

A Work Project, presented as part of the requirements for the award of a
Master Degree in Management from the NOVA School of Business and Economics

MANAGEMENT CONSULTING LABS – PROJECT TAP

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Abstract

The purpose of this project was to analyse and quantify the impact that the present operation and future expansion of a specific player of the commercial aviation industry has on TAP. TAP's individual performance and its competition with this particular player were analysed. A quantitative model was created to measure past and current impact on TAP's performance, which was also the basis to estimate future impact. A set of surveys was conducted to better understand passenger profiles and main drivers for passenger retention and churn. Based on these analyses, a pack of high-level recommendations was designed to respond to the challenge.

Keywords: TAP; Competitor; Impact; Respond; Anticipate

1. Brief context

1.1. The client

TAP is a Portuguese company that operates in the commercial aviation industry. It was incorporated in 1945 and has been a State owned company since 1975.

In 2009, TAP transported over 7 million passengers to/from the Portela Airport, accounting for a 55.2% market share¹, still a loss of 2.5 p.p. from 2008.

1.2. The industry

The commercial aviation industry is a very cyclical industry, closely tied to economic growth and trade. In addition, it is also highly sensitive to patterns of seasonality.

Nowadays, the worldwide economic context does not favor the industry's growth, particularly because of the cost of one of the key production factors – fuel.

In addition to the traditional low operating margins, flagship carriers, such as TAP, Lufthansa or British Airways, have also faced the challenge presented by the recent

¹ ANA website. ANA – Relatório Anual de Estatísticas de Tráfego (2009)
<http://www.ana.pt/portal/page/portal/ANA/ESTATISTICA>. Last accessed on May 2011

boom of low-cost carriers, a challenge that ranges from pricing strategies to service adjustments and communication policies.

1.3. The challenge

A competitor of TAP will make a significant investment in Lisbon which will result in additional capacity and an extended offer.

Considering the present context of the industry, particularly the traditionally razor thin operating margins and the ever raising prices of fuel, it is fundamental for TAP to respond to this move without losing its identity, its business model and its leading presence in Lisbon. TAP's recent strategy has been based on exploring new markets but this challenge will also have an impact on that option.

2. Critical approach to the project content

2.1. Problem definition

2.1.1. What was the problem at hand?

The project's scope was centred on a pivotal strategic issue for TAP that had to do with the investment that a competitor will undertake in Lisbon to increase capacity and extend its offer. This competitor operates on a significantly different business model that is based on a competitive advantage centred on cost efficiency that supports a different value proposition for the consumer.

The project included two main problems: (1) to analyse and quantify the present and future impact of that competitor in TAP's performance and (2) to recommend a plan to best respond and/or anticipate that same impact.

The first problem was eventually divided into two major areas of analysis: (I) on the one hand, to quantify and understand the impact that this specific competitor has, nowadays, on TAP's performance and then estimate future impact of that competitor's possible

actions; (II) on the other hand, to better understand passenger profiles and identify the drivers behind customer retention and churn.

Interestingly enough, at first TAP's main concern was the first problem, quantifying the impact.

Now looking back, the project scope could have been less quantitative and more qualitative. The most important part of that analysis is the "so what?" approach. Once the impact had been quantified, what was there to be done with that number? The mere quantification of a variable does not, in itself, reveal a plan or a possible strategy to tackle a challenge. Naturally, most of the recommendations emerged after the surveys, after having a grasp of what is the passenger behind the numbers.

Notwithstanding, it is clear that the quantification problem had to be solved. Not only did the process provide a decisive insight into the reality of TAP and the characteristics of its business model, but it also revealed the relative importance of this matter to the bottom line of TAP as whole. And this is not a minor detail. The attention paid to a challenge and the implementation strategy to deal with it are not the same whether a challenge represent a major or minor threat.

2.1.2. Why was this problem relevant?

As stated above, the initial focus of the problem was the quantification of impact. Even if it was an interesting question, it could only be a starting point of the project as it would make it possible for the team to determine the relative importance of the challenge presented by the competitor.

However, once the scope of the project was extended to passenger profiling a whole range of strategic and tactical decisions was open for discussion.

In terms of strategy, responding to this particular competitor is an important challenge. TAP stands out from the rest of the flagship carriers because of the options it makes,

namely on which markets it chooses to invest in (e.g. the Brazilian and African markets). Responding to a competitor with a different business model, however, is a completely new game, particularly when that competitor is investing in Lisbon, the core of TAP's operation.

From a strategic point of view, TAP should be able to anticipate possible competitor moves and act accordingly because it is paramount for TAP's performance to keep a leading market share in Portugal. The outcome of this project should allow TAP to implement proactive and reactive strategies in order to (i) minimize the impact caused by this specific competitor and (ii) reduce the attractiveness of the Lisbon market to its competitors.

Even if the strictly quantitative analysis was useful, particularly in understanding the degree of relevance of this specific matter, it could probably have been less ambitious so as to free some time to do qualitative research that could provide additional, and probably invaluable, insights for the project.

2.2. Hypothesis, analysis and work

2.2.1. Quantification of impact

In the first stage of the project, the scope was not clearly limited as the question regarding the quantification of the impact was too broad. In the first days of the project, and even before meeting with TAP's staff, the team split this topic into three sub-questions that, in short, had to do with (i) past/present impact, (ii) possible actions of the competitor and (iii) future impact of those actions. It was clear that there was a milestone that could be used as a breakdown for the first approach to the project – past/present vs. future – and not only did this seem to make sense, it also made it easier for the team to create different work-fronts for the early stages of the project.

(...) Background check

Before the first meeting with TAP the team invested some time in research and data gathering to develop a solid background for the project. We collected data on TAP's past performance and we tried to develop a market intelligence database with information we considered would be useful for the project. In 1/2 weeks' time, the team already had a good perception of the recent trends in the industry and of some key characteristics of the competitor under consideration.

A first output of this work was a profile of the competitor built around 7 operating principles. An insightful task for the project ahead.

(a) Past/present impact

The starting point for this task was creating a project database based on the information provided by TAP. This involved sorting and selecting information and organizing data according to financial and operational criteria.

The team created a specific work-front for this task, one that was extinct once the database was concluded. It was mostly a technical task, based on Excel skills, but essential to give an answer to the first problem and for the following questions and cross-checks.

The analysis itself was, at first, primarily comparative. The team looked for data referring to the past, specifically TAP data referring back to key dates when important events took place or when the interaction of TAP with its competitors changed for some reason, and identified patterns that could suggest the influence this particular player could have on TAP's performance. The purpose of this analysis was to measure an average impact of the competitor on TAP's performance in the routes in which both firms compete. Conclusion was drawn from a regression model that portrayed the

impact sustained by TAP until a steady-state, i.e. a point in time when that impact stabilized, was reached.

In the course of this analysis the team identified one additional, and unexpected, positive contribution triggered by the presence of that specific competitor, an evidence of the principle of communicating vessels in the airline industry – a decision taken on one single area of business will most likely have an impact in many others.

As it turned out, this side to the story, which had not been considered at first, ended up being the object of additional analyses and a relevant part of the final output.

An additional note regarding this stage of the project to remember that the team did not sail these waters with no setbacks. Virtually in every single problem solving session doubts and additional questions kept surging and new work-fronts were opened. The quest for the final answer included several sub-tasks, executed either to confirm specific parts of the computations or to provide additional information required for the final conclusions.

While working on these sub-tasks, the team overcame some difficulties in getting access to information. Most of the times, a set of assumptions was built based on market data or business sense just to “anchor” computations around a plausible background.

(b) Possible actions of the competitor

A key factor to determine the impact TAP will sustain from the investment made by this player was to predict which actions the competitor would take. It was public that this competitor would have about 10 shots to fire, but it was impossible to determine the specific targets.

A list of possible targets resulted from a selection process in accordance with a set of KPI's and of standard operating procedures (as identified during the pre-project stage) The team decided to insert a “fudge factor” into the list of possible actions, thereby

including more options than what is expected the competitor may take, hence including a margin for error. Before moving forward, the team requested TAP's agreement on that list of possible actions.

The main goal of this selection was not to individualize impact for each target, but to provide an estimate of the global impact of the competitor's strategy.

(c) Future impact

The estimate for future impact was based on the previously designed model to quantify past/present impact. The model was used as an "anchor" but the prospective analyses placed many different challenges for the team. Measuring an event in the past can be done provided there is access to the data; estimating a future event required a lot of work, a lot of problem solving, to deal with the key variables of that interaction. In most cases, the team had problem solving sessions for each relevant variable and the outcome was a set of assumptions that made ground for the final estimates.

Nonetheless, more than the actual number, the result of this analysis made it possible for the team, and TAP, to put things into perspective, weighting in the difference between past/present impact and future impact.

2.2.2. Passenger profiling

A second stage of the project included conducting surveys to a sample of passengers. These surveys were designed by the team with the purpose of (i) having a clearer picture of the passenger that flies with TAP and (ii) understanding the reasons that are relevant for passengers that decide to keep on flying with TAP or change to a different company, namely the specific competitor that was a reference for the project.

Before running the surveys, the team met in a couple of problem solving sessions where discussion was centred on which questions to include. The team had a clear idea of the content that was relevant but we had to overcome some challenges in making the

wording of the questions as simple as possible and keeping the survey short because passengers were asked to fill in the questionnaire before boarding and so time was also a significant constraint.

A total of 1201 surveys were completed and results were revealing! It was possible to identify the main driver for churn as well as the main drivers for passenger retention. Surveys also revealed a breakdown of passenger profile according to place of residence (Portugal, Europe or Non-Europe), type (direct, indirect, intercontinental) and purpose (leisure or business) of the trip and some features of the ticket buying process (distribution channel, days in advance, etc.).

Additional conclusions from a second set of surveys showed that even within the same segment of passengers (e.g. passengers flying for leisure) the actual passenger that flies with one company or the other is actually very different, particularly in what concerns the ticket buying process.

One important finding was that the perception of the consumers regarding the service and pricing of TAP was not very accurate. This finding was also the ground for a strategic guideline in terms of recommendations, as detailed below.

Surveys were a key part of this project because it was the data gathered from the answers of the passengers that gave the most information the team ended up using to come up with the pack of recommendations.

2.2.3. Recommendations

The team's approach to the recommendations was to provide high level strategic orientations that could be actionable both in the short and long term. However, and even if it was not a primary goal to deliver concrete and specific examples, the team also presented some examples to complement these strategic guidelines.

Considering that the impact of the competitor on TAP's performance was divided in past/present impact and future impact, the team came up with both reactive and preemptive strategies, to respond to the present threat and to anticipate the competitor's possible moves respectively. Hence, the final pack of recommendations included five major strategic orientations that had to do with:

- Enhancing the indirect positive effect that had been identified in the first stage of the project;
- Adjusting TAP's communication policies to change consumer perception about the TAP's price and service;
- Segmenting and customizing TAP's offer to meet passengers' needs;
- Taking preemptive actions to anticipate those that were considered the competitor's most likely moves; and
- Investing in CRM and market intelligence.

As mentioned above, the team also provided TAP with some suggestions on how to execute these guidelines. The purpose of this task was not to persuade TAP to implement those specific actions but to convince them that the guidelines were actionable. Examples included suggestions for new products, new communication campaigns and actions of direct retaliation against the competitor.

2.2.4. Benefit of hindsight

As far as the quantitative analysis is concerned, most of the value for the project was created with the first step, quantifying past/present impact. Not only did most of the challenges and additional questions emerge at this point but the conclusions of the following stages did not change the overall perception of the relevance of this matter for TAP. It is big, it should be faced and dealt with!

In addition, the analyses were also compromised by the lack of access to information, namely when estimating future impact. In this stage, the analyses could have been more accurate and more robust if the team had been granted access to inside information. This was probably the most significant obstacle in dealing with TAP. As available and helpful as the TAP team members were, whenever their support required contacting other departments or units inside the TAP organisation, the outcome was always disappointing. It is hard to imagine that someone inside the organisation was not standing on a lot of information that was required to come up with the computations (e.g. the number of hours a plane can travel in a day). Despite being satisfied and confident with the final result, I do feel that some of the assumptions may be arguable.

All things considered, the team's efficiency may not have been as good as it could have been. Time and effort allocation could have been channelled to other tasks but we ended up spending too much time dealing with details that would not have changed the big picture and would certainly not have changed the team's conclusions.

Particularly, the pack of recommendations would have benefited from this. A first quantitative approach could have been complemented with interviews and other qualitative approaches that would necessarily reveal more information than the surveys. An additional input, and a little extra time, would probably have resulted in more creative recommendations that could probably represent a breakthrough in service and product adjustments and innovations.

3. Reflection on learning

3.1. Previous knowledge

The Masters in Management provided some very useful background to take an active part in the project. The concepts of “wars of attrition” and their consequences and the

dynamics between “entrant” and “incumbent”, as studied in Competitive Strategies, came to mind as soon as the framework of the project was disclosed.

Then, the Cournot and Bertrand models, as addressed in Analysis of Industry and Competition and Industrial Organization, and the dynamics of game theory, also came to mind as the project progressed. Personally, it was interesting to note that the final results confirmed the theoretical projections of the models.

During the first, more quantitative, stage of the project basic notions of Statistics were useful as the team ended up using averages, standard deviation, regression models and validity conditions for the surveys (sample size, selection criteria, etc.).

Finally, when the time came to develop the pack of recommendations the framework of the 4 P’s and the visualisation of the Marketing Funnel were helpful to fine tune the team’s proposals.

Looking back to the first days of the project, I did not expect to use many contents from the Masters Program. My previous academic experience led me to believe that most of the content taught at the University in not much more than the foundation on which to build the knowledge or the techniques that will be required in the future. It is gratifying to realize that at least some of the hours spent in class will be certainly put to use in the future!

3.2. New knowledge

3.2.1. Tools & Frameworks

(a) 80/20

Every single team member will remember the “80/20 rule”! This rule states that most of times, 80% of the outcome will come from the initial 20% effort. This rule was present in practically every single analysis the team completed during the project and indeed whenever the team would get to an apparently solid result after digging into the first

20%, usually nothing significant would change when the team dug deeper. The “80/20” rule was a key tool for time and effort management because it allowed the team to feel confident with an analysis that was not 100% thorough and still keep moving forward, investing time in the following challenges, tasks or documents.

(b) Almost right and absolutely wrong

Another important motto, that is somewhat related with the “80/20 rule”, is that it is not the purpose of most analyses to get to a result that is absolutely right because that will bring the team closer to a number which is absolutely wrong. Particularly in quantitative and comparative tasks, more than the final number it is important to have a solid grasp on the relevance of the matter at hand.

(c) Cross-checks

As far as quantitative tasks are concerned, it was also an important lesson to learn how to triangulate, to cross-check. Cross-checking was truly important in this project because many of the models the team created were based on a set of assumptions. In order to have confidence in each analysis, and guarantee that it was robust, it was imperative that each number was computed from different formulations.

3.2.2. Communication skills

(a) Pyramid principle

An important lesson on structuring and preparing any communication is to pay close attention to the audience. A higher-level audience is usually time restrained and requires any communication to be effective and “straight to the point”. Therefore, the speaker should start by saying what will be the structure of the presentation and immediately deliver the key ideas of the communication.

The “Pyramid Principle” states that a communication should start with the key idea, the punch line, and then present the supporting evidence. It is based on an inductive

reasoning, instead of the traditional deductive one that goes from presenting all arguments to reaching a conclusion. The purpose behind this strategy is to capture the audience immediately from the start presenting the bottom line, i.e. the content that must “stick” in the minds of the audience throughout the whole presentation.

(b) Storyline and Storyboard

In order to achieve this objective, the team adopted a presentation building scheme that was anchored in two documents. The first, the storyline, is a draft version of the message that the team intended to communicate, listed in bullet points in accordance with the key ideas that had to be passed on to the audience. The second one, the storyboard, was a paper draft of the slides used to communicate the key messages included in the storyline. At first glance, what seemed to be a waste of time, ended up saving hours of effort because it is much easier to erase and redo slides in paper than to iterate on screen.

3.2.3. Client and team/workload management

(a) Trust

When the team first presented itself to TAP staff, it was clear that there was some distrust about the team’s capabilities. To some extent, this was probably predictable as the team was composed of a group of students that set out to address an important matter for a big organization.

As our advisor told us, trust is the result of:

$$\text{Trust} = \frac{\text{empathy} + \text{credibility} + \text{reliability}}{\text{self} - \text{interest}}$$

On day one, the team had little credibility or reliability and the goal was to score some points based on empathy. As the project progressed the team presented convincing results and the initial distrust or disbelief eventually faded away. From this moment on the team invested in turning this project into a TAP and NOVA project instead of a

project of a group of students, thereby working the self-interest variable. It was curious to notice that as the team earned more trust from TAP, expectations also increased. If initially any credible and robust number would get a positive appraisal, by the final stage of the project we were required to give something more, something “outside of the box”, to get that same result.

(b) Time management

As far as team and workload management is concerned, the corner stone of the project was “divide to conquer”. Given that there was so much information available, and so many possible ways of dealing with that information and pursuing the goal of the project, it was very important for the team to divide the scope of the project into work-fronts, each owned by a different team member in order to have the best result from the effort that was being put into the project.

At first, this organisation generated an interesting group dynamics because whenever we had a team meeting every team member could present recent developments and bring new knowledge to the table. Eventually the team did not handle this model very well. The common feeling after closing the first progress review was that not every team member was “inside” the project, that the information and even the learning experiences had not been shared properly or had been unevenly distributed. The team changed its working method because of this and ended up dismissing the ownership of work-fronts to start working on the project as a single work-front in each every member worked on. Eventually, our efficiency, as a team, was very low because all four team members were working on the same analysis and only after having closed that analysis would we move to the next one. The outcome of this inefficiency was that by the time we had to come up with recommendations, there was little time and no team member had devoted

attention to this issue. We overcame this challenge with some additional guidance from our tutor and with some extra effort that was put in by all team members.

(c) Feedback

One last important tool concerning team dynamics is feedback. A proper feedback model is invaluable in taking full potential from each team member. The adopted feedback model was based on three key ideas:

- Constructive: feedback had to be constructive in the sense that it had to cover both strengths and development needs instead of only focusing on the bad, or the good;
- Specific: feedback also had to be fact-based, objective and actionable. To avoid generic observations or just plain emotional approaches, we were required to provide concrete examples for our analysis, explain the impact that particular example (action, reaction, comment) had on us and then provide suggestions on how to handle a similar situation in the future; and
- Interactive: giving feedback was not a one-way conversation, instead it was supposed to be an actual dynamic conversation that could address any doubt or curiosity a team member could have.

(d) Personal characteristics

It was also interesting to start the project with a “kick-off” meeting in which each team member presented himself and where we talked about our personal strengths and weaknesses and some characteristics of our own. It could probably have been more helpful if we had revisited that meeting periodically. I do believe that some minor misunderstandings could have been prevented if we had done that. When confronted with each one’s self-assessment, I think that we, as a team, would have remembered to address our concerns differently.

3.3. Individual reflection

3.3.1. Strengths and weaknesses

In short I do see myself in my Individual Performance Assessment, but I still need to comment on some details:

(a) Strengths

- Analytical skills: given my past background (i.e. Law) it was very fulfilling to realize that I could keep up with the quantitative tasks undertaken in the project;
- Risk-taking: I do not perceive myself as a risk taker. I have always loved to learn new things. I also love a challenge and I am competitive which usually drives me into taking responsibility for new things. More than a risk taker, I was (and am) eager to learn and there is no better way of learning than doing;
- Tutoring: an invaluable review because it is a team-related skill. Of all the positive feedback I got, this was the most meaningful;
- Planning and organisation: I have always been methodical and organised but I had not realized that could be an asset for a project like this one. Together with “Tutoring”, having these pointed out as strengths was very meaningful because they are skills that are evidence of team-spirit.

(b) Weaknesses

- Triangulate: When we started I was under the impression that a number provided by a consultant had to be “bullet proof” and so I associated that with sophisticated models and elaborate computations. I came to learn that business sense is just as important and that numbers should result “naturally” to any listener. This is a weakness I will clearly work on as it comes from a (wrong) perception I had before playing the role of a consultant;
- Think of recommendations: clearly the hardest challenge for me. I am not as creative as I would like to be which sometimes limits my thought process to the

analysis, to the numbers. If the “so what?” is the most important part of the game, than clearly I need to work on scoring more goals;

- Fine-tune communication: I think this will be relatively easy to work on. I sometimes over-extend explanations, probably because of my past work experience of legal consultancy;
- Manage self-focused perception of others: I am, indeed, a bit self-absorbed because I usually need some time for myself to focus and to have a better understanding of the task at hand. After having discussed this with our tutor, I have come to realize that I need to work around this to make sure that it does not have a negative impact on the team’s performance;
- Lead seamlessly: it is my nature to like to have things done my way. During this project I was asked to give a contribution when it was another team member’s turn to lead. On the one hand, I chose not to interfere because I consider this a very important learning experience. On the other hand, I felt that if I disagreed on some choices of the team leader I would struggle to talk him into finding a point of balance between his choice and my personal view. I do need to work this and find a way to deal with different personalities.

3.3.2. Developments plans

I intend to focus my attention on the team skills, particularly leading abilities and interaction with others. It has come to my attention that there are several books that address these concerns and that will be my starting point. In addition, I will also try to work on the final goal approach, but I think this will require on-the-job training.

3.3.3. Future career

I will start my consulting career in August and I am looking forward to it. I really enjoyed being a part of this project and if the career is going to be similar to this, I believe I will have a good time!