting.
- “*Reality*”: stands for exploring the current reality.
- “*Option*”: stands for exploring the alternative options for achieving the setting goal.
- “*What, When, Whom, Will*”: stands for taking responsibility and deciding regarding the execution of the strategy (Whitmore, 2008, p.54).

**Emotional Intelligence.** Project managers should be proactive, forward looking and results orienting. They need strong people management, emotional intelligence skills and human behavior knowledge to motivate team members successfully. Emotional Intelligence besides the self-awareness and social compassion is also related with is the ability to have empathy and



communicate efficiently and effectively with others and have sense of appropriateness in general (Covey, 2006). As it was said during the interviews project management is more than technical expertise. In addition, Goleman (1998) states that to achieve top performance “emotional competence is twice as important as purely cognitive needs” (p.31). Nevertheless, “combining thinking and feeling creates better balance, judgment and wisdom” (Covey, 2006, p.52).

**Mentality Innovation Sub-Process.** An interviewee said that the role of people in organizations and project management practices should be further recognized and respective actions to be taken in order to foster creativity, innovation and unique organizational cultures and communities. Furthermore, many interviewees discussed about the need of changing attitude or mentality. Koutsoukos (2008) proposed the “*Mentality Innovation Sub-Process*” as a structured approach to assist project team members to handle recurring human attitudes which may impede innovation and creativity in IT projects.



**Figure 20.** Project Lifecycle and the Mentality Innovation Sub-Process. Adapted from: Koutsoukos (2008)

The sub-process is both independent and complementary to any other project management framework or methodology. It assists team members to “innovate” their practices by thoroughly revealing how mentality patterns influence projects, by sharing relative experiences and lessons learned and by taking project decisions respectfully to the notion. Table 4, illustrates examples of

mentality patterns that have a negative impact in IT innovative projects.

**Table 4.** Examples of Mentality Patterns. Adapted from: Koutsoukos (2008).

Mentality Pattern	Description
"Fear To Admit Ignorance"	The individual do not admit that his knowledge about a specific subject is limited
"Subject Guru "	The individual believes that he has indisputable expertise on an area.
"Not invented here"	The individual prefers to “reinvent the wheel” instead of taking advantage of existing solutions.
"The Best Is The One We Are Comfortable With"	The team members impose solutions because they feel more secure with due to their knowledge background.
"Opportunistic Listening"	The level of attention to others opinion or deliverables is determined according to their power, age or experience.
"It Is Not My Fault!"	The pattern of blaming others for failures and not admitting his fault.
"Negativism"	The pattern of searching for any negative aspects on others' ideas, opinions or solutions.
"Secretivism"	The pattern of being unwilling to share information or knowledge.
"Us and Them"	The pattern of viewing other teams, such as test factory teams or external such as the business unit team as “enemies”.
"No Coding = Useless"	The espoused belief that non-coding tasks such as design, documentation or administration is less contributing to the project and therefore, are waste of time.

## Processes

According to most of the interviewees during economic crisis growth is curtailed and priority is given to reengineering the organizations' processes and model of operation towards standardization, automation and cost cutting. Quality and cost reductions are related. Deming (1988) stated that "costs go down and productivity goes up, as improvement of quality is accomplished by the better management of design, engineering testing and improvement process". In addition, many organizations are focusing on centralization, adoption of industry best practices such as ITIL. Their objective is to strive towards providing quality service to the internal customer by measuring the business value of the requested change.

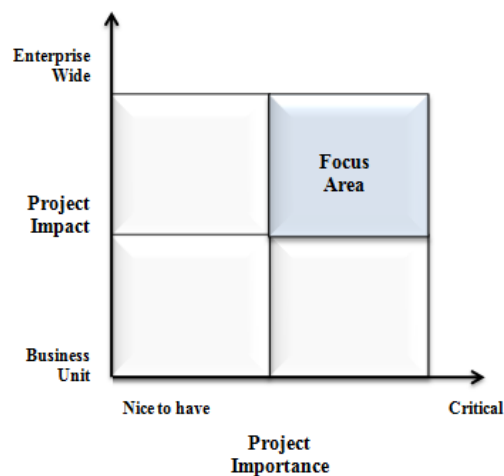
**Lean Principles.** Some of the organizations have launched major transformation programs trying to apply "Lean principles" and "streamline end-to-end the process for introducing new product and services". As an interviewee stated: "Waste reduction and more value to the clients is the key driver for changes in the company". Furthermore, George (2010) mentioned that if organizations change and adopt a holistic approach that combines reduction of complexity, quality improvement, and the elimination of process waste, they can deliver significant improvements and results.

**IT Service Management.** According to Knapp (2010), ITSM processes help organizations achieve business and IT alignment, which is a top priority for Chief Information Officers according to a survey conducted by CIO Insight. An integrated approach to implementing ITSM processes also enables IT organizations to balance critical traits such as Efficiency with Effectiveness, Stability with Agility and Standardization with Innovation, which are significant to IT customers and cannot be viewed as mutually exclusive. Instead balance is must be achieved by rigorously executing processes and continually monitor and improve them. ITIL is an

existing best practice framework that can assist organizations to implement ITSM and can be used to define and continually improve a given set of processes. ITIL can facilitate to:

- Provide efficient services to the internal customers
- Implement clear services and processes
- Communicate efficiently and effectively the objectives of the service delivery
- Use common language for IT service delivery and support
- Give the appropriate priorities to the services provided
- Satisfy internal customers with services provided
- Plan required resources and maintain effectively the services
- Align IT services and business requirements (ISACA, 2009).

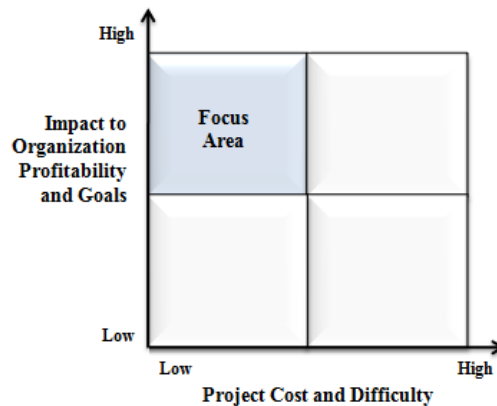
**Program, Portfolio Management and IT Governance.** Many interviewees argued that the current economic crisis has affected the way the organizations initiate, plan and deliver projects in the sense of more direct business executives' involvement and more rigor in approving project as well as in respective planning and delivery.



*Figure 21: Focus on Critical Projects with a wide impact on the organization Adapted*

*from: Benko and McFarlan (2003)*

As today's economic situation continues to drive the viability of business success and business value, and as recovery stretches out, executive leaders continue to demand more IT contribution to success without significant growth in the numbers and costs of resources.



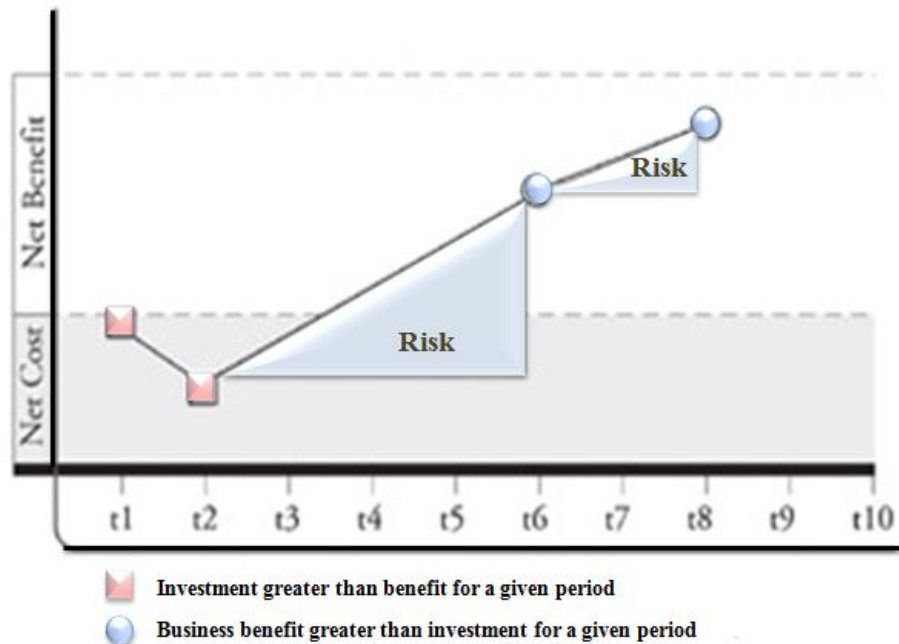
**Figure 22.** Low Cost Projects with a high impact on organization profitability and goals

*Adapted from: Benko and McFarlan (2003)*

Strong IT governance and program and portfolio management (PPM) capabilities that match the "new normal" will contribute to realized benefits and value from IT efforts that clearly map to needed business success. Organizations should focus on critical projects with a wide impact on the organization and low cost and difficulty projects with a high impact on organizational profitability and goals.

**Project Segmentation.** Many interviewees stated that there was a strategic shift from large projects and long term business benefits to smaller projects and immediate benefits and minimal risks. Benko and McFarlan (2003) argue that during this period of economic recession, business needs change too quickly to invest on risky, expensive multi-year efforts and long term results. Moreover, a study concluded that the smaller the project duration the greater its probabilities of

being on time, on budget, and with all original required features (The Standish Group International, 1999). Organizations should deliver results faster and better.



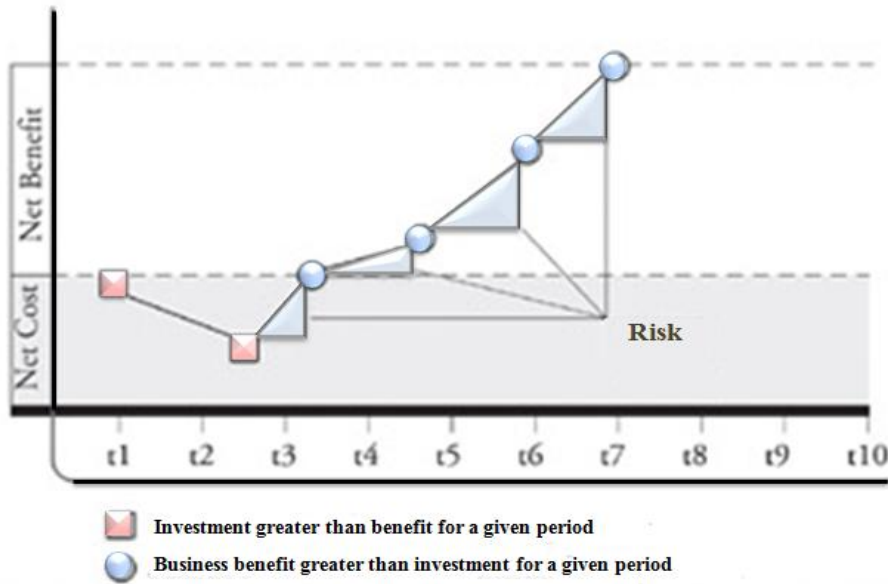
**Figure 23:** *Traditional Project Cost/Benefit Curve*

*Adapted from: Benko and McFarlan (2003)*

Figure 23 illustrates a traditional project cost benefit curve. The y-axis represents the net benefit of the entire project whereas the x-axis shows time. Squares indicate periods where the up-front investments are greater than the benefit. On the other hand, circles indicate periods where the realized business benefit is greater than the investment.

As the project proceeds over time, the expected benefits should exceed the initial investment, but the longer the project time, the greater the organization risk. Therefore, whenever possible, the execution of large strategic projects should be split into smaller ones, to achieve short-term results. This can be achieved by implementing on the first project the scope

that will deliver more benefits and larger cost savings. By applying this method organizations are able to manage and control the projects easier, benefit quicker from the partial results and realize a ROI earlier.

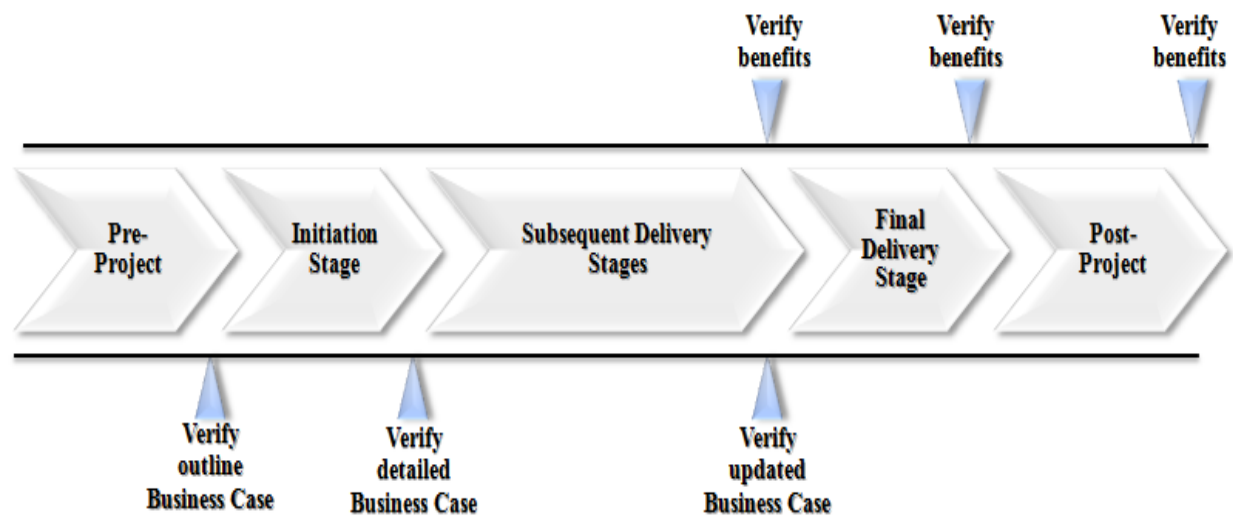


**Figure 24:** Segmented Project Cost/Benefit Curve

*Adapted from: Benko and McFarlan (2003)*

**80/20 Rule.** When economic pressure is high, there is no budget available for launching expensive multi-year efforts. In reality, some organizations require that projects should have a maximum of six- to nine-months' schedule or that the ROI of the project should be achieved in less than a year (Cassidy & Cassidy, 2010). Consequently, many organizations apply the Juran's "universal" principle and implement the "vital few" portions of the project scope that gather the majority of the benefits (1992, p.71). Alternatively, they eliminate the "trivial many" features and minimize the scope, by following the 80/20 rule, where 20 percent of the initial project scope realizes 80 percent of the cost savings and ROI (Juran, 1992, p.71).

**The Business Case.** Project management discipline concentrates on *what* is the final deliverable of the project and *how* it should be delivered. According to OGC (2009), the role of the Business Case is decisive because beside the fact that provides a crucial baseline for the project, it also prevents from overlooking *why* the project is needed. Gambles (2009) defines the Business Case as a cost-benefit and risk analysis that supports a proposal against other realistic alternatives, with an justification of its implementation plan that assist the decision makers to take a specific action for the benefit of the organization.



*Figure 25. The Business Case. Adapted from: (OGC, 2009).*

In PRINCE2, the Business Case should be prepared at high level at the project launching, be refined during its initiation and maintained throughout its lifecycle. At every decision making event, it should be approved by the Project Board which should ensure that the benefits cited are aligned to the organizational strategy. Additionally as Figure 25 illustrates, the expected accumulated benefits should be verified throughout the time, (OGC, 2009).

In any case, cost, benefit and risk appraisals should be considered. However, the Business



Case should take under consideration and evaluate the monetary value of the benefits over a period of time against not only the implementation costs but also the costs which are related with maintenance, support and operations.

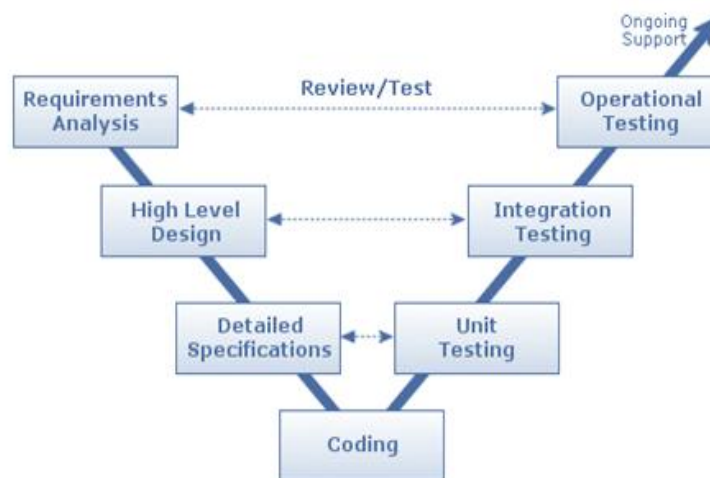
**Agile Development.** As compared to traditional waterfall systems development, agile software development methodologies gets faster results with less cost and effort. Concepts used in agile development vary, but generally include teamwork, regular communication, and implementation in small increments, short time frames, and iterations. As it was captured through the interviews due to high demand volatility and frequent changes in requirements coming from the market or regulators, the organization applied the “scrum” method. With this method, several stages of the development phase are occurring in parallel, there is frequent interactions between developers and the business, high commitment from the sponsor as he participates in daily meetings with the development team daily, and the focus is on smaller scope and immediate results. This type of development will reduce risks and costs as the team is able to find errors earlier in the process and complete changes quicker. The organization was able to take out a layer of management and significantly reduce costs, while also increasing value through better execution.

**Lessons learned.** Learning from project failures. Accountability is the key to successfully executing a cost-justification model. Key checks and balances are crucial otherwise business units will tend to inflate projected benefits to get their project approved. After completion of any project or cost reduction initiative, complete post-project reviews to ensure that the project have achieved the projected benefits and cost savings. A governance committee should be established to conduct post-project review. In case of failure, the responsible should identify causes and

determine if the benefits are achievable or were initially overstated (Cassidy & Cassidy, 2010).

**The V-model.** The specific sequential model is focusing on the testing activities.

- Testing against the detailed specifications of the program takes place at the unit testing phase.
- Testing against the high level design takes place at the integration testing phase.
- Testing against the requirement specification is completed during the operational testing phase (Hambling, 2007).

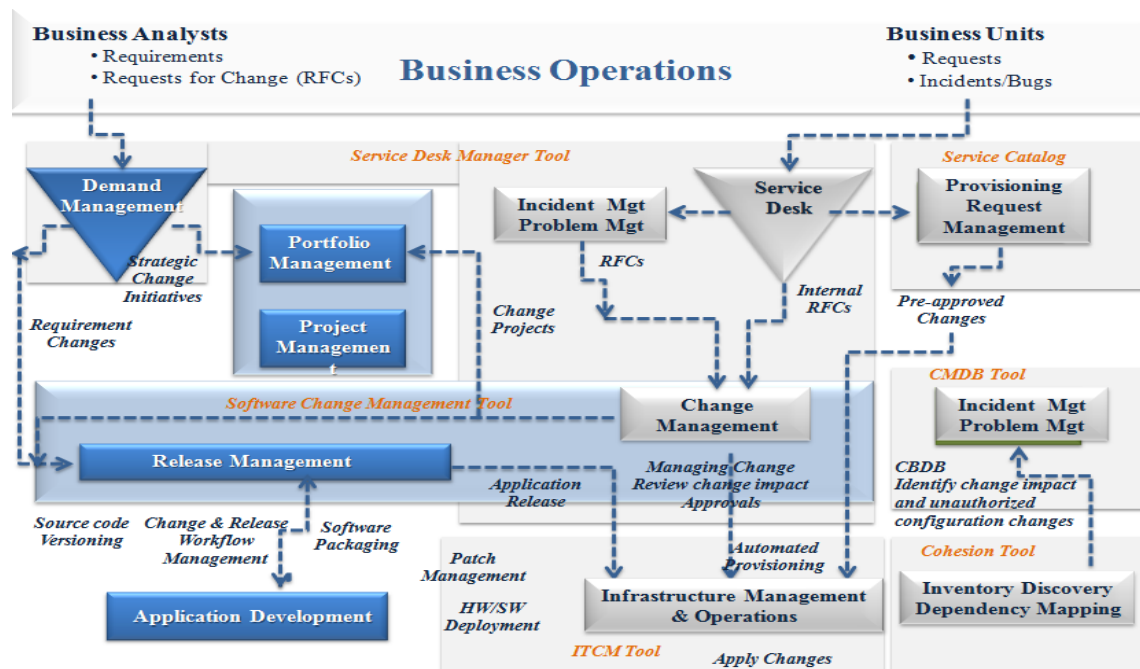


*Figure 26. The V-model*

## Products

According to Cassidy & Cassidy (2010) technology enables organizations to create innovative solutions, to manage complexity, to reduce costs and expenditure, to improve quality, to automate and increase the speed processes and to optimize the supply chain, that help organizations not only to survive but even thrive in a crisis. Nevertheless, there are several tools and new technology trends available to advance the organizational efficiency and effectiveness in IT.

**Enterprise Change Management tool.** An interviewee said that “We need to move toward to a more flexible integrated project management environment to support the reengineering of our new processes”. An Enterprise Change Management product provides a flexible integrated change management environment as it is the tool that integrates, automates and unifies processes, provides complete transparency, status and resource visibility and tracks costs of change.

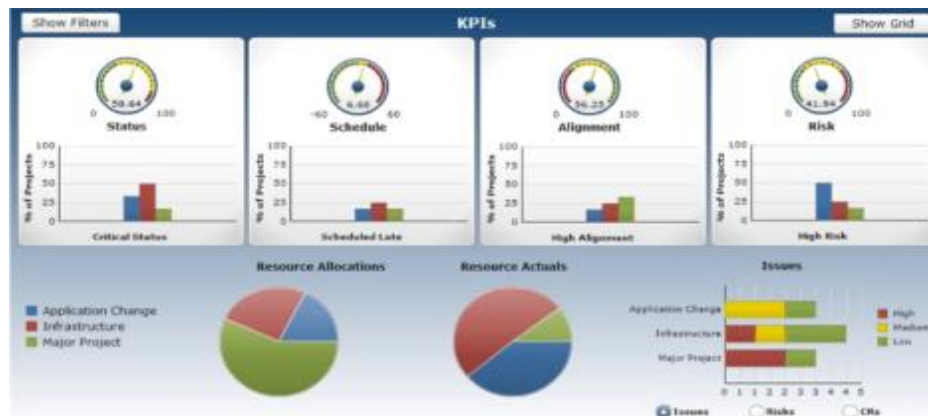


**Figure 27.** *The Complexity of Managing Change. Adapted from: CA (2006).*

Moreover, enterprise change management products generally include automated software solutions for:

- Portfolio and Program Management capabilities that ensure improvement of the decision making process, alignment of organization strategy with the strategic investments and the programs and projects prioritized for implementation.
- Managing scope and track change requests.
- Managing project financials for capturing project costs and earned value.

- Managing resources capacity and demand and achieving balance among the business units.
- Collaboration platform for transparency and single point of reference and reporting to the entire project related information.



*Figure 28. Available KPIs and dashboards through ECM tools*

*Source: CA (2006).*

Indeed, the ability to efficiently and appropriately handle change is very important during these volatile times, especially when change must be executed with minimal cost and minimal risk of business disruption. Therefore, IT organizations need to automate processes for best practices for the entire end-to-end change management lifecycle from Initiation through Closure (CA, 2006).

**Prototyping tool.** Cohen (2010) emphasizes that user experience design is significant both in agile and traditional project of software development and that the iteration zero involves researching user experience and is the only that does not deliver working software. Prototyping tools assist project team to collaborate with the customer, get his feedback early, set up the environment and model the architecture.

**Estimating tool.** A software estimating tool should use objective criteria for all technologies/platforms. Annual reviews for each section of the estimating tool should be conducted for continuous improvement. Base estimations should be adjusted according to past performance statistical data and management decisions. Furthermore exceptional treatment entries are available and can be used for review of elementary components base estimations and phase calculations.

**Testing Management tool.** Tools that manage and automate the process of testing are significant as they facilitate visibility, repeatability and rapid execution of stress and regression tests. There are many test automating tools in the market. An interviewer said that they substitute their testing management tool with a new one:

- To reduce the annual cost for licensing more than 70%.
- To reduce the development time of automated scripts more than 50 %

**Social Media Tools Web 2.0 technologies.** Social media tools can improve collaboration communication, knowledge management and therefore innovation.

**Open Sourcing.** Open source software has had a considerable impact on the software industry. Open source vendors charge for maintenance and support, but it is significantly less expensive than standard software. Many development projects mix open source with internal code to shorten development time and reduce costs. Open source assists team members not to waste time to reinvent the wheel by using components available for reuse (Cassidy & Cassidy, 2010).

**Service Oriented Architecture.** Service Oriented Architecture (SOA) is an architectural paradigm that allows building applications with reusable components. It is highly interoperable, loosely coupled, and encapsulated units of work that link or combine resources on demand. It

provides a flexible application architecture that is easier, faster, and less expensive to change (Cassidy & Cassidy, 2010). Developers also can use services as building blocks for responsive business processes. By building services, firms can increase organizational agility and rapidly introduce new business models through the flexible delivery of functionality and improved value-chain collaboration (Cassidy & Cassidy, 2010).

**Cloud Computing.** According to Gefen (2010) an organization can avoid the management and the maintenance of some services such as the e-mail by relying on consistent and mostly free services relative to cloud computing and achieve impressive cost savings. Moreover, he mentions examples of companies which claim that a cloud environment by taking advantage of economies of scale can reduce storage and data management costs up to 20% without compromising the security of the data.

The U.S. National Institute of Standards and Technology classifies Cloud computing into the following three service models:

- *Cloud software as a service (SaaS)* gives the client the ability to activate the application which is running on the provider's infrastructure, through a thin client such as a website or a cell phone. Examples of SaaS are Gmail and other types of web-based e-mail.
- *Cloud platform as a service (PaaS)* gives the ability to run their own applications on the infrastructure of servers, operating systems, networks, and storage these require. Running applications on an iPhone belongs to this category.
- *Cloud infrastructure as a service (IaaS)* gives the consumer the ability to run its own operating systems and applications. The consumer has control over operating

systems, storage, deployed applications, and probably partial control of select networking components such as host firewalls but he does not manage or control the underlying cloud infrastructure (Gefen, 2010).

Nevertheless, Mell and Grance (2010) cloud computing technology has five essential characteristics:

- “*On-demand self-service*”. A consumer can get needed computing capabilities and services, automatically without the necessity of human interaction with the service’s provider.
- “*Broad network access*”. The ability to connect over the network and get access through standard mechanisms by using heterogeneous and wide variety client platforms such as laptops, PDAs and smart phones.
- “*Resource pooling*”. The provider’s computing resources such as memory, storage, and network bandwidth are pooled to serve multiple consumers. The resources are dynamically shifted among the consumers as their demands change.
- “*Rapid elasticity*”. As the costumers demands change there is the capability of automatically and rapidly scaling up or down the bought services.
- “*Measured service*”. The usage of the aforementioned resources is monitored, controlled, and measured to provide a transparent utilized service (Mell & Grance, 2010, p.50)

## Partners

**Outsourcing Offshoring.** The interviewees' answers demonstrate that when the economic crisis occurred, outsourcing and offshoring gave organizations the power to be flexible and ramp up or down accordingly to the conditions and their needs. Indeed, outsourcing and offshoring enables organization to achieve operational efficiency through cost reductions, scale economies, and flexibility (Ellram, L.M., Tate, W.L. & Billington, 2008).

**Vendor Management.** The interviews resulted that in times of economic recession and pressure, renegotiating better deals for services, hardware or software is a necessity. Cassidy and Cassidy (2010) advice that organizations should work with their partners for mutually beneficial deals to succeed cost reductions in the short term by cultivating expectations to maintain the partnership in the long term. The economic recession has an effect vendors and partners as well and even if reduced -prices cannot be achieved; organizations should negotiate for other benefits such as training and consulting services (Cassidy & Cassidy, 2010). Consolidating the suppliers is another way to achieve better agreements. International large organizations can use their size as a great advantage to reduce costs and achieve additional discounts by proceeding to bulk procurements to serve worldwide needs.

**Customers.** The customer needs to be able to see clearly the organization's value, both in technical, business and commercial terms. The organization cannot afford to be disposable or interchangeable ever, even worse these days. Therefore IT should increase business intelligence, knowledge on markets, competition and customers, and improve the way it interacts with the business. Furthermore, IT should increase insight on business needs, to avoid reworks.



## **Discussion, Conclusions, Recommendations**

### **Discussion**

The uncertain environment and the pressure of time that the unprecedented market and credit crisis introduced, threatens organizations which struggle to survive and reinforces them to make crucial decisions and changes regarding their strategy. As Sull (1999) supports it is harder for the leading companies to implement the appropriate changes as the former thriving practices, processes and values ultimately become obstacle for their survival.

This thesis contributes by providing an indication of the tools and practices that seem to support organizations to innovate, learn, change and improve their business results. Program and project managers and leaders, who may be interested in delivering timely business results and customer satisfaction through the initiation, approval and implementation of IT projects, are provided by the tools that the analysis indicated as most appropriate for use to overcome the challenges introduced by the current economic crisis environment to achieve cost reductions, improve time to market response and organization's competitiveness. To accomplish this, the author initiated by reviewing academic research regarding crisis, polarity management, systems thinking, learning organization, and motivation, theory of constraints, quality and project management best practices and methodologies related to the challenges induced by the current economic crisis, interviewed 20 professional experts of 11 different organizations with different perspectives and completed the research by analyzing, classifying and synthesizing the data collected through those interviews and the literature review. By adopting a holistic approach the findings were classified, synthesized and presented in four large categories by using the ITIL's 4 Ps for People, Processes, Products, and Partners and critically reviewed concerning their advantages and limitations of applicability as well as their short or long term effectiveness and

risks.

**People.** People are the most important asset of an organization their role in organizations and project management practices that should be further recognized and respective actions should be taken to foster trust, creativity, innovation and unique organizational cultures and communities. Soft skills and Emotional Intelligence are crucial for success. It became apparent that training and coaching motivates staff improves learning, relationships, performance, productivity and creativity. Although training on coaching available in the market are expensive the organizations can always adopt the train the trainer approach which can reduce the cost and boost knowledge and experience and finally transform them into learning organizations .On the other hand, letting go old symbols of security and authority might be hard and there might be internal barriers to this initiative.

**Processes.** There is a strong demand for IT to deliver business value and results, operate more efficiently and minimize the organization's costs. Therefore, the business units rely on IT sectors for their survival and the implementation of their competitive strategy. Strong IT governance and program and portfolio management (PPM) capabilities that match the "new normal" will contribute realized benefits and value from IT efforts that clearly map to needed business success. Benko and McFarlan (2003) document how many organizations have failed to achieve alignment in projects and technology-related investments as many projects finally compete with each other for resources or overlap. They argue that the organization's project portfolio is its future and they suggest a grid on which the organization can plot its projects and business objectives and by connecting the dots, top management executives can understand tentative clustering or overlapping of the portfolio and goals (Benko & McFarlan, 2003). The role of governance and the demand management and the establishment of a strong steering

committee and project review and approval process are critical during these turbulent times (Cassidy & Cassidy, 2010). Program and project portfolio tools are valuable in the process that the priorities identified and determined. Projects should be analyzed more than ever and the available resources should be provided on the most valuable projects to achieve benefits across the entire enterprise rather than a specific business unit. Nevertheless, adopting IT governance and program and portfolio management processes does not mean that the processes are effective and valuable. As any other process, it is significant to strive for continuous improvement by monitor key measures and target improvements

By breaking the project into more manageable smaller ones is reduced and incremental benefits can be achieved. Furthermore, new information, market conditions and business needs can be incorporated to the next projects. The project segmentation also provides flexibility as it facilitates funding decision making process and it is easier to change direction or even terminate the project if necessary. Unfortunately, the method cannot be applied in very project as there are cases where a time and effort consuming project should be delivered before the first returns can be realized. Furthermore, one should not lose focus from the strategic roadmap and the desired end-state (Benko & Warren McFarlan, 2003). Furthermore, strong business and IT collaboration is required to be able to apply it.

The 80/20 rule is simple to use and helps the organization to concentrate on those portions of the project that if implemented they will have the largest benefit and return on investment. On the other hand, IT estimations may become time consuming in complex large projects. Therefore in this case also IT and business alignment and collaboration are prerequisites to identify the best-fit solution outline.

The business case is extremely important because it aligns the project to the agreed

business benefits and objective, justifies the project cost, the involved risks with the expected business benefits and therefore facilitates the decision-making process. However, adequate time should be allowed for the development, review and approval of the Business Case. Therefore, a business case is worth writing for significant large projects at enterprise level.

Regarding, agile project management processes benefits are significant and include reduced development cycle-time, stability of work-loads, higher utilization of work-load, flexibility to change of management and development plans and higher quality by getting earlier feedback from the customers. Being able to deliver early, continuously, meet the changing conditions, and collaborate with the customer, the organizations can be certain they can deliver business value through the project.

On the other hand, bringing agile approaches to large traditional development organizations would be rather challenging. To begin with, the problem of changing mentality and practices from process-driven to people-driven is acute. Many organization have spend years to accomplish a high level of Capability Maturity Model and changing a former standardized process according to the team members competencies or the characteristics of the project requires considerable investment of time and effort. Moreover, knowledge management is vital for the organization. Knowledge in agile development is generally implicit and this can make the organization heavily depended on the development teams and that will not be acceptable. The deadlock can be solved by choosing the knowledge area that should be confined and what should remain implicit. Furthermore, the customers need to be collaborative, dedicated, and knowledgeable and willing to actively participate during the development process. In addition, it might be difficult to find enough self motivated competent experts that agile methodologies need.

**Products.** Enterprise Change Management projects increase efficiencies and speeds deployment by employing process- driven integration and best practices, support the business and IT alignment process by prioritizing projects and change according to business impact, manage, prioritize, and allocate resources, mitigate risk through change impact, reduce project failures due to cost and resource re-alignment for "emergencies" and finally measure and minimize cost and risk associated with unplanned change. On the other hand, if the processes are not standardized and well defined a tool only maximizes the problems and the internal issues of the organization. Although, the high prices for these products are suitable only for large organizations, is an excellent long term investment.

Prototyping offers learning and discovery experience and gives the opportunity to the project team and the client for collaboration on further enhancements that will improve the final solution (Wysocki, 2009). Apparently, the consequential participation of the customer is a decisive factor for the successful results of tool. Furthermore, an initial development effort is required for automating test scenarios, long-term results from standardization and quality will finally achieved.

Cloud computing provides services when needed and any required quantity instantaneously and demands for payment only for the exact services provided. Furthermore, these services are being continually fine-tuned in an invisible for the consumer way to be able to produced and maintained in an optimal manner. Low costs are achieved due to the economy of scales achieved by resource pooling. Contradictory, as there is lack of industry standards switching vendors is difficult and the consumer may end up dependant on a specific vendor (Gefen, 2010). Moreover Feldam (2010) reports that 46% of the surveyed business technology professionals believe that it will take 3-5 years to get their investment back, whereas the 32% of them believe that the Return

on Investment will take 1 or 2 years. Security and privacy of the data is also a considerable issue and should be carefully considered along with regulatory compliance issues. Open source introduces challenges such as license, security issues, scalability, maintenance, version control. (Cassidy & Cassidy, 2010)

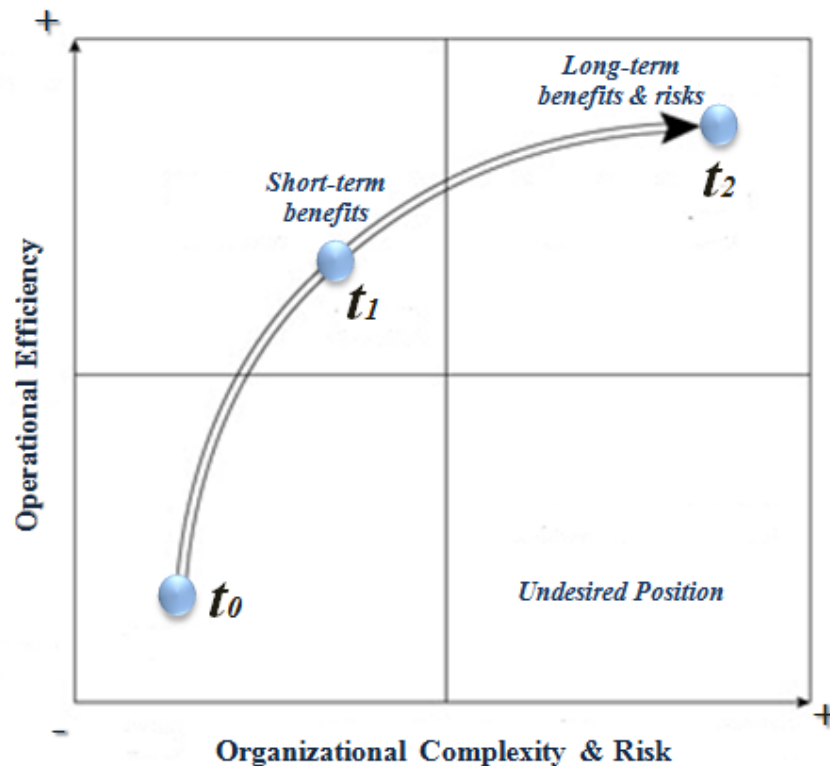
**Partners.** Renegotiating contracts and consolidating partners and vendors are great tools to achieve short-term cost reductions by achieving reduced prices or other intangible benefits. Large organizations are definitely more powerful comparing to the small ones regarding renegotiations. Moreover, the consolidation of the vendors or partners can create dependencies and new risks in the long term.

Regarding offshoring Kakumanu and Portanova (2006) argue about the negative impact that has to public opinion as the jobs are moving out of the country. Moreover, according to Tadelis (2007), the necessity of managing the relationship is one of the concealed costs of outsourcing. Contractor, Kumar, Kundu and Pedersen (2011) argue that there are three paradoxes regarding outsourcing that need to be managed. According to Rosen (1994) paradoxes are "dynamic tensions of juxtaposed opposites" (p. xvii) whereas Cameron (1986) explains that paradoxes include "contradictory, mutually exclusive elements that are present and operate equally at the same time" (p.545). Nevertheless, the paradoxes related to outsourcing are:

- The increase of operational expediency at the expense of increased managerial complexity and the overloading to coordinate the groups and the relative activities (Rothaermel, Hitt & Jobe, 2006);
- The increase efficiency requires increased and complex organizational learning as they need to empower and advance their organizational competencies related with

the supply chain (Espino-Rodríguez & Padrón-Robaina, 2006) and managing vendors (Hoecht & Trott, 2006);

- The increase of the risk profile and the strategic complexity due to the “operational expediency”.



**Figure 29.** Outsourcing Short-term and Long-term Benefits versus Risk

Adapted from: Contractor, Kumar, Kundu & Pedersen (2011).

Organizations that use outsourcing may improve their short-term competitiveness but usually they undermine their long-term ability to remain agile which leads them to new ways to become competitive (Contractor, Kumar, Kundu & Pedersen, 2011). Figure 29, illustrates how operational efficiency achieved by outsourcing key competencies or core functions will progressively add complexity and risk to the organization. Therefore, someone can conclude that organizations should proceed with selective outsourcing by analyzing extensively what should be

outsourced. Decisions should be based on whether the specific work provides an advantage against their competitors and whether the organization excels at it or not.

## **Conclusions**

Besides the criticality of the problem addressed, the significance of the study is stemming from the combination of the theoretical background that the extensive academic research offered and the diverse expertise of 20 interviewed professional experts that belong to a network of 11 organizations. The research indicate that the economic crisis demands costs reductions, introducing efficiencies and improving return on assets, innovation, flexibility, adaptability.

Deming (1988) stated that “costs go down and productivity goes up, as improvement of quality is accomplished by the better management of design, engineering testing and improvement process”. Therefore, quality and cost reductions are related. Organizations need new practices and approaches to succeed in this uncertain economic climate; therefore they should innovate to survive (Gale, 2009). As project management is the discipline that supports organizations to implement their strategy and achieve their business objectives, the significance in changing their project management practices to facilitate learning, change, and innovation is distinctive. Beside this, every interviewee perceives this period as an opportunity for change and learning and the research indicated that there are IT Sectors of large organizations in financial services that have perceived this period as an opportunity to launch transformation programs to establish structures consistent with the initiated changes.

Adopting IT governance and project, program and portfolio management processes is significant but the need for continuous improvement by monitoring key measures and target improvements is equal.

New technology tools and trends can assist the organizations to facilitate and automate



their processes if those are standardized and with well defined roles and responsibilities otherwise magnifies the issues.

The organizational leaders and project managers should apply an adaptive leadership framework which adopts a systems approach for understanding the internal forces of projects and includes the ability to manage and adapt to change, adopt an “overall humanistic problem solving approach” and encourage constant feedback, adaptation, and collaboration as skilled professionals do not adapt well to micromanagement, and tools and techniques quickly reach their limits when not used appropriately (Augustine, 2005, p.87).

### **Recommendations**

This thesis contributes by providing an indication of the tools and practices that seem to support organizations to innovate, learn, change and improve their business results. Although the appropriateness of the final sample of the interviewed experts was determined on specific eligibility criteria the findings are not without limitations or risks. Firstly, the IT organizations were basically limited to the author’s professional network in Financial Services Industry. Consequently, focusing on a single industry, such as Financial Services Industry, risks the ability of generalization of the study results. Secondly, the results are not quantitative verified, as a qualitative study is statistical limited. Therefore, the author’s recommends further quantitative research to statistically verify the findings.

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## Appendices

### Appendix A: Interview Questions

#### Control Questions.

1. How many years of professional experience do you have and in what roles?
2. How would you describe your current role within this organization?
3. How long have you been in this role?

#### Organization Profile Questions.

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?
2. How would you rate your organization's ability and maturity to deliver projects and why?
3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

#### Core Questions.

1. What are the challenges that the current economic crisis environment has introduced?
2. Do you perceive the current economic crisis as a chance for change and learning?  
Please explain.
3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?
  - a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?
4. Does your organization use any agile methods in managing IT projects?
  - a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
  - b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.
5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?
6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?
7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.
8. Please provide some suggestions for leading and motivating team members during these turbulent times.
9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?
10. Is there anything you want to add relative to the subject that has not been asked?

## Appendix B: Interviews

### Interviewee 1

#### Control Questions.

1. How many years of professional experience do you have and in what roles?

*11 years in management consulting and project management*

2. How would you describe your current role within this organization?

*Continuous improvement consultant*

3. How long have you been in this role?

*2.7 years.*

#### Organization Profile Questions.

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Financial Services/ Post-trade services, 3725 employees, Private, International*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*Good to very good, for small & medium sized project, below average for large project (failure to implement a single platform).*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Several KPIs, standards and methodologies in place including PRINCE, PMI principles, V-model for software development and PMO office, mostly for top 15 projects; however more for reporting and KPIs.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*The crises pushed for less costs and higher efficiency; the biggest impact was in the mindset of how we deliver new services/ products to our clients; there was a strategic shift (which came with the new CEO) from large projects and benefits in the long term to the clients to smaller projects and immediate benefits.*

2. Do you perceive the current economic crisis as a chance for change and learning?

Please explain.

*Yes, people were pushed to re-examine the way they develop and implement changes but also to the way they deliver new services to clients. Waste reduction & more value to the clients is the key driver for changes in the company.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, we launched a major transformation program trying to implement Lean*

*Principles in the way we manage our business; initially started to Operations (2007), later it was initiated in IT and Corporate Technology domains.*

4. Does your organization use any agile methods in managing IT projects?
  - a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
  - b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*Yes, as mentioned above, we chose as a general philosophy Lean, which brought significant changes to the way supervisors run their teams, e.g. through the introduction of 15' daily meetings in front of whiteboards, the monitoring of performance with KPIs, the introduction of SOPs (standard operating procedures, i.e. two pages top procedures which mention best practices, hints and tips), capacity management tools, power workshops for requirements definition, etc.*

*In specific IT teams, with high demand volatility and frequent changes in requirements (coming from the market or regulators) we applied the "scrum" method. With this method, several stages of the development phase are occurring in parallel, there is frequent interactions between developers & the business, high commitment from the sponsor (he participates in daily meetings with the development team daily), and the focus is on smaller scope & immediate results. Finally, we tried to streamline End-to-end the process for introducing new product and services. This year we initiated a project for eliminating the*

*inefficiencies in the new service generation process.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*To name a few:*

- *An area that needs a lot of work is the scoping phase. Inconsistent or not well defined scope is one of the major root causes for project overruns. Thus, a lot of effort has been given to reduce scope creeps, by i) increasing business intelligence (knowledge on markets, competition, & customers) ii) improving the way different teams (business & IT) interact (setting common objectives, establishing trust & understanding of the constraints & limitations of the two, etc), iii) setting standards & best practices to be followed during execution, iv) learning from project failures*
- *Another area is the investment that needs to be done in reducing the complexity of the IT applications & infrastructure. We have observed, that from year to year is getting a lot more difficult to implement changes or new things, due to the increase in complexity; specific teams have been formed to work on reducing complexity & decommissioning applications (this year it was initiated; don't know how they are doing)*
- *Finally, soft factors such as skill development for IT & Business in specific applications & technologies, reduction of the fragmentation between teams (large teams with broader responsibilities), management thinking*



*(underestimating long term impacts, “kill the messenger” attitude, “doing before thinking” culture, etc).*

- *Outsourcing & offshoring may had benefits but they created several challenges as well in my opinion (frequent turnover of people, time & cultural differences, limited proximity, etc); however I do not have access to data or information to evaluate the cost/ benefits.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, but I don't know the details and I think they plan to increase it for non critical areas.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Tools are second priority; according to my own view the biggest challenges exist on the soft factors (management, interactions within teams, culture of the people & the organization, long term thinking)*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

- *Lead by example and be a role model*
- *Spend time with your people on the shop floor – spend time to develop them (both on technical and soft skills)*
- *Abort the command and control management style & move to a coach/ mentor*

*role - about Management by Objectives (numerical targets, etc)*

- *Be consistent, fair and trustworthy*
- *Create a nice atmosphere to work with, be funny and use humor in times of frustration*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*What I believe would be valuable for executives & management, is the introduction of system dynamics in project management; it is methodology for training & educational purposes that explains the way management's behavior can impact the performance of projects. Great learning experience for myself.*

10. Is there anything you want to add relative to the subject that has not been asked?

No.

**Interviewee 2****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*10 years as developer, consultant, software architect, IT Strategy*

2. How would you describe your current role within this organization?

*Coordinating the establishment of clear directions along, the various lines of an IT organization e.g. technology, applications and infrastructures.*

3. How long have you been in this role?

*4 years*

**Organization Profile Questions.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Financial services, banking, Large private sector, international organization.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*In terms of standardization and project management methodologies more than average. In terms of execution probably average. Although they exist the aforementioned methodologies, in practice things are more complex and very dependent on the skills and efforts of particular people. Consequently, due to the lack of such skills among other constraints (business engagement, quality of requirements, organizational culture), things tend to slip.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Yes, there exist not per phase but overall. There is a PMO established.*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*Finding the balance between cost cutting and the necessary investments that can drive you through the following years. Additionally, people motivation and engagement in such efforts.*

2. Do you perceive the current economic crisis as a chance for change and learning?

Please explain.

*It's an opportunity for housekeeping. This definitely includes change, not only in the organizational structure but also in mentality. The process also involves learning.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, in the sense of more direct business executives involvement and more rigor in approving projects as well as in respective planning and delivery.*

4. Does your organization use any agile methods in managing IT projects?
  - a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
  - b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*No, we don't at least "formally". As always some of the practices applied are similar to what agile prescribes but this is not institutionalized. Personally, I do not believe that much in methodologies and recipes but rather on people capabilities.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*OPEX Costs such as software maintenance fees and hardware infrastructure via consolidation. Things are so turbulent that it is difficult to dogmatic in such aspects.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, but since there is less money to spend in IT projects, it is reduced.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Definitely, yes e.g. Virtualization technologies, open source, cloud computing.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Being honest, communicate often, be the example in the directions you want people to go.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*In project management practices, agile methods can provide useful input. I also consider that web 2.0 and communication technologies provide good opportunities for facilitating innovation and learning.*

10. Is there anything you want to add relative to the subject that has not been asked?

*The role of people in organizations and project management practices should be further recognized and respective actions to be taken in order to foster creativity, innovation and unique organizational cultures and communities.*

**Interviewee 3****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*13 years general management consulting, senior analyst, team leader, project manager.*

2. How would you describe your current role within this organization?

*Head of Business Architecture Division*

3. How long have you been in this role?

*1 year*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Financial services, private sector, large international group banking organization.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*Comparing with the competition, I would say that it is highly mature and with powerful IT Governance.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Yes, we have key performance indicators to measure performance, a project management methodology and projects should have a strong business case to be implemented.*

*Therefore, we also have a projects' prioritization and demand management cycle before the project implementation.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*To do more with less. We have to implement critical projects for the survival of the organization with limited resources.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Yes, the organization at all levels should perceive it as a chance for change and incorporate learning in its processes and culture.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*The fact that demand for IT projects has been decreased gave us the opportunity to change and improve our processes. Regarding the financials, we have reduced outsourcing to the minimum, we follow strict demand management and planning procedures and the reporting for the business will become more transparent*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?



- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*We typically adopt a waterfall approach for project implementation, but in exceptional cases and especially new front office new applications we use wireframes for prototyping and use cases for the definition of the requirements.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

- *Contracts renegotiations, data centers consolidations, telecoms, VOIP, offshoring for non critical services, virtualization, and streamline for processes, open source, applications portfolio management for consolidation or removal of applications*
- *Run the bank budget cannot be reduced. I would suggest never cutting R&D and innovation.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, we use but due to the budget constraints we have scaled them down.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Open source, cloud, web 2.0 collaboration, efficiency video conference instead of travelling.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Participation and sharing the vision is basic. We should be transparent, explain the situation and make the team accountable.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*We need a next generation change management tool. Besides the reinforced collaboration, visibility and transparency, accountability through the workflow is also earned.*

10. Is there anything you want to add relative to the subject that has not been asked?

*Project management is more than technical expertise. We should be proactive, forward looking and results orienting. We need strong people management, emotional intelligence skills and human behavior knowledge to motivate team members successfully.*

## Interviewee 4

### Control Questions.

1. How many years of professional experience do you have and in what roles?

*11 years in total: 3 years as a Researcher (Science) and 8 years as a Project Manager and a Business Analyst (Industry)*

2. How would you describe your current role within this organization?

*Business Analyst to the Upper Management with ongoing Project Management tasks*

3. How long have you been in this role?

*4 years*

### Organization Profile

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Industry: Universal Banking Private Sector,*

*Size: Large (€80bn assets, 24.000+ employees, International (European))*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*Quantitatively Managed Maturity: Key point in the Organization's ability to deliver projects is the sophistication and result orientation of its task forces, supported by tools and internal procedures for process measurement and timeline control*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Standards:*

- *Initiation:*

- *Business cases to support requests for projects*
- *Project categorization as per Corporate Strategy*
- *Project Evaluation committees (representatives from all involved units)*
- *Planning-to-Monitoring:*
  - *Project management office, responsible for planning execution and monitoring of all large and medium scale projects, facilitating the interaction and communication between project-involved parties (business, operations and IT)*

*Measures:*

- *Initiation:*
  - *Project Metrics as an index for alliance with Corporate Strategy (i.e. Priority in the Project bucket)*
- *Planning-to-Monitoring:*
  - *Work plan deadlines monitoring (for Analysis, Design, Development, Integration, UAT, Roll-out)*
  - *Strict “stick to the Baseline” policy*

## **Core Questions**

1. What are the challenges that the current economic crisis environment has introduced?
  - *“Do more with less”*
  - *Conservative corporate strategies inhibiting innovation*
  - *Maintain flexibility in a dynamic market while minimizing operational risks*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*The recession offers great lessons for adaptation to dynamic high-risk environments as well as an opportunity to re-think on risk assessment, operational efficiency and the value of quality over quantity and payback as far as costs are concerned.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes. All projects are reviewed and evaluated from a committee of highly competent and specialized individuals, ranking them according to their relevance with corporate strategy as well as their expected revenues. "Nice-to-have", "high maintenance" or "high risk" projects are postponed. Approval is directly related to project planning and the capacity of the teams involved to deliver on time.*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*To my understanding of the IT project management procedure, we operate under a*

*Waterfall model for all types of IT Projects, based on the principles of sequential design. I believe it is more appropriate for Large Scale projects where numerous parties are involved and the phases' lifecycles need to be precise.*

*However, given the fact that Medium and Small Scale Projects tend to follow the need to respond to a dynamic market, the model proves to lack in flexibility (for example it has proven difficult to alter requirements if a design issue is discovered during the test phase to be inconsistent to the newest of trends)*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

- *Capitalize on IT staff strength by aligning assignments on staff specialization.*
- *Cut down on IT outsourcing.*
- *Automate all reporting processes (interaction between IT and MIS units).*
- *Never cut down on training.*
- *Increase IT insight on business needs response, to avoid re-design and counter-implementation*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Outsourcing was used mainly on IT and MIS units, a great deal of which was cut-off as an initial measure for cost containment.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Two of the newest business and technology trends are Agile project management and*

*cloud computing technology. To my understanding, an agile approach is good for projects with an extreme level of uncertainty, which is hardly the case for most of my organization's IT projects. However, given the fact that the recession has made business needs more uncertain than ever, implementing agile practices could help out. However, revisiting my organization's plan-driven processes to an agile point of view would mean an important investment as far as time, money and training are concerned. Cloud computing techniques have proven valuable in the struggle for cost-containment, given the fact that they offer more functionality and do not require up-front capital investment (or dedicated staff). However, I believe it is more suited to small businesses rather than organizations such as an accomplished financial institution able to invest both in (some, even limited) capital and in staff.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*The new "leader of the great recession" should be able to:*

- Make things work in the most efficient way (avoiding lags, loops and interferences)*
  - Work on a granular level (strategy as well as day-to-day business)*
  - Always keep the "big picture" in mind*
  - (Recruit and) Motivate team members who adapt quickly to change while keeping things organized, simple and practical*
9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing

organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*I believe in the strategic alignment of innovation to day-to-day business as well as process benchmarking, in order to balance market exploring and exploiting in a turbulent market.*

*In my organization (in some cases) we tend to "overdo it" in both analysis and implementation and still the outcome may not characterize us as market leaders.*

*The middle management uses Balanced Scorecards (BSC), however the criteria are numerical rather than qualitative as far as innovation is concerned.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No*



**Interviewee 5****Control Questions.**

1. How many years of professional experience do you have and in what roles?

- *Analyst/Programmer, 6 years*
- *Business Analysis/Project Management, 9 years*
- *Risk Management/ Regulatory Compliance, 6 years*

2. How would you describe your current role within this organization?

- *Project Manager*
- *Business Analyst / Reengineering expert*
- *Regulatory Compliance Expert / Risk Management Expert*

3. How long have you been in this role?

*9 years*

**Organization Profile Questions.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Financial Services industry, Public Sector, International Banking organization*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*With regard to IT projects, the organization relies heavily on the talent of specific persons and not on processes and policies.*

- *Organization chart, processes and culture are not project oriented but rather hierarchical/functional*
- *Lack of adequate/formal project documentation*
- *Lack of feedback and reviewing mechanisms*

*The organization is very effective in dealing with small and medium size projects but rather immature in dealing with large projects.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*No.*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

- *Selecting/prioritizing eligible projects by the short term revenues.*
- *Postpone projects that require more resources, last longer and have minimum financial impact.*
- *Shift to in-house information systems development*
- *Re-negotiation of all contracts with outsourcers in order to reduce costs.*
- *Right sizing (in terms of personnel, budget and other resources – where applicable)*

2. Do you perceive the current economic crisis as a chance for change and learning?

Please explain.

*A crisis must always be perceived as such. An economic crisis reveals the organization's weaknesses; however, it also reveals new talents that can adapt easier*

*to the new environment. Moreover, in period of crisis, the organization usually focuses on its core business activities. The organization has the opportunity to reassess its performance, discover and fix its weaknesses.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?
  - a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
  - b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*The economic crisis has already had an impact on the project planning and delivering. The organization is constantly trying to improve efficiency (by reducing the required resources). Therefore, in-house development is preferred over outsourcing, the project selection is based on more short term criteria, costs and prospect revenues have become a crucial factor for project selection.*

4. Does your organization use any agile methods in managing IT projects?
  - a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
  - b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*No.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

- *Renegotiate outsourcers' and vendors' contracts for cost reduction*
- *Invest in HR training and education*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*We have reduced our dependency from outsourcers. We rely more on in house development and maintenance.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*New technologies create opportunities for cost reduction. Issues such as cloud computing should be carefully considered along with regulatory compliance issues.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*In a period of crisis, it is rather difficult to use bonuses as a motivation tool. However there are other things that a manager can do in order to motivate his team members:*

*- Give them responsibility over certain projects / project phases and after the implementation, communicate to the management, the project team's names along with the project's positive impact on the organizations' revenues.*

*- Motivate them to find cost effective alternatives. Communicate the results to the rest*

*of the organization, giving the credit to the employees who worked on the project.*

*- Let your team members participate in committees and project teams and the decision making process in general.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

- *Installation of an enterprise - wide software for project management*
- *Formation of a project office*
- *Formation of a department responsible for project risk management*

10. Is there anything you want to add relative to the subject that has not been asked?

*No*

**Interviewee 6****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*15 years. I started my carrier as a programmer and then, I moved on to more managerial role such as Team Leader, Project Manager, Program Manager and Division Manager*

2. How would you describe your current role within this organization?

*Currently I hold the position of PMO, Demand and Capacity Manager at a Public Sector Bank, which is extremely difficult since the bank's culture and workforce are not familiar with the role, scope and process of the project management*

3. How long have you been in this role?

*I hold the current position for the last three years IT Compliance & Program Office Manager for three years as well and as a Project/Program Manager more than a decade. In addition, I am a certified PRINCE2 Practitioner.*

**Organization Profile Questions.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*The organization I work for is a large size, public sector Bank which focuses and lunches its products and services within the Greek market.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*The bank is not mature enough. Actually it is the other way round, for several reasons. First of all, the workforce of the bank is mainly older people with no academics*

*background. Another reason is that most of my colleagues are not willing to learn anything new or to adjust to a new way of working.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Yes, we do have both KPIs & a PMO, although they are newly established as a process and unit and we face a lot of difficulties in applying them, due to the aforementioned reasons.*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*Limited resources.*

2. Do you perceive the current economic crisis as a chance for change and learning?

Please explain.

*Yes, it is definitely an opportunity for change and learning in order to reduce unnecessary costs and expenses and redesign processes and authorizations limits and approvals, especially in a public sector institution.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, the organization has change the way it initiates projects. Excluding regulatory, compliance and audit related projects, the initiators of the projects need to prepare a cost/benefit analysis and have a strong business case.*

4. Does your organization use any agile methods in managing IT projects?

*Due to the public type of culture, the organization I currently work, experience serious difficulties to even apply and follow any project management methodologies, methods and practices.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*One suggestion would be to decrease the monthly fees the bank pays for renting a parking for all the employees of the IT data center, which could be reduced only to the managers, stand-by staff etc. Another idea would be to make a new agreement with the Telecommunication Company in order to achieve a better discount on the mobile's costs. One more would be to further review and control the SLA's with the companies in order to achieve a reduction to those expenses. Moreover, the bank could examine the possibility of "voluntary resigns" for the employees are about to pension.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, we use outsourcing for several and different kinds of provided services such as secretaries, technicians etc, which despite the economical crisis have not been*



*reduced yet.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes, for example cloud computing.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*I think that during these difficult times opportunities should be offered to learn more things, to get involved in different projects and to expand knowledge and further develop skills thru empowerment.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*We could use tools like PlanView, Microsoft SharePoint etc in order to improve further planning, monitoring and controlling our projects and program portfolio. In addition, we could grant access to certain users who put forward or/and evaluate the feasibility of implementation of new projects or change requests, work orders etc, in order to be more effective in demand and capacity management.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 7****Control Questions.**

1. How many years of professional experience do you have and in what roles?  
*23 years. Developer, senior developer, analyst, team leader, project manager.*
2. How would you describe your current role within this organization.  
*Head of the Group IT Testing Factory.*
3. How long have you been in this role?  
*1 year*

**Organization Profile Questions.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?  
*Banking, private sector, large global organization.*
2. How would you rate your organization's ability and maturity to deliver projects and why?  
*From 1 to 5 the maturity rate of the organization is at level 3. The reason is:*
  - *Only the last five years a methodology has been established to standardize the implementation of IT projects.*
  - *During the last year ITSM procedure has been initiated.*
3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?  
*We have metrics on budget and delivery deviation of the development units of IT and productivity rate based on internal customized algorithm. These metrics will be reinforced by adding new KPIs indexes following up the ITSM procedures. Yes, a PMO*

*has been established for the last 7 years with a focus on large projects (a total internal effort greater than 5 months)*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*Processes reengineering, repositioning of the personnel and the implementation of the ITSM that targets to the cost reduction and better utilization of the human and material resources.*

2. Do you perceive the current economic crisis as a chance for change and learning?

Please explain.

*It is an opportunity to change as you do not have a lot of demand from the business side, so you have time to rethink your processes in the daily production procedures and the implementation of the planned IT projects.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, and as a result of this we have changed the testing management tool with a new one:*

- i. *To reduce the annual cost for licensing more than 70%.*

- ii. *To reduce the development time of automated scripts more than 50 %*

*The coding development standards will be verified for their quality based on a new open source quality tool.*

4. Does your organization use any agile methods in managing IT projects?
- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*No, we do not use agile methods in managing IT projects, as a result of the size of the IT (number of running applications and employees)*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

- *Synergies among IT departments, the centralization of systems operations, merge of international and domestic departments, creation of common pools (clouds) for the servers' hard disk etc.*
- *The reusability of developed code in different projects.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*We have been used for more than ten years outsourcing resources and more than five years offshoring resources. Due to the economic recession, two years ago we have reduced the outsourcing and offshoring to the minimum needs.*

7. Do you believe that the new technologies or industry trends provide you with tools

for cost reductions? Please explain.

*Yes, the use of open source and the replacement of the old development platforms with the new ones is one example.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Changing the tools you are using you motivate them to learn new things. To avoid the stress and anxiety of the change you need detailed plan of the transformation to the new tools. Also the repositioning of the staff based on the needs of them motivates a lot to follow the change.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Following generic any project management best practices and methodologies (e.g. PMBOK, PRINCE2) is a very good way to enlarge your company's vision to highest ideal quality deliverable to your internal/external customer.*

10. Is there anything you want to add relative to the subject that has not been asked?

*By establishing ITSM processes and project management maturity the organization is going to have a competitive advantage against its global competitors.*

**Interviewee 8****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*14 years as:*

*Technical Consultant – 2 Years*

*Research Associate – 2 Years*

*Senior Technical consultant – 3 Years*

*Business Development Manager – 7 Years*

2. How would you describe your current role within this organization?

*Sales and Business Development in IT Systems Integration, with a specialization in Telco*

*OSS/BSS, Banking and Enterprise SOA – CRM – Customer Experience Management*

3. How long have you been in this role?

*7 years.*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Industry: Information Technology Systems Integration, Size: 140 Professionals, Revenue*

*13M, Profits 2.7M €, Private sector, Revenue wise, 55% International, 45% Domestic*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*Very mature. We have successfully delivered on-time and on-budget multimillion projects repetitively and in a variety of domains and countries in SE Europe.*

3. Do you have performance measures and standards to define impact and success in

initiating planning, executing and monitoring projects? Is there a PMO established?

*Yes, there are internal processes that cover such aspects. Yes, there is a PMO.*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?
  - *Further Diversification. You need to be outside of the area of the crisis both in terms of geography and in terms of domain. For us, this means moving our business to an even more favorable ratio for foreign - domestic ratio and expansion into business domains that allow us to distribute risk in a safe manner.*
  - *Closer attendance to internal costing. High level costing approaches are no longer sufficient. Specific costing per project, customer and context needs to be there; we are working towards this.*
  - *Delivering more value to current customer base. The crisis has affected even the healthiest companies in the region, even merely in order to further secure them. So your customer needs to be able to see clearly your value, both in technical/business and commercial terms. You cannot afford to be disposable or interchangeable ever, even worse these days.*
  - *More attentive project management. Together with b. and c. above this allows the organization to keep value, quality and cost at the desirable levels.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Yes, for sure. We need to optimize and diversify, in terms of delivery and markets. Project Management and interoperability can maintain businesses like ours competitive and profitable. On the same time, close coupling with the Greek market, which was thankfully*

*reduced for our company already, needs to be further reduced.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- *A PMO office has been established late 2010 to further improve the visibility of the following aspects:*
  - *Projects profitability*
  - *Projects Budget allocation*
  - *Inter Project Practices and Resources sharing and reusability*
- *Periodic project management and peer reviews have been established, covering the following aspects*
  - *Risk management*
  - *Budget allocation*
  - *Interoperability and reusability*
- *Prior to the establishment of such procedures, standard PM practices were adopted.*

4. Does your organization use any agile methods in managing IT projects?

a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?

- *RAD methodologies, like SCRUM are applicable when allowed by the customer processes and project specifics. SCRUM allows the delivery of prioritized parts of*



*projects on a fixed timeline and lower costs. The quality is not negatively affected, as the specific deliverables are tested thoroughly. When the customer model is flexible enough to allow such delivery and the dependencies with other projects – systems are controllable, agile methodologies are a good alternative.*

- *We can adapt to either model. However, projects with high interdependencies or within complex organizations with multiple stakeholders and decision makers usually call for more structured methodologies.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

- *Structured PM and usage of agile methodologies within projects, even when the Project is externally visible as structured. – Peer review. – Better PMOs that cover the reduction of efforts and the extraction of assets and best practices, technical and business between projects. – Better Knowledge management, for the same reasons.*
- *Proprietary Infrastructure is a good point to reduce. Cheap, dispensable infrastructures based on cheap HW and zero or no cost Open Source products, when possible are highly recommended.*
- *Analysis and testing activities are areas that would better be left untouched.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession?

If so, why?

*No, we do not. Attempts towards this in the past have not been proved economical eventually; as such schemes require highly structured processes, the cost of which the regional market around us simply cannot pay. Nevertheless, Greek costs at their own right*

*are quite competitive at their own right.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes, as said earlier, especially in HW and SW infrastructure. Open source OSs and SW products have made possible the usage of cheap, easy to replace infrastructure and have reduced the CAPEX and OPEX costs of IT.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times. *It depends on the person. That is why having empathy and EQ is important.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Practices and strategies-wise, it is important to be able to distil your innovations into assets that your company can market and allow the investments to be reused. This is something that will allow the Systems Integrator to evolve from an agnostic PM branch to a knowledgeable, competitive organization that can deliver not only IT services but also best practices, technical and business wise.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 9****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*I currently have 14 years of professional experience all of them in software analysis, design and development roles.*

2. How would you describe your current role within this organization?

*Senior Analyst.*

3. How long have you been in this role?

*7 years*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*I work at a large international banking organization of the private sector.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*Not very efficient since its size makes it very difficult to define the word "project".*

*Sometimes the business requirements are not very well defined. Overlapping projects may sometimes occur as well.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Although there is a PMO established, I am not aware of any performance measures and standards.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*More in-house development is what the economic crisis has introduced in our line of work.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*We are trying to view the current economic crisis as a chance for learning. In our line of business since the organization is not fond of giving to other vendors money for developing applications, more in-house programming development is required giving us the chance to expand our knowledge field.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*As I mentioned above the main changes in the IT department involve in mainly reducing the costs for obtaining software from other vendors. I am now aware of any tools or methods used.*

4. Does your organization use any agile methods in managing IT projects?

- c) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?

- d) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*The organization is using traditional project management practices for managing IT projects. In an organization of that scale, I do not believe that more agile methods would actually work better.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*You can reduce the IT costs by not employing huge number of consultants. Keeping your employees in touch with the latest technology is a cost that instead of reducing it, organizations should think of actually increasing it.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*We do use outsourcing, although due to the economic recession the costs involved in it are currently reduced.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*It could be, but we must point out that for an international bank, security is a main issue and costs related to security cannot be avoided. Furthermore a bank cannot easily be an innovator in technology.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Team members should realize that their work is actually significant and recognized. This is the time for each and every one to prove that the organization can lean on him for the*

*even more difficult times to come. Being important in a large organization is a good motivation.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

- *Organizations should trust on their employees. Organization's flexibility is actually restrained by all the small vendors selling a piece of software. Investing in your personnel is probably the best way of getting out of that economic recession.*
- *A more efficient project management model is also required since the existing one is definitely not working. Large organizations are complex. That is why our current project management techniques do not seem to apply. A more result oriented PMO should be created.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 10****Control Questions.**

1. How many years of professional experience do you have and in what roles?

- *4 years as a senior programmer*
- *4 years as a system analyst*
- *3 years as system architect/manager (currently).*

2. How would you describe your current role within this organization?

*The different tasks of my current role are the following:*

- *Management of 15 developers - Productivity review.*
- *Analysis of the new client requests/projects and payment schemes mandates.*
- *Coordination between the different teams into my department and other departments who may participate into a project.*
- *Review the development or the results of the test (only for very significant issues).*
- *Establish and review the effectiveness of the working procedures.*

3. How long have you been in this role?

*3 years*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*It is a payment processing company, a provider of electronic commerce and payment solutions. The company's portfolio includes merchant transaction processing services; credit, debit, private-label, gift, payroll and other prepaid card offerings, fraud protection and*

*authentication solutions, Internet commerce and mobile payment solutions.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*As a service provider, our main task is to deliver projects to our clients for the last 30 years.*

*Based on this fact, I believe that our experience give us the ability to support in a very good level significant projects and provide us the necessary mechanisms to control them in cases of problems.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*We have established procedures and reports for reviewing the estimation time vs the actual cost at the end of every project. This is a standard task of our PMO department.*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*Maximum productivity in the minimum possible cost is a standard moto, in the history of every efficient company. The current economic crisis comes to make this idea mandatory, in order to remain in the market.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*It is a good period to review the effectiveness and the time consumption of the existing procedures.*

3. Has the current economic crisis affected the way the organization initiates plans and deliver projects?

a) If so, please explain how the organization has responded and adapted its processes,



practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, to succeed cost reduction, we are reviewing our existing procedures to improve them.*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?

- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*We adapt to the customer's methodology and expectations.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*IT consists of budgets for software vendors (if any) and developers. As a first check, we have to review vendor (software) contracts. In many cases there is room of improvement.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*We tried a couple times to make outsourcing, but it is really difficult to find a partner-vendor to share with your worries, your objectives, e.t.c.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*The reality is that there is a trend in new technologies but I believe this it is not because the crisis, but because these technologies became more mature to support core tasks.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*It is very difficult to motivate people this period. Our basic weapons (like adjustments, salary increases) are now unavailable. Now, we have to keep the things quiet, to make it.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Clarity.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 11****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*12 years in consulting, business analysis, project management and PMO*

2. How would you describe your current role within this organization?

*PMO Head*

3. How long have you been in this role?

*1.5 year.*

**Organization Profile Questions.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Private Sector, international banking group.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*2.5 . Although we have a standard methodology for projects is applicable only for those change initiatives that involves outsourcing and vendors. Internal implementations are excluded although they shouldn't. To change this attitude strong management commitment and support is a prerequisite.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*We have measurements such as budget versus actual but as I said not for internal IT projects.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*Costs cutting and no hiring combining with mandates for regulatory compliance enforced by the current economic situation. Risk management and collections needs also automated reporting mechanisms.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Yes. We have to make changes in the way we select and implement changes and manage business priorities and we should stop implement according to the interpersonal relations with our internal customers. We have to use common resources across group to achieve cost reductions.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*The current economic crisis has affected the way the bank initiates projects. Projects should have a strong business case and fulfill very strict eligibility criteria, alignment with the strategy, to be approved by the new established committees. Unfortunately, as I have already mentioned this procedure is applied to the minority of the projects*

4. Does your organization use any agile methods in managing IT projects?
  - a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
  - b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*No, we do not use agile. Our internal customers are not mature enough to succeed the collaboration that agile methodologies embraces and internal audit requires extensive documentation.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*Central installations and consolidation to achieve bulk fix costs agreements with reduced fees and free advisory services.*

*Staff needs.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Although reduced, we use outsourcing only for implementation and not for advisory services. We have kept partnership with those who are more flexible and had built on win- win cooperation.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Business Intelligence applications and data mining tools should replace spreadsheets.*

8. Please provide some suggestions for leading and motivating team members during these

turbulent times.

Trainings even internal are valuable. Team building activities even during lunch break are also important. Everyone should share the corporate vision and realize how its work contributes for its implementation.

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

- *Internal cost allocation among units which hopefully will stop generate requests without value that create overhead to other departments.*
- *A project management collaborative platform is also significant.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No*

**Interviewee 12****Control Questions.**

1. *How many years of professional experience do you have and in what roles?*

*13 years in the banking industry, working as an IT system trainer, business analyst, project manager and now assistant manager in Special Projects*

2. *How would you describe your current role within this organization?*

*I am involved as a Project manager in large projects, performing all tasks from design, analysis, recording requirements and testing, plus coordinating the team.*

3. *How long have you been in this role?*

*4 years*

**Organization Profile**

1. *Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?*

*Banking industry, private sector, 6000 employees, domestic department.*

2. *How would you rate your organization's ability and maturity to deliver projects and why?*

*Due to lack of coordination and dedication to some departments, there are a lot of difficulties in delivering projects on time-*

3. *Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?*

*There is a PMO, but there are no measures and standards known*

**Core Questions.**

1. *What are the challenges that the current economic crisis environment has introduced?*

*We have to implement projects with limited resources and the personnel motivation is rather low.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Yes. Crises facilitate organizational changes and change is interrelated with learning and growth.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*In my area, the projects initiate either from the business side or it is an ORGANOSIS initiative as a result of the networks complains. All the proposals are being revised from a committee that is constituted from executives from Organosis, Retail, Operations and they decide which projects are going to be implemented according to their budget. (I think this process takes part twice a year). Afterwards a general plan is being conducted for every project and the team is performed. The application of special techniques in delivering projects is not global within the organization so you cannot speak of effectiveness of processes etc.*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to



project time, cost and quality?

- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*It should start with a global application of initiating and monitoring projects where all the businesses will record their needs as projects. We need a standardized method/tool.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*I would never cutting budget regarding training and knowledge management, but I could decrease the costs by combining in-class with e-learning courses.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Due to the crisis the number of projects has been reduced, and fewer projects are being undertaken by external partners.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes ,the use of an automated system/application may increase extremely the productivity*

.

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Giving them incentives to produce new ideas for internal growth for example internal reorganization and planning so as to work more efficiently*

9. Although not implemented in your organization, are there any project management tools,

practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*No.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 13****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*14 years job experience, 4 years as an IT Software Manager*

2. How would you describe your current role within this organization?

*Head of Software Development in an insurance company, coordinating projects and daily work.*

3. How long have you been in this role?

*2 years*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Private Insurance Company, belongs to a German group of companies, employs 200 people in Greece*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*Moderate ability to deliver projects on time because of the*

- *workload that everyone has and*
- *lack of ability to take quick decisions*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? There are no indicators. Is there a PMO established?

*No. PMO activities and duties are fulfilled by IT*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*It is even more difficult to take quick decisions.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*No, we were not wasting money in our projects but we are trying to do everything in-house.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*We are trying to follow a standard methodology for international IT projects. We are trying to reuse project deliverables and gained experiences from the projects. There are the following phases:*

- *Feasibility Study which is related with the decision of whether a project can be conducted successfully.*
- *Initiating/Mobilization, which includes project approach, final effort estimation, business case, budget, staff acquisition)*
- *Implementation which includes the analysis, functional and technical design, development, integrations, and user acceptance test.*

- *Go live*
- *Stabilization*

4. Does your organization use any agile methods in managing IT projects?
- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*We have just started adopting traditional project management practices and people are trying to be familiarized with them. Therefore, it is not the right time to proceed with big changes.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*I would increase the analysis phase to avoid re-work, to plan better and avoid outsourcing.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*In the past we were outsourcing more projects but now only the projects that we don't have the capacity and we cannot postpone the deadline.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*We have to use the technology that the Group has selected. Nevertheless, technology always assists us in this area.*

8. Please provide some suggestions for leading and motivating team members during these

turbulent times.

- *Everything to be done in a good team spirit.*
- *Everyone, from time to time, to do interesting work.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*No.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 14****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*15 years in total as a Financial Analyst, Consultant, Procurement Manager and Program Manager.*

2. How would you describe your current role within this organization?

*Program Manager*

3. How long have you been in this role?

*2,5 years*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Banking, large, private, international*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*8/10 because the organization has a standardized project methodology due to:*

- *Recurrent needs for project deliveries*
- *Financial high risk environment (security, business continuity service, information service core service to the customer).*
- *Large and complex projects with many stakeholders.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Regarding planning, executing and monitoring projects we use the following KPIS :*

- *Adsorption of Demand*
- *On time preparation of the scope definition & for project's high level estimation*
- *Baseline effort and schedule deviation*
- *On time delivery per deliverable*
- *No of hours of subordinates' internal training*
- *% deliverables review*

*Yes, we have a PMO established.*

### **Core Questions**

1. What are the challenges that the current economic crisis environment has introduced?

*Changing needs and priorities like collections, credit quality, risk management in general, liquidity and profitability.*

- *Cost reduction (both demand and supply, CAPEX & OPEX, centralizations, operational costs, renegotiations, reengineering, doing more with less)*
- *Motivation without monetary rewards*
- *Due to the fluid environment there is need for agility and responsiveness to accommodate changes in business priorities and continuously reevaluating investment budgets.*
- *Improve the information, relationship and loyalty of the existing customers.*
- *The need to adapt to more strict or changing regulatory requirements.*
- *Risk management that includes policies, procedures, systems, culture and anti fraud projects.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please



explain.

- *Not a chance but a necessity.*
- *New operational knowledge for subjects, platforms new to the organization*
- *To gain EQ skills for motivating your people*
- *Chance for improved cost awareness and ownership*
- *Chance for embrace and accept changes*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes. To be more specific:*

- *There was change of the methodology of the IT Budget. The organization change the way that evaluates the projects. Adopt a top down instead of a bottom up methodology. First priority is given to the run the bank projects.*
- *The organization focused on large strategic projects to competition*
- *For small medium projects not included in the annual planning (budget from specific buckets)*
- *Investment Committees under specific criteria-axes for projects approvals*
- *Shorter planning cycle (4 months to 2 months)*
- *Reduce outsourcing.*

4. Does your organization use any agile methods in managing IT projects?
- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*We use traditional PM. In selective projects we have used agile practices.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*Reevaluate all the maintenances contracts and SLAs.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*It was reduced after the economic recession.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes, virtualization, cloud computing.BPM, collaboration tools document management.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

- *EQ is one of the means to understand both personal and professional needs.*
- *Involvement in interesting or the bright side of the projects.*
- *Recognition.*
- *Team building through meetings with no strictly job issues agendas.*
- *Collaboration of diverse team members, rotation to learn new skills*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Evaluate how you can integrate innovation in a more formalized way within a formal IT budget for trial and error innovation without a clear business case a small percentage of the budget for innovative projects. Technologies that could enable learning and experimentation with emerging technologies that could provide an advantage for the future. We need a more clear business case and benefits delivery measurement for projects in order to increase the organization ability to understand and reuse lessons learned regarding the Return on its Investments (ROI).*

10. Is there anything you want to add relative to the subject that has not been asked?

*No*

**Interviewee 15****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*11 years as IT consultant and Business analyst. I am a certified PMP too.*

2. How would you describe your current role within this organization?

*Project Management Officer (PMO)*

3. How long have you been in this role?

*3, 5 years*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Banking, large 27.000 private, both domestic and international*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*3/5. There is a corporate project management methodology which is not always followed. Improvement efforts are in progress.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*We have monthly kpis such as projects on schedule per phase. We also use dashboards at group level. As I have already said there is a methodology in place.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*The survival of the organization is our objective which it is implemented through projects for liquidity, collections, cost cutting, regulatory and compliance.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Priorities have change due to the current situation.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*We have change our procedures by adopting the use of business case, feasibility study, approval committees for procurements and strict approval limits which sometimes creates issues related to bureaucracy .Moreover a IT Strategy Committee at governance level reviews the initiation and executing of the projects .*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?

- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*Not officially but there is an exception to the rule. Agile project management is currently applied for a new workflow system that will improve our business origination processes.*

*The change agent of this program tried very hard to introduce to the organization the agile principle and communicate its benefits. Personally, I believe that traditional project management is more appropriate for our case because agile needs motivated team members and in our organization we have many sub cultures and people with different perceptions and values who do not cooperate well in projects because they see each other as opponents. Traditional is more convenient for standardized processes and project management maturity.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*Reduce outsourcing and increase centralizations projects*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Outsourcing for implementation services yes, offshoring no. vendors have been reduced.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes, for example we implemented project relative to central management of printing services, and virtualization for disks*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Provide recognition and give positive feedback.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Maturity should be our first priority. We are trying to change the organization step-by step to become more mature through iterative improvements.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 16****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*15 years, it consultant, developer, analyst, project manager, CIO*

2. How would you describe your current role within this organization?

*Group E-Business Sector Head*

3. How long have you been in this role?

*1 year.*

**Organization Profile .**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Banking, 20.000 employees, private sector, international.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*3.5 / 5. The organization has standardized processes and maturity and the projects are generally delivered on time. Demand and capacity can be improved. Increased complexity, and business and IT gap are the issues.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*There are performance standards established, KPIS and PMO.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*We have limited resources to deliver innovative services and products before the competition.*



2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Banks have to turn to new products and new innovative solutions with common technological platforms, synergies across channels to reduce their costs. E-banking and mobile channels are the banking future as their use has increased and their served customers have 150% more products than the customers served by other more traditional channels.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, we initiate more projects to implement innovative solutions and cost reduction through alternatives channels.*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*Although, the organization has a traditional waterfall project management*

*methodology, the projects relative to alternatives channels adopt agile project management with small iterations to deliver value quickly. Currently a transformation project is on progress to achieve maturity and a continuous improvement culture.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*Reducing costs can be achieved by renegotiating outsourcing, vendors and maintenances agreements, by using VOIP and non exclusive networks for telecoms, centralizations and virtualizations of infrastructure and data centers, by video conferences to reduce travel expenses and by outsourcing for non core functions such printing and scanning services and finally e-invoices to reduce paper and operational work for manual ERP entries I would never cut cost for the implementation of innovative services that also reduce bank's operating costs such as e-statements and virtual cards that reduce printing and mailing costs.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*We have reduced outsourcing and offshoring and we have renegotiated their contacts.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes. SOA, Web 2.0, telecoms, open source, cloud computing.*

8. Please provide some suggestions for leading and motivating team members during these

turbulent times.

*Organizations are successful only because of individuals being successful. Therefore the most important asset of the organization is its people. I personally prefer team building activities.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*I believe that release management, flexible testing environments and structured processes for the project lifecycle are significant.*

10. Is there anything you want to add relative to the subject that has not been asked?

*IT should act proactively and collaborate with the business units to achieve cost reduction in the appropriate areas.*

**Interviewee 17****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*More than 10 years as an Accountant, Financial Analyst, Equities Trader, Consultant, Operations Manager, Project Manager*

2. How would you describe your current role within this organization?

*Project Manager, Consultant, Financial Analyst/ Comptroller, PMO Head,*

3. How long have you been in this role?

*More than 6 years.*

**Organization Profile .**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Financial Services industry, private sector, universal banking with retail presence in 7 countries.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*3/5, because the projects are not well documented, standardized or measured for future improvements. We lack of an Enterprise PMO, as its business unit has its own PMO and a subset of the entire project effort.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*We have defined process and procedures and tools for initiation, assessment, prioritization, planning executing and roll-out supporting of IT projects.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*We have to deal with constraints in time to market, investment budget and resources, priority conflicts and high level of flexibility, low morale and negativism.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Yes, because you operate under different environmental conditions and you have to become faster and cleverer to achieve time to market with limited constrains.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes, the way we select and initiate projects have change as there have been established committees according to the organizational strategic goals to evaluate the business case of the projects and approve or reject their execution.*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*Not yet. Currently the organization implements ITSM to reduce lack of ownership and accountability.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

- *Project portfolio management and ROI focus.*
- *Across service provision operations and development*
- *I would never reduce training as we are white collar workers and our brain gives power to the organization.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, we use but we have reduced. In every case we have to make a cost benefit analysis to select the right approach.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Due to the nature of business highly improbably.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Good personal relationships support and develop plan for personal development and career paths*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing

organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Lean with its conceptual logic and/or 6-sigma to quantify service delivery and reduce variations in the way we implement projects.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

**Interviewee 18****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*8 years as Business Analyst*

*2 years as senior consultant and 8 as Project Manager*

2. How would you describe your current role within this organization?

*Project Manager and Process Expert*

3. How long have you been in this role?

*3 years*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Medium size domestic Commercial Bank with over 70 Branches nationwide - offering a wide variety of retail and business products.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*The bank is a functional organization consisting of silos hence is rather immature in delivering projects.*

3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?

*Currently, there is a PMO established - ad hoc basis- for the needs of a particular program. There are no quality assurance standards set up for measuring the project's impact or success apart from a very basic questionnaire that is circulated among the project members during each phase of the program.*



**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*The main challenge of the economic crisis that we are called to leverage as PMs may be summarized in four words, namely 'do more for less'.*

*The above statement goes for everything, more and better deliverables in less time and resources.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Indeed although is a rather difficult period the lessons are many and valuable. A PM learns to economize on resources and time in order to balance scope, thus you start paying attention to the quality and capabilities of the project team. The Project Sponsor is more alerted to the possible risks while the stakeholders are more likely to negotiate. On the other hand businesses collapses, financial mandates change hence change is inevitable and provides the means for learning new ways to accomplish things in a more efficient way.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?
- b) If not, please explain how the organization delivers projects and the effectiveness

and efficiency of the processes, tools, methods and best practices?

*Although the organization has covered a long distance to a project management maturity, unfortunately the Bank has not yet reached to a point to apply fully the 'harsh' crisis lessons to the project delivery methods. However at this point one should mention that the Project Management Team is more alerted and provides the necessary consensus faster. Although the aim of a number of projects is to establish new processes and enhance old ones, including tools and related best practices the application of these within the operational day to day activities has not been easy. Occasionally the resistance of the organization is considerable so much so that disables all positive intentions.*

4. Does your organization use any agile methods in managing IT projects?

- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*Currently, the Bank is trying to adapt to the demanding technological environment introducing new tools and upgrading the legacy application. I am not aware of any particular new methods for managing the particular projects. The introduction of traditional PM practices and techniques will 'nurture' a new culture so as to enable the Bank to shift gradually from a functional to a matrix organization.*

4. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*My suggestions are the following:*

- *Setting up a robust Demand Governance procedure with a solid prioritization routine that would closely monitor the Business Request.*
- *Application of Best Practices where possible*
- *Invest on a Quality Assurance department dedicated for the IT Development and Implementation.*
- *Set up a disciplined Change Management process*
- *Organize robust and well planned UATs*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Outsourcing is used sparingly and for operational duties only within the Bank.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Although the answer should be yes, that is not true. New technologies offer a great vehicle towards organizational development as long as the 'driver' knows how to drive. In some cases for very immature organization one should be very careful in adopting new technologies. Moreover technology requires strong and well compiled processes, in order to provide the desired result.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*I think the best motivation is team working and appreciation of her/his opinion regarding*

*possible solutions. Another incentive is the continuous visualization of the final project outcome.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Tools are as good as the persons that use them. Nevertheless a number of best practices as well as methodologies (PRINCE2, Six-Sigma) are important tools and may provide a considerable asset to any organization in period of crisis.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No*

**Interviewee 19****Control Questions.**

1. How many years of professional experience do you have and in what roles?  
*20 years, developer, researcher, solution & security architect, consultant, IT vendor and sourcing management.*
2. How would you describe your current role within this organization?  
*Head of IT Strategy.*
3. How long have you been in this role?  
*1 year.*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?  
*Banking, universal, private sector, international group of companies operating mainly in Eastern Europe, 20.000 employees group wide, 1.5 billion income.*
2. How would you rate your organization's ability and maturity to deliver projects and why?  
*We are selling orienting organization and with quick response to market changes. We are well established and systemic player in the market. IT wise there are mature processes and an established methodology.*
3. Do you have performance measures and standards to define impact and success in initiating planning, executing and monitoring projects? Is there a PMO established?  
*We have a PMO established and measurements for all stages but we do not define and measure impact for all cases.*

**Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*Continue supporting the bank and delivering IT services with substantially reduced resources.*

2. Do you perceive the current economic crisis as a chance for change and learning? Please explain.

*Yes. During economic crisis growth is curtailed and priority is given to reengineering our processes and model of operation towards standardization, automation and cost cutting.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) if not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*The organization is focusing on centralization, adoption of industry best practices such as ITIL. The objective is to strive towards providing quality service to the internal customer by measuring the business value of the requested change.*

*With respect to the initiation of new projects, we have established separate committees each with specific budget and business criteria, that review and approve only the most necessary projects that fulfill them. Large projects are reviewed and approved by a specific IT Steering Committee that is comprised by the bank's general managers.*

4. Does your organization use any agile methods in managing IT projects?
- a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
- b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*No. The size, the culture and the cooperation model with the internal customers do not facilitate the adoption of agile methodologies that need close collaboration with the customers.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*Keeping personnel related costs aside, we look at vendors' renegotiating, prioritization of business demand, economies of scale by standardization, centralization, assets (applications & infrastructure, licenses) revaluation and active management. Exploit new technology, automation tools. We would never compromise regulatory, security & critical operating activities.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, we use but they are both reduced for cost cutting.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes. Automation tools (workflow, monitoring, it assets management) can replace manual activities. New technology can offer better capabilities for less. (eg. Capacity, speed,*

*power).*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*Communicate how the team members contribute to the survival and the strengthening of the organization.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*Social media tools can improve knowledge management, collaboration and therefore innovation. We need to move toward to a more flexible integrated project management environment to support the reengineering of our new processes.*

10. Is there anything you want to add relative to the subject that has not been asked?

*It is significant to earn the buy-in of the personnel of the required changes and necessary culture shift.*



**Interviewee 20****Control Questions.**

1. How many years of professional experience do you have and in what roles?

*16 years, software engineer, soft team supervisor, solutions architect, enterprise architecture manager.*

2. How would you describe your current role within this organization?

*I compile and design architectural models of current and proposed systems across the enterprise. I coordinate and facilitate the activity of the IT Architects with existing projects removing road-blocks where necessary. I assure the complementary synthesis of all standards, models, designs and methodologies recommended by the IT Architects. I act as evangelist of the work and recommendations of the architecture team.*

3. How long have you been in this role?

*2 years.*

**Organization Profile.**

1. Please provide general information about the organization, e.g. industry, size, public/private sector, domestic/international?

*Financial Services, Banking,, private sector, large international organization.*

2. How would you rate your organization's ability and maturity to deliver projects and why?

*3/5, because of the unrealistic estimations, flawed estimation process and inadequate project management skills.*

3. Do you have performance measures and standards to define impact and success in

initiating planning, executing and monitoring projects? Is there a PMO established?

*Yes, we have measures, standards and a PMO established.*

### **Core Questions.**

1. What are the challenges that the current economic crisis environment has introduced?

*There is a pressure to deliver more at a lower cost. When this is not being accompanied with appropriate scope management processes, it only exaggerates the estimation problem.*

2. Do you perceive the current economic crisis as a chance for change and learning?

Please explain.

*Yes, as the environment changes one need to adapt to it. The current economic crisis for IT practitioners is an opportunity to invest on standards and people as opposed to proprietary expensive system of the past.*

3. Has the current economic crisis affected the way the organization initiates, plans and deliver projects?

- a) If so, please explain how the organization has responded and adapted its processes, practices, tools and methods and what is the perceived value of this practice in relation to project time, cost, and quality?

- b) If not, please explain how the organization delivers projects and the effectiveness and efficiency of the processes, tools, methods and best practices?

*Yes. The organization has initiated a transformation project to become service*

*oriented and effectively manage every project as a part of a greater service being offered to customers, according to ITSM model (ITIL). The org has also decided to invest on a pm tool integrated with a collaboration platform.*

4. Does your organization use any agile methods in managing IT projects?
  - a) If so, how long, which methods and what is the perceived value of them in relation to project time, cost and quality?
  - b) If not, do you think traditional project management practices are more appropriate for your organization? Please explain why.

*Traditional waterfall approach works well. However, there is a number of projects that I believe could benefit from a agile approach due to the fact that either requirements cannot be defined from the onset, or because projects are not large enough to justify the overhead of the traditional approach.*

5. What suggestions do you have for reducing IT costs? Where would you look for cost reduction in a typical IT budget? What are areas that you would suggest never cutting, and perhaps even increasing?

*Better scope management that needs IT skilled people aligned with the business priorities and can actively participate with the business in defining the requirements. Search for synergies from all perspectives both business and technical infrastructure.*

6. Do you use outsourcing/offshoring? Are there any changes due to the economic recession? If so, why?

*Yes, we do. However due to the economic recession we have minimized our outsourcing expenditures.*

7. Do you believe that the new technologies or industry trends provide you with tools for cost reductions? Please explain.

*Yes, I do. Major technologies that enable cost reductions are virtualization and cloud services. Open source is another tool that enables cost reductions however one should not be mistaken by considering that open source software is without cost when enterprise level support is required. Furthermore, many open source software vendors require support subscription to allow using a certified version of the software. Nevertheless, by keeping open source software alternatives, one has a negotiating tool with vendors of commercial software.*

8. Please provide some suggestions for leading and motivating team members during these turbulent times.

*It is a time when innovation is required and innovation is always performed by people that can look at the same things from different perspectives. I believe that in our line of work this is intellectually stimulating and rewarding and because of the economic climate innovation that leads to doing more with less can also be remunerated.*

9. Although not implemented in your organization, are there any project management tools, practices and short-term/long-term strategies, you personally consider valuable in improving business results, facilitating innovation and learning, enhancing

organization's flexibility, and helping organizations not only to survive in the economic recession situation but also to thrive?

*I believe we should be using agile project management and software development methodologies, such as Scrum or XP because it would allow us to deliver a large number of projects in a more efficient manner and better meet the customer needs.*

10. Is there anything you want to add relative to the subject that has not been asked?

*No.*

