

Analysis of the Causes of the Failure of the IT Projects of a University: Survey

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Abstract – This study defines possible causes of failures in the application of software tools for data management at Gamal Abdel Nasser University of Conakry, including student grades and other related data. This would improve existing software tools, or failing that, create a more powerful tool. This is of principal significance to the university to better protect its highly sensitive data. Therefore, we analyzed some possible weaknesses in the data management methods of the university, but also tried to propose some preventive solutions. This point was also discussed by a few researchers including Katering and Trivedik [6], Lisnianski and Levitin [1], Herzig [18].

Keywords: Software Reliability, Economic Impacts, Software Testing, Regression Analysis.

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INTRODUCTION

University education has very rigorous specifications which differentiate it from other teachings. It needs very effective software tools for the management of its data because they are very sensitive. In this same frame of ideas, Gamal Abdel Nasser University of Conakry continues to try various software to manage its concerns. However, in its series of tests, the data that are at the heart of the operation of the university, become very vulnerable, each time leaving a software to another with different providers and whose contract is not strong.

CAUSES OF THE FAILURE OF THE IT PROJETS AND SOLUTIONS :

One out of four IT projects is abandoned and 20-25% of them will never get a return on their investment. Alarming figures while IT remains a strategic asset and the mainstream of companies increase their IT spending. Why then such a mess?

Among the causes of difficulties or abandonment of an IT project, technology represents only 3% of the problems encountered. Most of the difficulties come from management at 54%! Next comes financing (21%), human errors (14%) and finally the method (8%).

And according to another point of view, there is the non-respect of the commitments:

- 30% of projects are canceled before going into production (Aberdeen);
- 90% of IT projects are late (Aberdeen);
- 50% of IT projects do not meet the business specifications (Gartner);
- 50% of IT projects exceed budget (Gartner). This surplus cost is distributed as follows:
 - Corrective maintenance: 20%;
 - Adaptive maintenance: 25%;
 - Evolutionary and perfective maintenance: 55%.

The various problems mentioned above (the cancellation of the project before the start of production, the delay, the non-adequacy of the project to the specifications, exceeds the originally planned budget) can be explained as follows:

✓ LACK OF VISIBILITY ON THE PROJECT

According to the work by Qurashiand Qureshi [1],it sometimes happens that the project manager and his team pilot their project without any visibility. The task list and schedule were previously defined when the project was launched, but they have never been updated based on its progress. Team

members know what tasks they need to work on, but they have no idea what the priorities are.

Solution:

If the university runs its projects blindly, this will be doomed to failure. **The Gantt chart is an essential tool in Project management because it allows to quickly visualise all planned task's, their Progress and their deadline.** Thus, the university has a whole perceptibility on the growth of the project, the tasks in growth and those to come. It will be able to better manage its significances, antedate possible delays.

√ **UNCLEAR OBJECTIVES**

A project whose objectives are not clearly defined is probable to miscarry.

To build a house, if you do not have specific plans, it is likely that the construction team will not know where to start, that the site is chaotic and that the house collapses before it is completed. . It is the same for an IT project.

When the specification is not precise enough or worse, if it does not exist, a great place is left to the interpretation of each one on what will have to be realized.

It is required to define the design and ergonomics of the application, models to support, and the exhaustive list of types of customers and actions they can achieve

Solution :

From the beginning, the University **must clearly and precisely define the issues and objectives of the project.** This is the essential starting point for all projects. The objectives must be precise and realistic so that she knows in which direction she is going. In adding, a perfect visualization of his project will win the care, faithfulness and participation of everyone.

√ **UNDERESTIMATED PLANNING**

Underestimating the time necessary to complete a project can have more thoughtful significances than just misplaced the goal on the schedule. You will exceed your valued reasonable because you will have to payment the extra time period completed by your collaborators and the other performers of the project. Delayed distribution of the project may also cause the corporation to failure significant bazaars.

A plan without progress markers is a plan that is unclear. Everybody complicated in the project should be able to project and remember its goals. Good planning requires a method, rules, processes, and planning tools for project management. Planning also

makes it possible to have the best possible estimate of the cost of a project, to avoid expenses.

This lack of rigor upstream and throughout the project severely penalizes companies and the contractual connection among the customer and the service provider, whereas a simple solution could prevent failure: the contract, a tool for anticipating and defusing in the event of conflicts when carrying out the project, is the key reference of any project. It allows a better client / provider collaboration, by validating key points such as a transfer of skills at the end of the project and a good understanding of the client's needs.

Solution :

It is essential for Gamal Abdel Nasser University **to prepare and evaluate its planning with precision.** Problems can occur at each stage of the project and delay it. It must therefore put in place an operative danger management and it gives a margin of maneuver in case of problem. It is better to have a larger schedule and finish ahead rather than the other way around.

√ **NO RISK MANAGEMENT**

Resignation of a collaborator, postponement of a provider, lack of budget, failure, etc ... In project management, the nothing danger does not occur and it is actual possible that your project does not continue accurately as scheduled. You and your group must forestall and minimize the threats that may happen to decrease their influence on the smooth successively of the project.

For a development project to work properly, it is important to have involvement at all levels. The hierarchy must be convinced of the interest of the project and support it in order to guarantee the commitment of the staffs.

The involvement of managers allows teams to set priorities. The presence of leadership is very important to monitor the growth of a project and support decisions.

Solution :

From the start of the project, Gamal Abdel Nasser University will have to put in place a risk management. This permits you to **identify, prevent and limit risks by anticipating their treatment through the implementation of preventive and corrective actions.** Thus, the University will be prepared for almost all eventualities.

√ **NO VISIBILITY ON RESOURCE AVAILABILITY**

You have no idea of the accessibility of your team-group members. You do not know which of your collaborators are well-worn and which ones are accessible. Some tasks are delayed while others finish ahead. This lack of perceptibility into the workload of your team-group is detrimental to the smooth successively of the project.

Solution :

The University must use timesheets. This tool is essential to **know the availability of the members of your team, and thus better distribute the workload.** She will relieve her overwhelmed colleagues by querying additional accessible co-workers to come to their aid. In addition, thanks to the timesheets, she will identify the amount of time previously expended on a duty, as well as the time remaining previously its finishing: a good way to anticipate postponements.

√ **BAD COMMUNICATION**

Poor communication or even complete lack of communiqué within the team-group is one of the main causes of project failure. A team that does not communicate will shut itself up and fall back on itself. The working atmosphere is deteriorating, which has a negative influence on the growth and realization of the project.

Solution :

It is important to maintain a continuous and productive discussion among the team-group and the project manager, but also with the additional performers involved. This progresses team-work and permits everybody to be knowledgeable of the growth of the project in actual time-period. The technical teams must be able to explain all the details of the project to "non-tech" (collaborators, suppliers, etc.). Good communication permits everybody to identify all the requirements of a project but also their role and responsibility.

Fostering communication and exchanges will therefore make the team more productive, build trust among members, as well as a sense of loyalty. The university needs to build belief by listening to its team-group. Follow-up meetings and co-operative project management software help maintain good communiqué within the team-group.

√ **INADEQUATE SKILLS FOR THE PROJECT**

Achieving good results will not happen without having enough people qualified for the project. Using a mentoring approach when one of the team

members does not have the necessary skills is highly recommended. Better yet, the University will need to recruit qualified staff through internal and external channels if it has the opportunity.

CONCLUSION :

When carrying out an IT project, it is imperative to scrupulously follow the schedule of execution of the project implementation works, to enforce the specifications of the specifications and to enforce the original schedule. This is an essential step to be effective and know where the project is. However, it should be noted that this is not the only major challenge in the management of IT projects at Gamal Abdel Nasser University in Conakry, but rather the monitoring of the evolution of the software. This is why Gamal Abdel Nasser University of Conakry has decided to break down this barrier and become an efficient and sustainable tool.

In addition, "Changing the work tool or monitoring and developing the existing tool does not guarantee the continuity of the tool", because a simple appointment of a new rector or a new director of schooling is enough to change everything.

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