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***Operating Expenditure Reduction in the IT Area
of a Telecommunications Company:
the Case of TIM Brasil***

SINTESI

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Sommario

Il presente lavoro di tesi è il risultato di uno stage della durata di cinque mesi, nell'ambito del programma Junior Consulting. Durante questo periodo, la candidata è stata inserita in un progetto il cui obiettivo era la riduzione dei costi operativi nell'area IT di TIM Brasil, una delle maggiori aziende di telecomunicazioni presenti sul mercato brasiliano. Il lavoro presentato è stato svolto interamente nella sede di Rio de Janeiro.

Poiché l'aumento della spesa operativa è un fattore fisiologico del settore TLC, la richiesta fatta al team era l'individuazione di best practice da poter implementare, in modo da ottenere benefici economici. A tal fine è stata fatta dapprima un'analisi della spesa dell'area IT, intesa come somma di OpEx e CapEx, confrontata con driver fondamentali per il business dell'impresa. A valle di questa, sono state individuate due aree in cui poter agire: il processo di gestione dei ticket e lo storage dati. Per entrambi è stata svolta un'analisi AS IS approfondita in collaborazione con i process owners al fine di valutarne lo stato di maturità, a cui poi sono seguite le proposte di miglioramento. Infine, è stata fatta una valutazione dei saving economici e dei benefici non economici delle azioni individuate.

Abstract

This thesis is the result of a five-month stage, during the program Junior Consulting, organized by Consel. During this period, the candidate took part in a project about the Operating Expenditure reduction of the IT area of TIM Brasil, one of the biggest TLC companies in the Brazilian market. The work was entirely carried out in the Rio de Janeiro branch.

Since the increase of the Operating Expenditure is a physiological factor of TLC sector, our aim was the individuation of best practices to implement, so that they could generate economic benefits. In order to reach this goal, we firstly analyzed the IT expenditure, considered as the sum of OpEx and CapEx, and confronted it with fundamental drivers for the company's business. We individuated two areas where we could intervene: the Ticket Management Process and the Data Storage. Both of them were examined through an in-depth AS-IS analysis, in collaboration with the process owners, in order to evaluate their maturity status. Subsequently, we suggested some improvement proposals. Finally, we estimated the economic savings and the not-economic benefits that our suggestions would generate.

1. Project Context

This thesis is the result of a five-month educational program carried out from May to October 2014 called “Junior Consulting” and organized by Elis – Consulting Academy¹. The aim of the program is to train professional figures, capable of operating in public or private environments with management tasks and coordination of project initiatives. After a first period of training, which includes education courses such as Project Management, Personal Leadership, and Public Speaking, but also a two-week English course held in Dublin, the 30-people class is divided into 10 groups of three people each, all coordinated by a Team Leader, and one project is assigned to every team. Thus, an on-the-job training is associated to the education courses.

Our project was commissioned by TIM Brasil, a TLC company controlled by Telecom Italia S.p.A., headquartered in Rio de Janeiro (Brazil). With more than 74 millions of customers and nearly 20 billion R\$ of Net Revenues², the company is currently at the second place in the Brazilian TLC market³. With 11,622 employees⁴, it is the result of the fusion of three companies: TIM, Intelig (fixed communications) and Atimus-Fiber (fiber channel network)⁵. The company provides mobile, fixed and long distance telephony as well as data transmission services throughout Brazil: TIM has a nationwide reach of approximately 94% of the urban population, with a presence in 2,958 cities⁶. It has obtained both the Quality (UNI EN ISO 9001) and the Environment (UNI EN ISO 14001) certificates, respectively in 2000 and 2010⁷. The Brazilian market, in which TIM operates, is very different from the European one: it is growing fast (the economic crisis has not reached it), thus leading to an important inflation rate per year. Moreover, TIM Brasil’s number of customers is quickly increasing, causing a physiological vertiginous growth in costs, especially in the ones of the IT area. Consequently, the market rules are very different from the ones in Italy.

¹ Source: <http://www.juniorconsulting.it/>

² Source: Orçamento Tim Participações 2012-2013

³ Source: http://pt.wikipedia.org/wiki/TIM_Brasil

⁴ Source: http://it.wikipedia.org/wiki/Gruppo_TIM_Brasil

⁵ Source: <http://www.tim.com.br/sp/sobre-a-tim/institucional/quem-somos>

⁶ Source: http://www.bnamericas.com/company-profile/en/TIM_Participacoes_SA,-TIM_Participacoes

⁷ Source: [http://www.tim.com.br/sp/sobre-a-tim/institucional/certificados-de-qualidade-e-gestao-ambiental-\(site-tim\)](http://www.tim.com.br/sp/sobre-a-tim/institucional/certificados-de-qualidade-e-gestao-ambiental-(site-tim))

2. Project Scope

The project was carried out in the IT area of TIM Brasil, which is situated half in Rio de Janeiro and half in São Paulo. IT area is composed as shown in Figure 1:

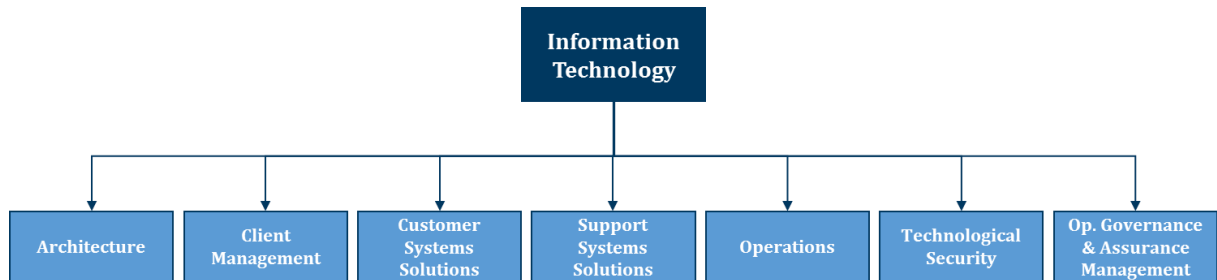


Figure 1 - IT organizational chart

The final goal of the project was to obtain a reduction of the Operating Expenditure incidence on the revenues through the rationalization and optimization of the activities and the processes in the IT area. However, this was not the only aim of our work. Indeed, the project inserts itself in a wider and strategic view of TIM's CIO, which is to guide Brazilian employees into working more efficiently, inspired to the Italian *way of working*⁸. Thus, the results of our work are not only the ones related to the savings in the short-middle term, but also the not-economic benefits on the long term.

In Figure 2, there are the project phases with the deliverables produced. The project is composed of three macro-phases: the Planning, the Analysis and the Proposals. Each one of them is decomposed into phases, and then into sub-phases.

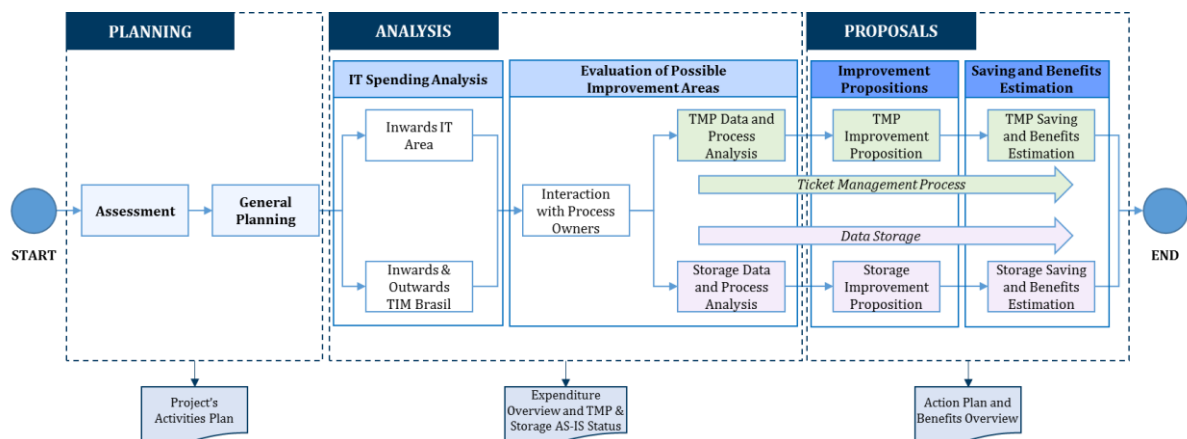


Figure 2 - Project phases

The Planning macro-phase was characterized by a first phase of Assessment, in which we studied the working and cultural background of the company, and the workload that the project

⁸ An overview of Brazilian culture and of the differences between Italian and Brazilian working behavior is given in Appendix A

would have required. After that, in the General Planning phase, we organized the resources and produced the Project's Activities Plan.

During the Analysis macro-phase, we firstly analyzed the IT spending confronting it with drivers both internal and external to IT Area, in order to understand better the context in which we were moving. The results of this analysis, with the help of the process owners, guided us into the choice of what improvement areas we could analyze; a phase of AS IS analysis applied to the two areas of Ticket Management and Data Storage followed.

Finally, in the Proposals macro-phase, we suggested improvement actions and calculated the expected savings for both the areas analyzed.

The details regarding the specific activities and the methodology followed in each macro-phase of the project are described in paragraph 3.

3. Activities, Methodology and Results

The time planning of the project's phases is shown in the Gantt chart in Figure 3:

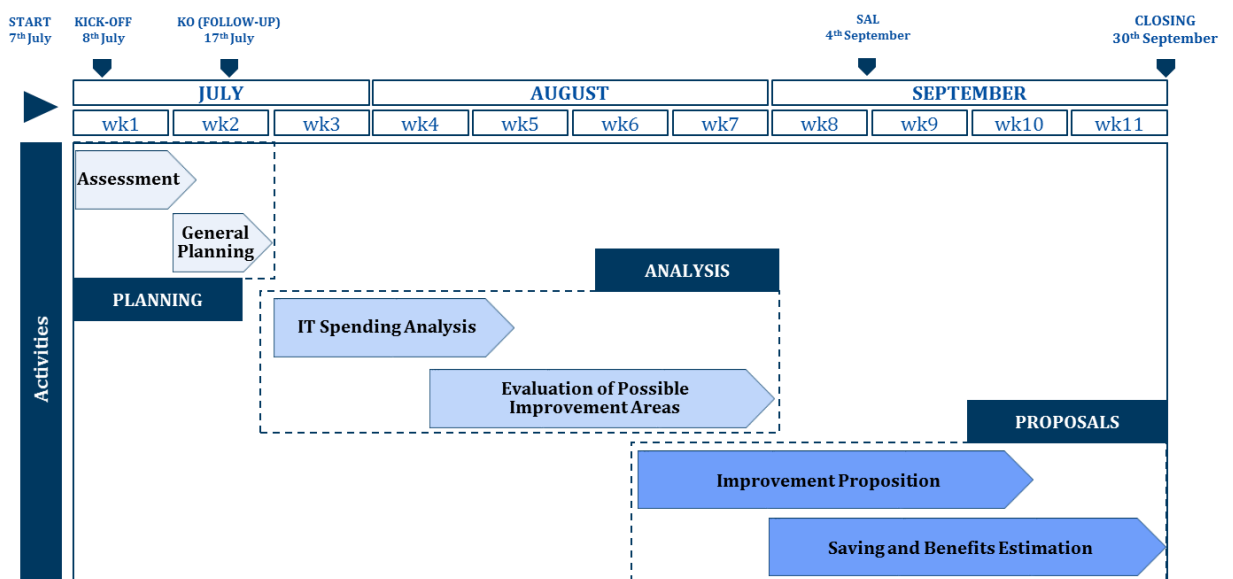


Figure 3 - Gantt chart

Each phase is described in the following paragraphs, in order to give the reader the interpretation key about the aim, the activities, the methodology, and the output of them.

3.1 Planning

The aim of this phase was to organize and schedule the project's phases.

Methodology

SUB-PHASE	ACTIVITIES CARRIED OUT	METHODOLOGY	OUTCOMES	THESIS (REFERENCE)
Assessment	<ul style="list-style-type: none">• Comprehension of the working culture environment (some examples are provided in Appendix 1)• Study of the theoretical background• Study of the workload needed	<ul style="list-style-type: none">• Focus group	<ul style="list-style-type: none">• Document with the background, the scope and the objective	2.2
General Planning	<ul style="list-style-type: none">• Setting of the final objective• Organization of the resources, the responsibilities, the deadlines, the bounds	<ul style="list-style-type: none">• Focus group• Brainstorming• Deployment of the activities• Gantt chart	<ul style="list-style-type: none">• Kick-off power point presentation	2.2

Table 1 – Planning: Methodology

Results

The initial comprehension of the background was a challenging task, both because the team needed to interact with people who speak a different language (Brazilian Portuguese), and because of the difference of the market in which TIM operates from the European one. In collaboration with the client, we set the final objective: to find some proposals, in the form of best practices, in order to have savings on the total amount of Operating Expenditure. After that, through a brainstorming with the project's referent, we evaluated the workload needed, and consequently organized the following phases. Considering the bounds we had (first of all the impossibility to move to São Paulo, the other IT site, if needed), the team organized the resources, the responsibilities, and the deadlines. The Gantt chart of Figure 3 was elaborated in this phase. Finally, in the Kick-Off meeting, the team received the necessary commitment to do the job.

3.2 Analysis

IT Spending Analysis

The aim of this phase was to analyze the trend of IT spending (calculated as the sum of Operating and Capital Expenditure) in the last years, and comparing these data with fundamental drivers for TIM Brasil's business.

Methodology

SUB-PHASE	ACTIVITIES CARRIED OUT	METHODOLOGY	OUTCOMES	THESIS (REFERENCE)
Analysis inwards IT area	<u>IT spending trend:</u> <ul style="list-style-type: none"> Analysis of OpEx and CapEx in the last five years Analysis of OpEx distribution in the IT area 		<ul style="list-style-type: none"> Report of OpEx and CapEx trends Report about the identification of the IT area that consumes more OpEx 	3.3
Analysis inwards & outwards TIM Brasil	<u>IT spending study:</u> <ul style="list-style-type: none"> Comparison of OpEx and CapEx with net revenues Comparison of OpEx and CapEx with inflation rates Comparison of OpEx and CapEx with number of customers 	<ul style="list-style-type: none"> Trend study Histograms drawing Analysis of CAGR Validation of the budget manager 	<ul style="list-style-type: none"> Report of IT expenditure's incidence on net revenues Report of IT expenditure compared with inflation's weight Report of OpEx and CapEx calculated for each customer 	3.3

Table 2 - IT spending analysis: Methodology

Results

The Governance & Assurance Management area supported our work giving us the financial & economic documents and reports we needed, i.e. the budgets of the previous 4 years (2010 - 2013) and the forecast about the current year (2014), updated to the month of June.

The results are described in Table 3:

CRITERIA	VARIABLES	RESULTS
Analysis inwards IT area	OpEx vs CapEx	The OpEx was characterized by a descending trend
	OpEx distribution in IT area	The Operations area was the one which absorbed the major part of the OpEx (78.79% of the total amount)
Analysis inwards TIM Brasil	OpEx & CapEx vs net revenues	The incidence of the total value of IT OpEx and CapEx on the Revenues was characterized by a descending trend. A constant reduction of the percentage of the IT OpEx on the Revenues was registered
	OpEx vs number of customers	The increase of the number of customers, combined with the OpEx trend, has led to a constant reduction of OpEx for each customer from 2010 to today
	CapEx vs number of customers	The increase of the number of customers, combined with the trend of the Capital Expenditure, has led to the reduction of the CapEx for each customer in the last three years
Analysis outwards TIM Brasil	OpEx & CapEx vs inflation	Discounting the Operating and Capital Expenditure relatively to 2010, and considering the loss of purchasing power of the money related to the high inflation, we could observe that the expenditure would have been much lower
	OpEx vs inflation	
	CapEx vs inflation	

Table 3 - IT spending analysis: Results

From the Analysis resulted that the Operations absorbed 78.79% of the total amount of OpEx, thus we focused our actions on this area.

Evaluation of possible Improvement Areas

The purpose of this phase was to identify and analyze the possible areas of intervention inside the Operations. In order to do this, the team, after an initial scouting of the total overview of the functions related to this area, organized meetings with the managers, so that the best fields of action could be identified with their help. From these interviews, it emerged that there were two areas where we could focus, which mostly needed the implementation of a method of management and best practices to improve: Ticket Management Process and Data Storage.

Methodology

SUB-PHASE	ACTIVITIES CARRIED OUT	METHODOLOGY	OUTCOMES	THESIS (REFERENCE)
Interaction with process owners	<ul style="list-style-type: none"> Scouting of the total overview of the functions related to Operations area Meeting with the functions' managers in order to understand the possible areas of intervention Selection of the processes on which intervene Meeting with the process owners 	<ul style="list-style-type: none"> Focus group 	<ul style="list-style-type: none"> Document about the overview of the functions of the Operations area Report of the greatest opportunities of action List of intervention areas (Ticket Management Process and Data Storage) 	3.4
TMP data & process analysis	<ul style="list-style-type: none"> Data gathering Data analysis Process's maps analysis Application of a maturity model in order to outline the AS-IS status of TMP 	<ul style="list-style-type: none"> Interviews BPMN standard Focus group Service desk maturity model 	<ul style="list-style-type: none"> Estimation of the workload of the units which process the tickets List of the 5 most recurring typologies of ticket AS-IS maturity model of the Ticket Management Process 	3.4
Data Storage Analysis	<ul style="list-style-type: none"> Data gathering & analysis Architecture analysis (structure & policies) Applications analysis (identification of the necessary drivers for the analysis of data related to the Storage applications) 	<ul style="list-style-type: none"> Focus group Classification drivers 	<ul style="list-style-type: none"> Report about the acquisition of virtual storage in the last 7 years List of the 15 applications with the highest consumption of storage SAL power point presentation 	3.4

Table 4 - Operations area analysis: Methodology

Ticket Management Process Results

A trouble ticket (sometimes called a “trouble report”) is a mechanism used in an organization to track the detection, reporting, and resolution of some type of problem⁹. The ticket can be of two typologies: a *service request* or an *incident*. We define as *Ticket Management Process* (hereafter called TMP) the whole process involving the opening, receiving, classifying, processing and closing the ticket. The organism that looks after this process is called *help desk* or *service desk*. This is usually divided into three levels, as shown

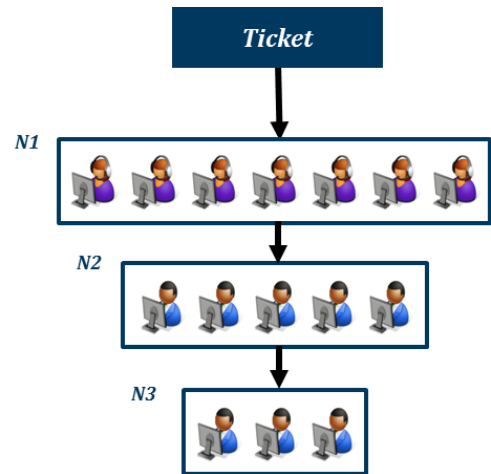


Figure 4 - Service desk structure

in Figure 4. These levels, called *Nível 1, 2, and 3* (i.e. “Level 1, 2, 3”), correspond to three different ways of approach to the ticket: in the first, the easiest tickets are processed. If the ticket is too difficult to solve, it passes - by a process called *escalation* - to the next level, where there are employees with a better knowledge and instruction. Obviously, the cost per person increases with the escalation, thus the number of employees of level two is smaller than level one. Initially, the team gathered information and collected data through interviews with the employees working at the service desk. The results of the analysis showed that the workload of the service desk was unbearable, with about 42000 tickets per month to solve. Thus, we clustered the tickets per type, and found out that the Incidents were the most recurrent. Focusing on those ones, we extracted the most recurring five (hereafter called *TOP5*) in the month of July, so that we could find out accurate actions to reduce them. In Figure 5 it is highlighted the difference

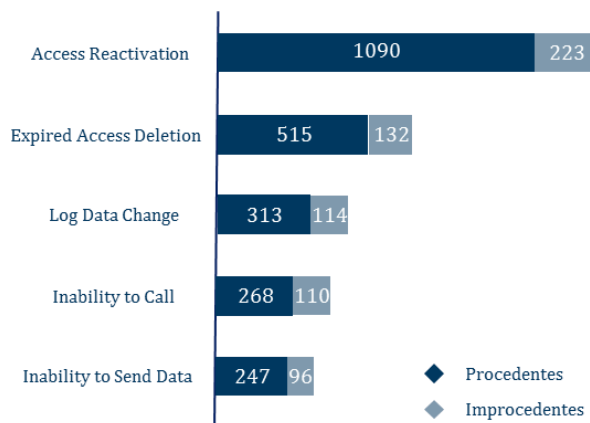


Figure 5 - Tickets TOP5, July 2014

between the number of *Improcedentes*, i.e. the tickets which should not arrive to the Service Desk because of errors and carelessness, from the one of *Procedentes*.

After that, in order to evaluate the AS IS status, we applied a Maturity Model¹⁰ (*Info-Tech’s Service Desk Maturity Assessment*) to the Service Desk. The model is based on three axis of evaluation and five levels of maturity. The axis are:

- Processes → all the sub-processes of the TMP
- Metrics → the throughput and cost/benefit KPIs typical of TMP
- Channels → channels and technologies used in the TMP

⁹ Source: <http://searchcrm.techtarget.com/definition/trouble-ticket>

¹⁰ Source: <http://www.infotech.com/research/ss/it-understand-the-value-of-service-desk-optimization>

The levels of maturity are the ones in Figure 6.

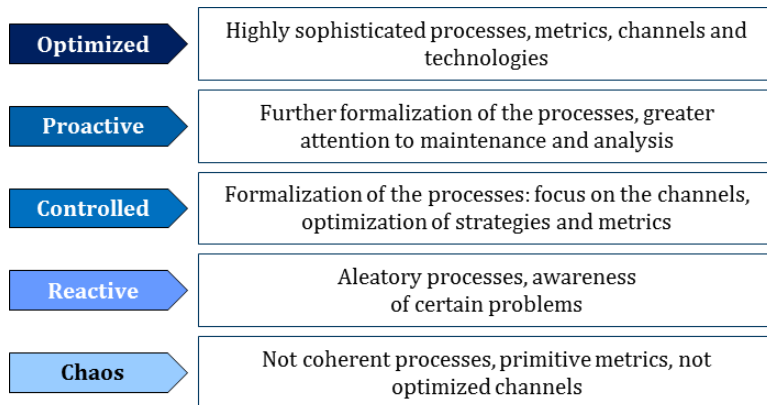


Figure 6 - Service desk levels of maturity

In a focus group with the process owner and the manager of the area, we stated that the AS-IS status of TMP is currently *controlled*.

Data Storage Results

Data are collected in a Storage Area. A company has the need of maintaining data for a period

because of constraints of various nature: legal, financial, privacy, etc. Thus, the so-called *data retention period* can be a great issue for a company, leading to a big expenditure for the acquisition of more and more storage. Moreover, we can appreciate different kinds of storage: from the fastest to the slowest, and of course from the more expensive to the cheapest, the types contained into the Storage Area are *Solid-State Drive (SSD)*, *Performance Disk*, and *Capacity Disk*. The data storage policies of a company define which drivers data can be allocated in one level or the other. The AS IS distribution of data in the levels is represented in Figure 7.

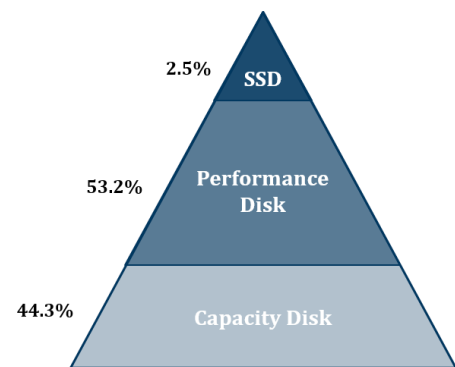


Figure 7 - AS-IS data distribution

From the initial data gathering, we could appreciate that in the last seven years the quantity of the archived data in TIM had been considerably increasing, doubling the storage need. Thus, we selected the fifteen applications (hereafter called *TOP15*) that absorb more storage, so that we could focus on them to optimize the costs related.

3.3 Proposals

The aim of this phase was to generate improvement propositions to be implemented in the areas that were found critical during the previous phase of analysis and, consequently, estimating the savings and the benefits resulting from our proposals.

For a clearer understanding for the reader, the point of view of the discussion of this macro-phase is horizontal (per process), rather than per phase. Thus, it is firstly presented the Ticket Management Process (i.e. the green arrow in Figure 2), then the Data Storage Process (i.e. the pink arrow in Figure 2).

Methodology

SUB-PHASE	ACTIVITIES CARRIED OUT	METHODOLOGY	OUTCOMES	THESIS (REFERENCE)
Ticket Management Process	<u>Improvement Proposition</u> <ul style="list-style-type: none"> • Identification of improvement actions relative to tickets in input and to the process • Classification of the identified actions depending on costs and benefits 	<ul style="list-style-type: none"> • Brainstorming • Best practices ITIL (Information Technology Infrastructure Library) • Weighted evaluation matrix • Costs/benefits matrix • Focus group 	<ul style="list-style-type: none"> • Proposal of actions to implement both in the short and in the long term • Prioritization matrix of the actions 	4.3
	<u>Saving and Benefits Estimation</u> <ul style="list-style-type: none"> • Construction of a model for the saving evaluation • Application of the model • Saving evaluation • Not-economic benefits estimation 	<ul style="list-style-type: none"> • Brainstorming • Focus group • Saving evaluation model 	<ul style="list-style-type: none"> • Report of TMP's costs evaluations • Report about the economic and not-economic benefit 	5.1
Storage Optimization	<u>Improvement Proposition</u> <ul style="list-style-type: none"> • Research of a model for data classification and KPI definition • Application of the model 	<ul style="list-style-type: none"> • Brainstorming • Data classification standard taxonomy (scheme, classes and rules) • Benchmark • Focus group 	<ul style="list-style-type: none"> • Proposal for the data reorganization • Proposal of guidelines for KPI identification 	4.4
	<u>Saving and Benefits Estimation</u> <ul style="list-style-type: none"> • Benchmark for an ideal reference model for the data distribution in the data tiers • Evaluation of the possible achievable savings • Not-economic benefits estimation 	<ul style="list-style-type: none"> • Brainstorming • Benchmark • Ideal reference model • Focus group 	<ul style="list-style-type: none"> • Report of storage management' costs evaluations • Report about the economic and not-economic benefit • Closing power point presentation 	5.1

Table 5 - Improvement proposition and saving estimation: methodology

Ticket Management Process Results

As for TMP, the process was analyzed from the perspective of efficiency and effectiveness, necessary for the cost reduction. In particular, the process was decomposed into three different parts:

- Input: ticket reception
- Transformation activities: assistance and ticket resolution
- Output: solved ticket

In order to ensure an adequate output, we thought that we needed to focus our attention on the first two phases:

- Input phase: reducing the tickets' volume
- Transformation activities phase: making the whole process more efficient

Crossing the results of the process analysis with the best practices ITIL, we were capable to identify six improvement actions relative to the reduction of the tickets' volume, and five improvement actions linked to the making of all the process more efficient. An action was inserted in our proposals overview only if it was able to have a positive impact at least on one of the three-evaluation axis of the service desk maturity model.

Each action identified was evaluated in terms of benefits and costs, using a weighted evaluation matrix. From the results, we inserted the actions in a cost/benefit matrix, in order to give the client a prioritization of them. The cost/benefits matrix gave also the client a long and short-term vision about which actions were better to implement, basing on the company's policy.

Finally, with the help of the process owner, we created a model for the estimation of the economic saving resulting from the implementation of our actions. The reduction of OpEx was evaluated in two different scenarios: optimistic and precautionary. For a more complete view of the saving, we calculated the savings coming from the actions about the reduction of ticket volume and about the efficiency of all the process, both separately and in a combined way.

Storage Optimization Results

The aim of this sub-phase was to propose a process for the redistribution of the data currently stored in the three tiers of TIM Brasil's storage.

From the analysis emerged that for a OpEx reduction related to the storage, it was necessary a better data distribution in the tiers (SSD, Performance Disk, and Capacity Disk) currently used by TIM Brasil, thus the research of an ideal data distribution model to take as a reference was essential. We proposed the Oracle model¹¹, which suggested the distribution of data shown in Figure

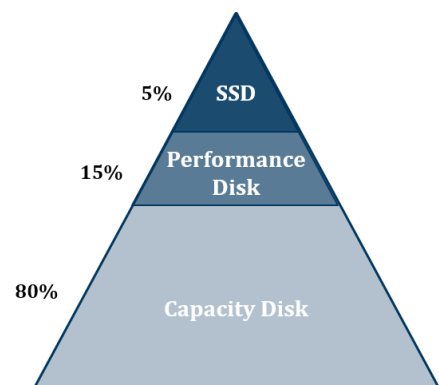


Figure 8 - Oracle model

8. In order to reach these optimal percentages, we considered necessary to increase the data storage's knowledge in the IT area, with the dual aim of understanding the real needs of the applications and, consequently, move the data in the most appropriate levels. The criticality in this passage was that each application had its own way of classifying data, thus owning various scales that could not be compared. For this reason, we suggested the process of *data classification*, in order to support the IT area in classifying and monitoring all the data used by the IT applications in a unique way. This process proved to be one of the best steps that the IT area could undertake in order to reduce IT costs and improve effectiveness for the storage. Indeed, it is essential for rationalizing unused data, and duplicating non-essential data or the ones excluded from policies, leading to a reduction in costs of management and an increase in performance. The steps are described in Table 6.

¹¹ Source: <http://www.oracle.com/us/media/calculator/tieredstorage/index.html>

STEPS	DESCRIPTION
<i>Define AS-IS</i>	To identify what information exists in the company's storage environment, who needs it and when
<i>Define goals & perspective</i>	To establish a clear storage-related goal and the perspective (this is a horizontal view of data)
<i>Define scheme</i>	To define the value of data that will help the company meet its program objective: the scheme is a sort of vertical view of data
<i>Define classes</i>	To group the chosen data into "containers"
<i>Define rules</i>	To determine how the selected data is sorted into defined classes
<i>Define classification</i>	To classify the data from business critical to disposable

Table 6 - Data classification: Steps

After the classification of the data, it was possible to proceed to their reorganization and to the definition of Key Performance Indicators that permitted a continuous monitoring of the data in the storage and the redefinition of the rules to support the changing business needs.

Finally, it was estimated the expected saving resulting from the implementation of the method that was suggested to get to the ideal model suggested by Oracle.

4. Conclusions and future developments

Our work contributed to the Operating Expenditure reduction of TIM Brasil, and the results were shown to the TIM's CIO during the Closing meeting.

The benefits are outlined below:

- **TMP:** the implementation of the improvement actions was expected to reduce the volume of tickets in input (27.3% in a precautionary scenario and 42.1% in an optimistic scenario) and make the whole process more efficient (40.5% R\$ saved in the first scenario and 55.9% R\$ saved in the second one), leading the Service Desk to the next maturity level
- **Storage:** the implementation of the data classification increased the knowledge of the data used by the applications, allowing the rationalization and elimination of them, and was expected to reduce storage management costs (29.7 % R\$ saved)
- **Long-term view:** the whole methodology used by the team was noticed by TIM Brasil's employees, thus giving a good example to follow in future similar projects.

Future developments in terms of possibility to:

- reformulate the contract between TIM Brasil and the vendor of the Ticket Management Service, thanks to the reduction of the volume of ticket to process
- apply the methodology of the maturity model in other areas of IT
- renew the contract between TIM Brasil and Consel, because of the success and the results of our project.

Appendix A

The aim of this Appendix is to give the reader a brief overview of what we could appreciate of Brazilian culture and economy (with differences and similarities with us), as we grew not only on the professional point of view, but also on the personal one. Living in another country, more than 9,000 km far from home, has enriched our lives and opened our minds, thus the following are the insights of our experience.

A.1 What we have learned in terms of way of working: differences and similarities between Brazilians and Italians

The following table highlights the differences and the similarities noticed during our project in the way of working between Brazilian and Italian people.

	BRAZILIANS	ITALIANS
<i>Planning</i>	A general guideline is set up but a little followed. During the meetings, the agenda is usually disregarded	The planning phase is always the most important part of a project. Once defined, there is the will and the effort to follow the schedule
<i>Personal company's view</i>	Close-range: they only look to the area in which they are inserted	Long-range: multi-area view, not limited to the area in which they are inserted
<i>Task priority</i>	The requests coming from the area in which the employees are inserted are taken into account before the others, though less urgent	The requests are fulfilled according to their priority, regardless of the area they come from
<i>Typology of task</i>	Giving them more than one task at a time can distress and confuse them	They are used to manage many tasks at the same time
<i>Group working</i>	No one makes any decisions without checking with the group. If there are three issues that need to be resolved, the entire group will work on issue #1 until that one is finished	Group working is used to plan and to have useful feedback. Each worker is able to carry on individual tasks by himself when the group or the conditions require it
<i>Ultimate goal</i>	Earn the salary	Get the work done
<i>Public-private balance</i>	No separation between public and private dimensions	Greater separation than Brazilians between public and private dimensions
<i>Reaction to work bounds</i>	Passive: they usually recline on constraints	Active: they take note of the constraints and try to overcome them in an innovative way
<i>Interpersonal relationships</i>	Very friendly even at work. If you want to do business with them, you need to become their friend	Friendly behavior. Friendship is not the main driver when doing business, but if present helps the negotiations

Table 7 – Way of working: Brazilians vs Italians

A.2 Brazilian Economy and Society

Brazil is the largest national economy in Latin America, according to the International Monetary Fund and the World Bank, and has been predicted to become one of the five largest markets in the world in the decades to come. The country has a mixed economy with abundant natural resources. Active in agricultural, mining, manufacturing and service sectors, Brazil has a labor force of over a 107 million (ranking 6th worldwide) and unemployment of 6.2% (ranking 64th worldwide). The country has been expanding its presence in international financial and

commodities markets, and is one of a group of four emerging economies called “the BRIC countries”.¹²

There are in Brazil strong cultural values in favor of conciliation, tolerance, and cordiality. This Brazilian style of behavior may be derived from an Iberian and colonial heritage of diverse ethnic groups living together, weaker central authority exercised by the Portuguese crown, and day-to-day practical forms of resistance to abuse. Nevertheless, though cordial and magnanimous at the interpersonal level, Brazilians as a whole are exploitative with regard to the environment. This attitude has been explained in terms of the *conquistador* mentality. According to this interpretation, the general spirit of the colonizer of yesteryear or today is to accumulate as much wealth as possible as quickly as possible and then move on. Whatever its roots, the result of this kind of behavior is individualism, transience, and disregard for others and for nature, which led to both human and environmental degradation. In a similar fashion, Brazilians tend not to think in terms of the common good. The result of widespread evasion of rules imposed by the central authority is a vicious circle involving crackdowns and inspections (*fiscalização*) to enforce ever-tougher rules and ever more sophisticated and ingenious ways of evading the rules (*burla*).¹³ Indeed, in Brazil there is this behavior called *jeitinho brasileiro* (literally “the Brazilian way of doing things”)¹⁴. *Jeitinho* is the way in which Brazilians respond to their bureaucratic society, tending to interpret the rules and bending them a little. Since the colonial period, everything in Brazil is done without planning, what has shaped a society living in constant need for adaptation. Until today, it is rather difficult to see things running smoothly, so people have to always find a way in order to survive and get things done.¹⁵

In general, the main social issues that Brazil faces are¹⁶:

- Poverty

Poverty in Brazil is most visually represented by the various *favelas*, slums in the country's metropolitan areas and remote upcountry regions that suffer with economic underdevelopment and below-par standards of living. The rate of poverty is in part attributed to the country's economic inequality: the poor segment constitutes roughly one third of the population. The disparity of income levels between the urban rich of Brazil and the rural poor continues to widen and this inequality risks destabilizing the fragile political peace

- Crime

Crime is one of the biggest problems in Brazil. With about 23.8 homicides per 100,000 residents, muggings, robberies, kidnappings and gang violence are common. Police brutality and corruption are widespread

¹² Source: <http://en.wikipedia.org/wiki/Brazil>

¹³ Source: <http://countrystudies.us/brazil/38.htm>

¹⁴ Source: <http://scienceblogs.com.br/socialmente/2012/08/e-jeitinho-brasileiro/>

¹⁵ Source: <http://thebrazilbusiness.com/article/the-brazilian-way-of-doing-things>

¹⁶ Source: http://en.wikipedia.org/wiki/Social_issues_in_Brazil

- Lack of education

Public education in Brazil is free at all levels, nevertheless school non-attendance by absence and malnutrition is still one of the biggest problems in Brazil. Law forbids work under the age of 16; however, Brazil has many cases of child labor: children from large poor families start working from the age of 10 in order to help their parents. Other reasons for school non-attendance are the lack of sufficient school places and the high examination failure rate. Malnutrition also materially affects the intellectual development of children. The standards of primary and secondary public education have been falling over the past decades: since the country invested little in education, public education's standards dropped and the middle class moved their children to private schools

- Infant mortality

In Brazil, policies geared to improving child health have led to a significant decline in infant mortality rates over the last 30 years. Despite this improvement, however, mortality rates are still high. Sanitation, education and per capita income are the most important explanatory factors of poor child health in Brazil

- Housing

Rapid urbanization and population led to the problem of housing: as cities grow too rapidly, resources are not able to keep up with the swelling population. With a population of 12.7 million people, Rio de Janeiro is the second largest city in Brazil. Migrants who cannot afford proper housing are forced to build temporary housing without proper utilities (*favelas*). This rapid rate of illegal occupation of urban land has led to serious problems not only to the residents, but also to the society and the natural environment of the city.

A.3 Working in Brazil

Because of the particularity of Brazilian market and behavior, working in Brazil is not easy, especially if you come from abroad. There are some issues that who want to open his own company needs to face. A list of the most common problems for businesses in Brazil¹⁷ follows:

- Staff turn-over

Brazilians change jobs very often, mostly because of more benefits. This behavior comes from a tradition in which a successful career is directly linked to money and not to the construction of a company or brand. When an employee leaves, he creates many issues, like generating costs for the hiring of a new employee, overwork for other employees, and the time spent in the training process

- Taxes

Brazil has the highest tax burden of all BRIC countries. When opening a company in Brazil, entrepreneurs spend at least 67% of their profits with taxation matters

¹⁷ Source: <http://thebrazilbusiness.com/article/the-7-most-common-problems-for-businesses-in-brazil>

- Bureaucracy

Opening a business in Brazil takes up to 185 days, thus the company should be economically solid enough to wait so many months until it can make some money. Such bureaucracy creates severe barriers to imports, exports and foreign investment, directly affecting the economic growth

- Delays and absenteeism

Brazilian employees tend to be late and even absent. Absenteeism is mostly caused by diseases, stress and demotivation. As employees who ask for dismissal lose part of their rights, they become late and absent as an attempt to have the employer firing him instead

- Education

According to IBGE¹⁸, only 7.9% of the Brazilian population has a college degree. Indeed, there are problems finding qualified workforce. Another major problem faced by entrepreneurs is to find employees who speak English: less than 12% of the Brazilian population speaks English. Another problem related to education is the professional shortage, especially in areas related to technology and engineering, because of the prices of the courses, the availability (e.g. engineering courses offered by public universities are full time, which is an obstacle for those who need to work) and the difficulty level

- Benefits

Benefits are what make hiring in Brazil so difficult. There are two categories of benefits: mandatory (paid vacations, transportation, 13th Salary, etc.) and non-mandatory (life insurance, health insurance, etc.)

- Holidays

Brazil has 11 federal holidays and each Brazilian city has its own holidays. Most Brazilian holidays are of religious nature and very much related to traditions, like *Carnaval*

Moreover, for non Brazilian people is difficult to adapt to two fundamental aspects of business in Brazil: the time and the personal relationships. About the first, the “time is money” concept does not apply in Brazil: Brazilians are very laid back when it comes to time. It is not a disrespect towards other people but it is simply how people are. Meetings can start late and run late. Business lunches or dinners may run 2-3 hours long. A meeting can start with an agenda but that may not be followed.¹⁹ Regarding the personal relationships, the fact that most of the time astonishes foreign businesspersons is that they have to become friends with Brazilian entrepreneurs in order to do business with them. However, the fact is that Brazilians cannot separate public and private dimensions. An executive is the citizen and the company at the same time, and being friends with the company hastes negotiations and increases trust.

¹⁸ Source: <http://www.ibge.gov.br/home/>

¹⁹ Source: <http://shumandia.wordpress.com/2014/09/27/business-etiquette-in-brazil/>

In conclusion, to remind that even hard work can be enjoyable, in Figure 9 it is shown a typical lunch break of my team and me in a restaurant near TIM's headquarters, right in front of the sea.



Figure 9 - Typical Brazilian lunch break