DESIGN OF A FLEXIBLE AND GENERIC SYSTEM OF EVALUATION FOR COMPLEX INFORMATICS SYSTEMS

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INTRODUCTION

A functional, flexible and easy to maintain system's design is highly important.

The opinion of the users is highly important in order to establish how many resources are necessary. The finalization of all the project's activities in due time is to be admired, but this means a good management, that is an efficient control of the project's each stage of activity and the flexibility to adapt to the purpose and the strategy of the unit

To be in charge of such a project does not simply mean to gather these activities and resources. It also means that the project's manager is faced with a series of „*negotiations*", Sometimes the costs can be decided, influenced and sometimes the time can be the most important factor. It takes time to listen to the requested of the beneficiary, time to code, to design, to test. You can create a quality soft, but you can fail at its respond to the user's demands. You can design a perfect system, but you may not have time to test it. Time IS hard to administrate. What if we find ourselves in the situation of having „ no time"? More time doesn't always means achieving the results we expect. The message is to be careful not to prolong the deadlines.

1. THE DESCRIPTION OF THE BASIC EVALUATION AND CONTROL DATA

The evaluation of the assistance and support activity is based upon the defining processes of the levels of service, the leading of the service team, the performance management, of offering a continuous service, the security of the system, the identification of the costs for assistance and support, the teaching and training of the users, the assistance and advise of the clients, the configuration management, the organization of the problems and incidents that might appear, the data , facilities and operation management(addition, accuracy, validation, upgrading and stocking).

All the attempts in defining the leadership is centered upon the idea that the leadership is different from the management ,that leaders are different from the managers, due to certain personal qualities and abilities In a corporation, an efficient leader has a future strategy of the organization, which takes into consideration the true interests on a long term of all those involved in it Then the leader develops a strategy in order to reach that purpose by obtaining support from the employees and in the same time motivating them to reach that purpose.

In every I.S. there are four independent factors: price, quality, time and risk... We can not have the fullest efficiency from all the four factors. That is we can not have a system made by smaller costs, with high quality, quickly made and with smaller failure risks. Mainly we can talk about the first three factors. It is possible to build a quality system with relatively small costs. Anyway, the chances that this type o system to fail rise dramatically.

To make sure that a system is successful, we must take into consideration the following factors:

1. Every major product must be examined by verifying its accuracy and correctness...

2. The support of the manager to the project must be carefully supervised. We must make sure that the managers are aware of the team's progress.

3. We must have the proper technical leadership for the project...

The managers have to understand the technological impact and the informatics applications upon the business they lead, taking into account the fact that I.T. assures them the necessary information and that of being able to select that information in due and real time. Today's businesses are more and more organized , lead and aromatized around the series of processes and the relations established among them. These processes involve developments and the products and services, the interactions with the clients and the support of those processes and of human resources. Thereby, we suggest the identification of the solutions for the successful planning of the specific I.S. activities and their management in accordance with the company strategy, as well as the evaluation and control of main lines of work in accordance with: the following information criteria: efficiency, effectiveness, availability, integrity, confidentiality, accord, safety and the financial and human resources through a flexible system of evaluation.

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The information are storage in a data base in order to be able to make complex operations, the access to these information being made by taking into account the manager's purposes and abilities. The application becomes efficient through the design's methods, allowing the interpretation and the manipulation of the data depending on the abilities of each user. One can describe such evaluation criteria able to understand the context, the user's medium and to respect the domain of the application.

The system can be adapted to each project manager's way of working, to the company's strategy, the financial and human resources offered by that company. The main criteria selection of the evaluation and control activities has been made after the following information criteria:

- effectiveness,
- integrity,
- confidentiality,
- availability,
- accordance,
- Trust in the information.

2. THE ADVANTAGES OF THE FLEXIBLE DESIGNED EVALUATION SYSTEM

It is a system, which allows the project's manager to establish the evaluation criteria and to concentrate upon the performances made in the administration of the specific I.S. activities.

The control of the activities is essential for the accomplishment of the projects. It is essential the role of each of the identified process in the Cobit standard for the accomplishment of the final project and the current stage of the organization, by grouping the processes in four activities:

• Planning and organization of complex I.S.:

• The acquisition of goods and services for the project;

• Delivering the designed system and the accomplishment of the paper documentation for the project.

These problems and opportunities appear as a result of the desire of the companies to adapt to changes, a major aspect being occupied by informational processing. Due to the high degree of flexibility, the importance of the evaluation method is underlined. Starting from the observation that a main characteristic of each level is that of finalizing with a check up and a validation in order to eliminate certain anomalies, it is underlined the fact that a good security of the I.T. and the administration practice's control of the complex I.S. projects is essential. Under these circumstances, one can search new managerial solutions in order to integrate:

- Time control,
- Cost control,
- Quality control of the working team,
- Obtained results control.

Unrealistic deadlines, not wanted personnel and not working with the expert persons are reasons for which a projects fails.

The informatics solution, which is given, underlines the functionality and the easy way to handle it. The application is capable of interaction, of dividing the application as well as not synchronized interactions, divided space works.

The transformation of the company in terms of high-level processes allows the managers to have a measure as far as the determination of the successes of the processes and the comparison of their result with those of the competition. It is the ideal way to maintain a strong focus on the clients and their needs and to structure the relations with the partners and suppliers.

The processes supply a way to organize the I.T. resources and to give priority to the I.T. tasks as well. They represent the key which assures that the I.T. investments support the strategies of the unit and guarantees a reasonable retrieve of the investments.

The designed system is a useful tool for the manager because it:

- Offers a generalized frame of the processes of evaluation;
- Is a way to evaluate and self-evaluate with flexible criteria;
- Can serve as „*best practice*" for standardizations and future researches.

Most of the economic decisions are based upon financial information. However, as decedent, to have information at the right time is not everything. This information must be trustable.

The need for competent and independent evaluations is bigger every day. The given evaluation system is a tool that allows:

- the check up in order to see if the necessary conditions are fulfilled to assure the equilibrium of an organization;
- to control the disorder, to adapt to changes;
- To evaluate the degree of security and the risks undertaken by a company.

This kind of I.S. evaluation is very useful. The aims of every institution and the manner, in which they are reached, depend on the abilities and leading manner of the managers. Their integrity and attachment as far as the ethical values are concerned are reflected by their actions and judgments. The ethical values of one organization can not be better than those of the employees (the leading positions are included) that create them, that make them work and supervise them! AND All this because there are some organizational factors that contribute to credulous actions such as:

- the inexistence and inefficiency of controls within the company;
- the excessive and inefficient decentralization of the report system;
- the penalizations of some employees that weren't announced to the entire company.

But the employees' ethical manners are not enough. Their abilities are another essential element of the control medium. The ability, that is knowledge and aptitudes necessary in every line of work, must be mentioned by the leaders. It is in the interest of every company to have the best employees.

The managerial philosophy and the leading manner affect the way in which any company is administrated, no matter the field of operation. We can include in this category factors such as: taking the risks, instituted politics and procedures, giving responsibilities, the attitude in regard of financial reports.

In the end, the organizational structure represents the general frame where the necessary activities will be planned, executed, controlled and monitoring, in order to reach the targets. Most often, she is the result of the managerial philosophy and can be centralized, decentralized and structured on a functional base, in comparison with the size of the company and the nature of its activities.

On the next level we find the risk's evaluation. The company must be aware of the risks and must be able to face them. The activities and the risks involved by these activities must be evaluated and hierarchies in such a manner as to allow the company to take only the risks it can afford and in order to avoid the useless ones. But one of the prime conditions in risk evaluation is to establish some well defined and compatible targets with the company's evolution. The risk's evaluation assumes the identification and analyze of those events that can interfere in the reach of those purposes.

The identification and the analyze of the risks are continuous processes that must take place at all the levels of the company and must take into consideration the factors such as the economical changes, the needs of one society, the legislative changes, new technological developments, natural disasters, new hired personnel, new informational systems, the change in the management responsibilities.

After being identified, all the risks are being evaluated. Often enough, this process, which can be more or less formal, includes:

- the evaluation of the importance of every risk;
- the evaluation of the probability or the frequency of risk's appearance;
- The actions that must be taken in order to prevent the risks and the costs involved in these actions...

The well use of the resources assumes that the manager has pertinent data on which he can create the politics of the company. Once introduced, these politics must be monitoring and the manner in which they are followed must be supervised.

One of the most important targets of the leadership is preventing and identification of the errors and frauds. The cost of the possible control measures must be compared with the probability of appearance of such fraud or error and the consequences.

The evaluation system offers the leaders the required data necessary for the administration of that business. But it's still the job of those being in charge to create and launch such a system. In order to make a simple evaluation, an organization must take into consideration every evaluation criteria, to read the 6 levels of scaling and determine which one of the six is better suited for the company's current state. The more important is the process for the company, the higher it is situated on the scale. For example, in a relatively stable commercial environment, the growth maturity of the 13's processes from the "supply and support" field is the one that separates the successful companies from the others. On the other hand, in a very dynamic economic field, successful companies are highly depended on the maturity of the field "*planning and organization*", "*acquisition and implementation*".

One must mention the fact that there is a difference between the measurement of the abilities and that of performances. For example, the achievement of the abilities for a certain security or control of practices is one of that decisions that must be taken and done, but the consistent appliance of the abilities, once required, also demands to be measured [1].

Every project can be then labeled with a unique sequential trademark as in fig.1. The purpose in choosing the main projects is that of identification of those projects where one can have quick results and benefits. The most suitable candidates for quick benefits are usually those where the discrepancies are smaller and the closing price and the failure risks are also smaller, and the
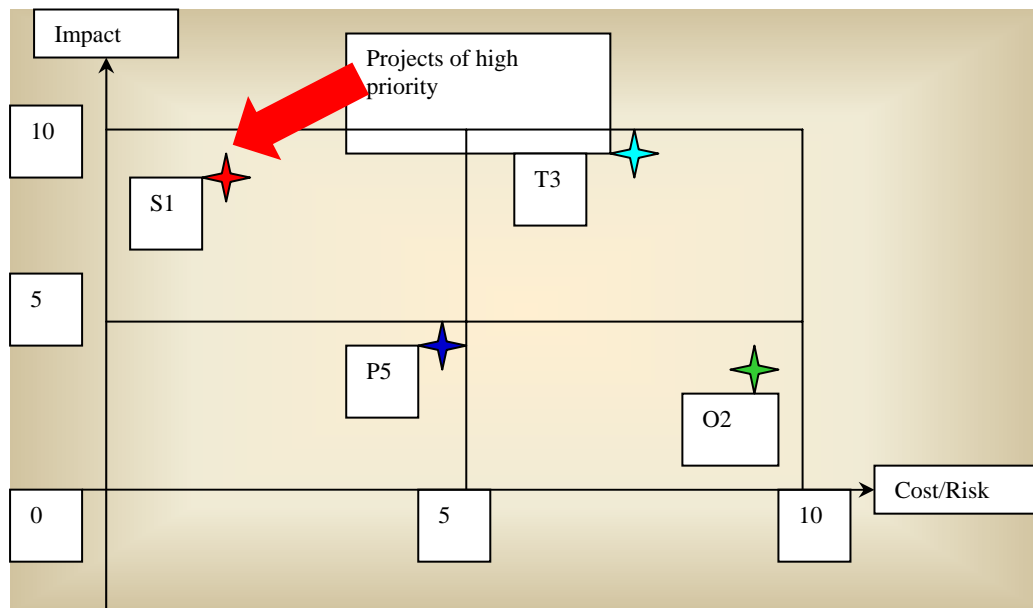
Figure 1. The position in relationship with the impact on the business and risk.

impact upon the benefits of the business is higher.

The manner in which the priority is being attributed to the projects is through the identification of the rapid benefits that can be achieved. The best candidates for rapid benefits are usually those projects in which the gaps are smaller, where the costs to close a gap are as small as possible, where the risk of failure and the impact of the benefits on the business are higher. The projects could be evaluated for impact and cost/risk on a scale from 0 to 10 for each of these variables. The projects can be pointed on a graphic that can become a support tool for the decision of the manager, showing the relative impact and the costs/risks. The projects that have a bigger impact and a relatively small price are better candidates as well as quicker winners.

CONCLUSIONS

In the recent years, the fact that there is *a need for a reference for a proper frame of work for the safety and control in I.T.* has become more evident for the moderators, users and suppliers of services.

The effective administration of the I.T. has a major importance in the success and survival of the company. For many companies, the data and the technology they have, represent the biggest values. Indeed. The information and the information systems are general for the entire company from the users' platform to the local networks and those of bigger cover, to the servers of the user within the computers. *Many companies recognize the potential benefits produced by technology.* Yet, the successful companies understand this and administrate the associated risks with the introduction of new technologies. Thereby, the administration needs a good appreciation and a basic understanding of the risks and limitations within the I.T. in order to supply adequate controls.

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