

Develop an Organization System that Allows to Optimize and Automate the Process of Access to Files

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Abstract

A company has an excess of archived documents that go from 2003 to the present. The excess of files has limited the space in the office and the work of the employees. It also causes a very large monetary expenditure on materials such as paper and ink. The purpose of this project is to develop an organization system that allows to automate and optimize physical files in a digital way. The DMAIC methodology was applied to find a solution to the problem. Two possible solutions were evaluated. Once the best solution was selected, it could be determined that the digitization of files brings multiple benefits to the company. Among the benefits, a monetary saving of \$29,930 can be mentioned.

Project Description

There is an excess of files in the office that go from the year 2003 until today. The files are not organized by sequence and are stored in different rooms, some are even kept under a custody company. There is no space available to store the new files that arise. In case of need access to a specific file, a lot of time is spending looking file by file on the different rooms. And for the files that are in custody, it is necessary to wait several days for the delivery, which delays the employee's work and avoids giving an immediate response to the customer. In turn, it is invested too much in materials such as paper and ink since the daily flow of papers is high.

Objectives

Develop an organization system that allows to automate and optimize physical files in a digital way

Digitized 60% of the files

Reduce monetary expenses

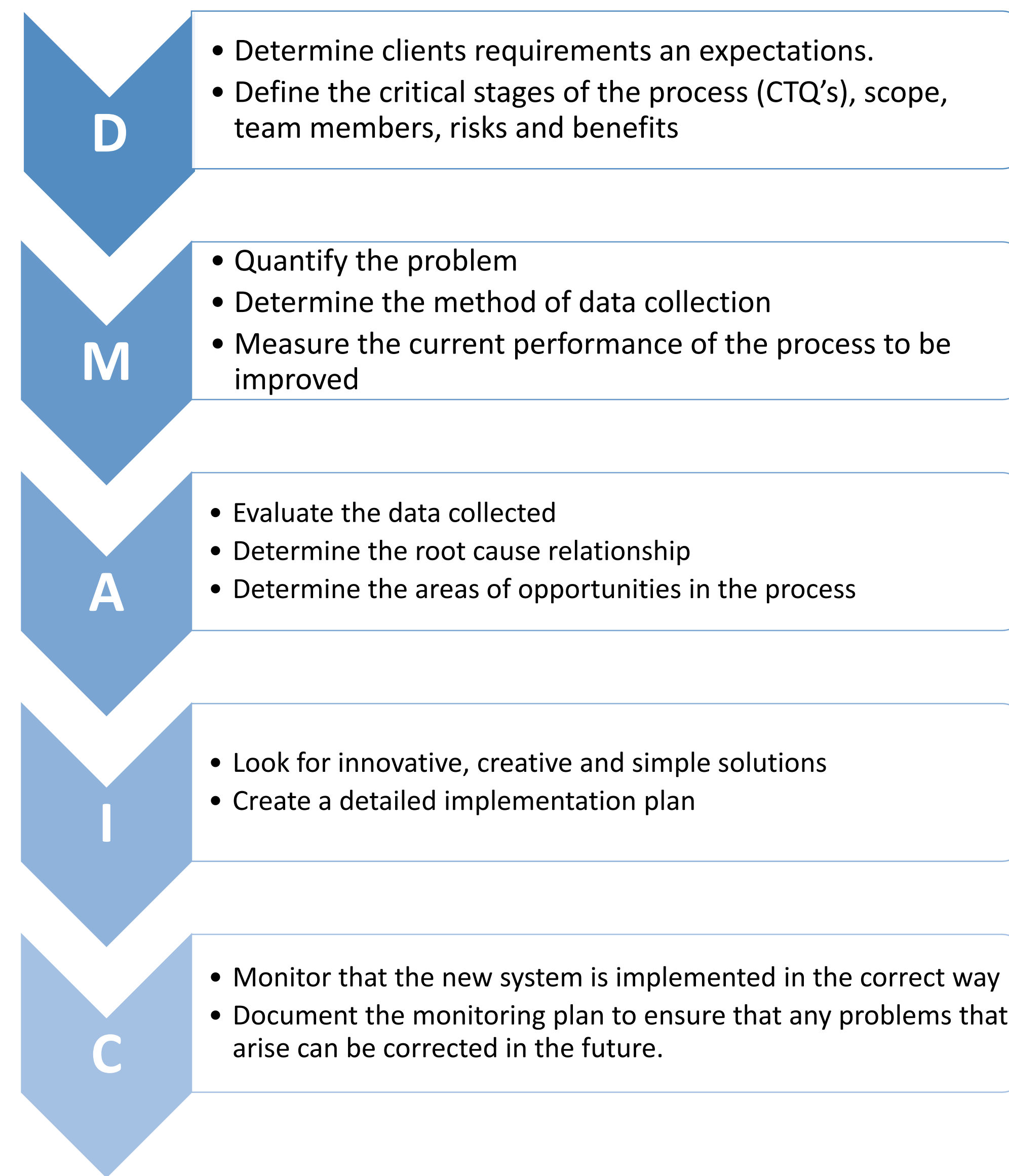
Reduce the time invested by the employee looking for and organizing the files

Increase the physical space in the office

Background

To carry out this project a DMAIC methodology will be executed. The DMAIC process is chosen since it is categorized as a tool that helps to improve, optimize and establish the processes of a company in a practical way. The phases of the DMAIC methodology are: Define, Measure, Analyze, Improve and Control. The DMAIC methodology uses a process-step structure. Steps generally are sequential; however, some activities from various steps may occur concurrently or may be iterative. Deliverables for a given step must be completed prior to formal gate review approval.

Methodology



Results and Discussion

Define Phase

During this phase a Project Charter was created. Through the Project Charter, the fundamental and crucial aspects of the project are determined. As can be seen in Figure 1 the scope, objectives, team members, risks and approximate time of the project are defined. One of the benefits of the project charter is that it works as a direction and purpose guide for all team members.

Project Title: Develop an Organization System that Allows to Optimize and Automate the Process of Access to Files		
Project Start Date: June 1, 2018		Project End Date: December 30, 2018 +
Problem Statement	Benefits	
Excess of files in the office that go from the year 2003 until today. The files are not organized by sequence and are stored in different rooms, some are even kept under a custody company. There is no space available to store the new files that arise. In case of need access to a specific file, a lot of time is spending looking file by file on the different rooms. And for the files that are in custody, it is necessary to wait several days for the delivery, which delays the employee's work and avoids giving an immediate response to the customer. In turn, it is invested too much in materials such as paper and ink since the daily flow of papers is high.	<ul style="list-style-type: none"> Monetary savings for the company since they will not have to pay other companies to save and keep the oldest files. Savings on purchasing materials such as: papers, folders, ink for printers, etc. The money saved can be invested in improvements to other processes, in new projects or in its employees. Increase office space, allowing to the company take advantage of that space for other functions. Decrease in pollution and environmental damage. 	
Goal Statement	Risks	
Digitize and destroy 60% of the physical files by December 2018	Losing documents in the process of digitalization given the high volume of papers. That the duration time has to be extended. Finding unreadable documents given the long time they have been archived	
Project Scope	Timeline	
Search and select the appropriate digitization method that complies with the security measures of the company, the budget and has enough memory capacity to store the files.	Define Phase-June 30,2018 Measure Phase-July 30,2018 Analyze Phase-Sept 15,2018 Measure Phase-December 1 ,2018 Control Phase-December 30,2018	
Team Members		
Member	Role	Area
L.Pantoja	Supervisor	Transfers
M.Lorente	Supervisor	Payments
L.Garcia	Office Clerk	Transfers
J.Tavarez	Office Clerk	Transfers
M.Merced	Trust Representative	Transfers

Figure 1

Results and Discussion (cont.)

Measure Phase

The flowchart diagram presented in Figure 2 shows the current file process of the company.

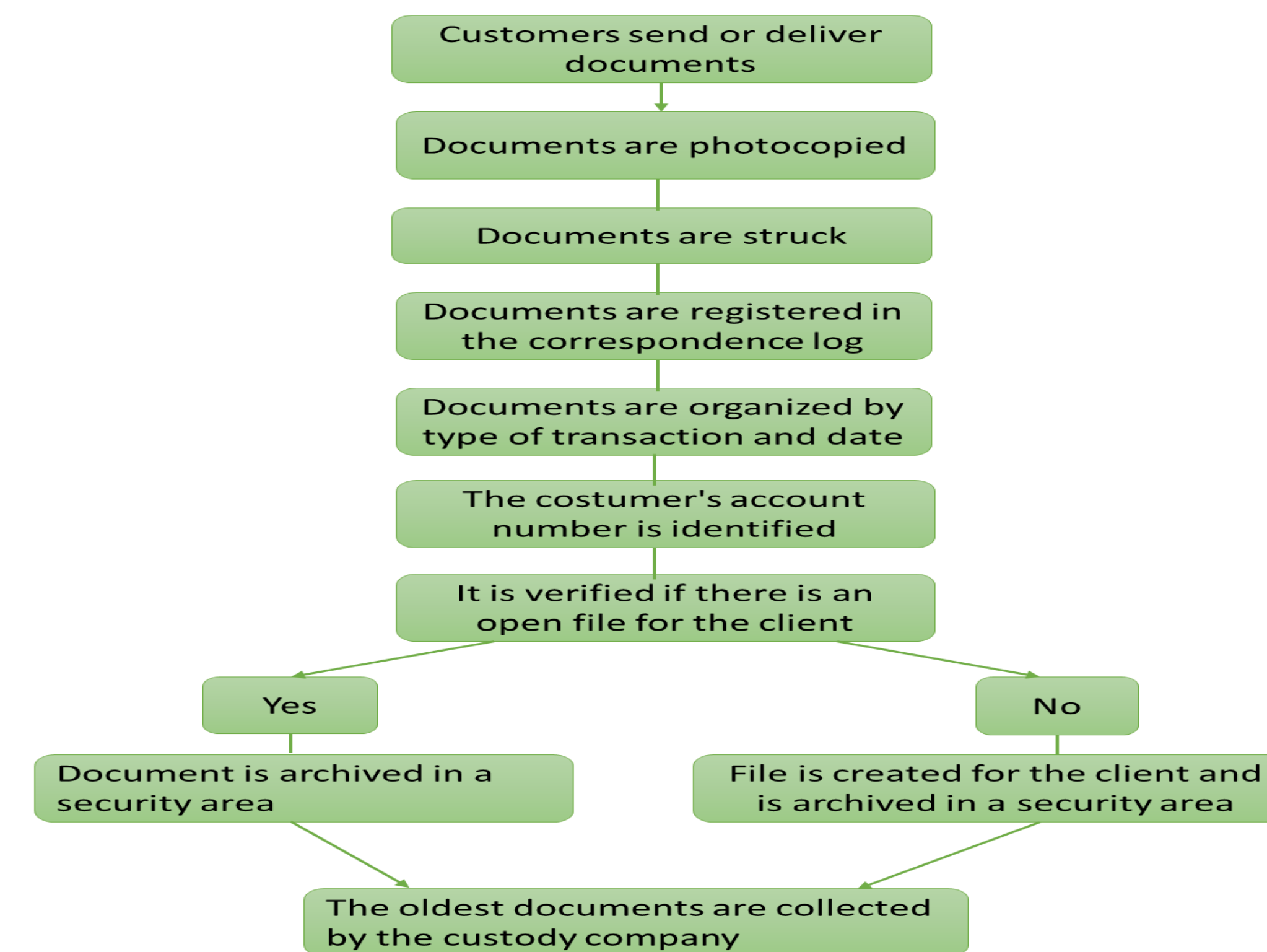


Figure 2

The identified critical quality needs (CTQ) are: time, space and expenses. A CTQ Tree, shown in Figure 3, was created with the purpose of listed all the measurable performance requirements that will help meet with the customer's needs.

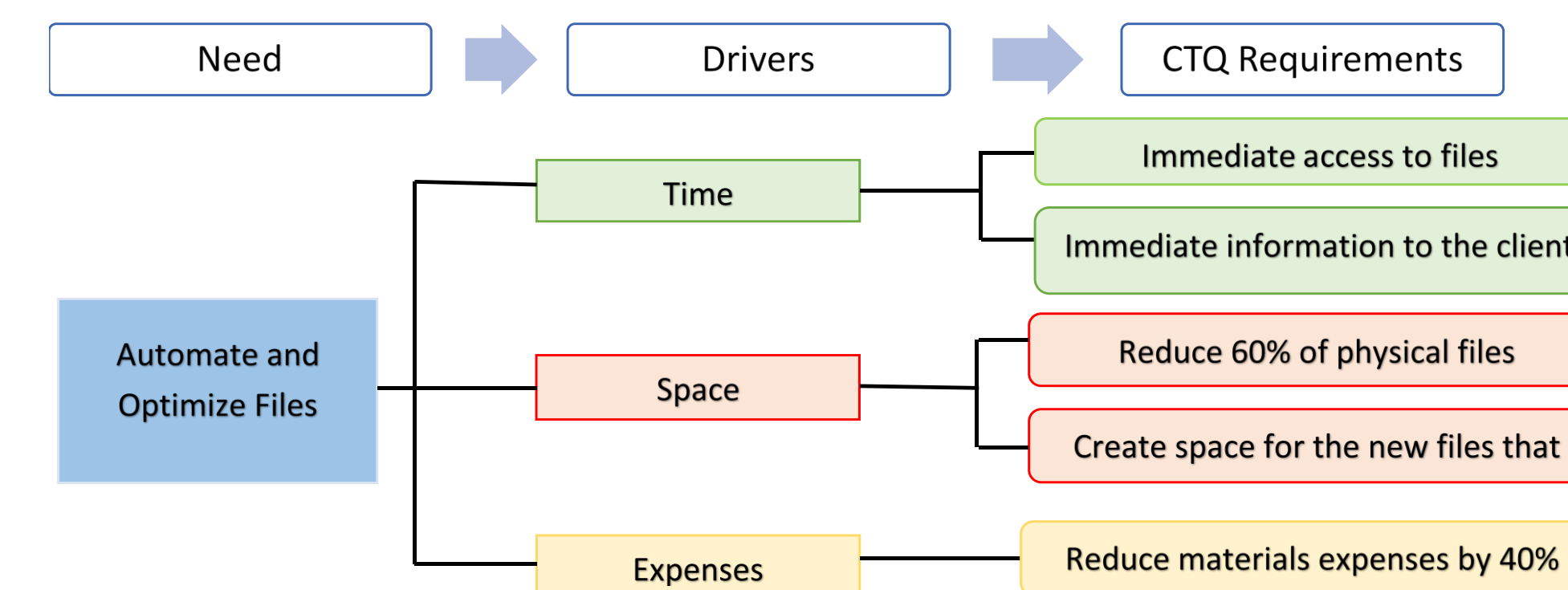


Figure 3

Analyze Phase

Measuring the problem helps determine that having the files in a physical form is a great waste of time and space for the company. By eliminating the physical storage of the files, the company could have the following savings:

Saving	Amount
Materials (paper, printers)	\$15,840 annually
Custody Company	\$610 annually
Office Clerk	\$21,120 annually

The amount of money saved on materials and maintenance can be invested in the digitalization program since it will bring multiple benefits for the company, such as:

- Immediate access to information
- Immediate answers to customer inquiries
- Space saving
- Avoid loss of documents
- Avoid the deterioration of documents over time
- Reduces the risk of information theft

Results and Discussion (cont.)

Improve Phase

Two possible solutions to the problem will be evaluated. The alternatives are presented in Figure 4.



Figure 4

Control Phase

To ensure proper functioning of the process once the storage system has been implemented, it must be monitored that the documents have been digitized according to the date they were struck as received and that they were filed under the correct file. The quality of the image of the documents once digitized must also be monitored. Verify every two weeks the amount of papers destroyed, in addition to monitoring that the proper safety method is followed. It is important to evaluate and identify the adaptation and level of knowledge of the employees with the program. Trainings and seminars can be coordinated for the employees if necessary. And finally check monthly that the new documents received are scanned immediately and then are destroyed.

Conclusion

During this design project, the file process was evaluated and analyzed in order to optimize and automate it. The DMAIC methodology was applied to improve this process. The cloud-based alternative turned out to be the most beneficial. Among the benefits can be mentioned: cost, accessibility and flexibility. The possibility of implementing the Microsoft Azure server was evaluated. Rent 250GB of this server would cost approximately \$8,640 per year. Selecting this server would imply a saving for the company of approximately \$28,930 per year. Through this project it was possible to prove or at least establish that the digitalization of documents has multiple advantages for the company. Among these advantages are: monetary savings, better customer service and contribute to the reduction of environmental pollution.

References

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