A Work Project, presented as part of the requirements for the Award of a Master's Degree in Management from the Nova School of Business and Economics

CONSULTING PROJECT FOR THE OPTIMIZATION OF THE AUTOMOTIVE PROVIDERS NETWORK OF EUROP ASSISTANCE PORTUGAL OVERVIEW OF THE NETWORK CAPILLARITY

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Overview Of The Network Capillarity

Abstract

After an in-depth analysis of EAP's current situation, it was found a need to implement actions that, while not requiring a high effort, represent significant operational gains. These initiatives have a short-term impact, however, they are meant to be a first step for the introduction of more profound changes. The analysis' results proved that it is crucial to improve the network efficiency by re-structuring critical zones and excluding low-performing providers. Additionally, to guarantee that EAP internal systems run smoothly, actions are recommended regarding the TASK and RoS systems. Finally, providers' performance can be enhanced by linking KPIs to SLAs

Keywords: Network Capillarity, Operational Efficiency, Short-term Impact, Risk Analysis, Internal Systems

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Quick Wins

Visible improvements that have immediate benefit and can be delivered quickly once the project begins. The quick win does not have to be profound or have a long-term impact on the organization. The Critical Zones are driving down the network efficiency. Providers acting in these zones are either overwhelmed with demand and unable to accept more missions or have high refusals and are unwilling to work more wit EAP. A re-structuring of these areas is necessary to optimize the providers network. Critical zones should be revised and updated every trimester.

6 Recommendations | Re-structure the Critical Zones

Situation

EAP's **high refusal rate pressures the network capacity**, and contributes to more refusals. Particularly in some zones of Portugal, this loop has resulted in a large number of refusals and difficulty in attributing missions on the first try.

Providers get sent to areas out of their reach, while other providers are called to do their local county, creating **tensions between providers and EAP**. At the same time, the **lack of monitoring** of the large network often makes it difficult to be aware of these, and other, situations, and the Providers' Team is at the mercy of the providers reaching out to report these problems.

Re-structure the Critical Zones

For the providers **network to become more efficient**, the number of critical zones needs to be minimized. Doing so will naturally reduce the refusal rate.

The areas will be re-structured based on 4 actions:

- **1. Maintain PIE priorities** for counties in which the highest-priority provider has a low/medium refusal rate (0% to 30%);
- 2. Change PIE priorities for counties in which the highest-priority provider has a high refusal rate (30% to 100%);
- **3.** Eliminate bad-performing providers from the network (any county, where there are providers with very high refusal rate and relatively few missions completed);
- **4.** Find new local providers for counties in which current providers do not have enough capacity to cover demand, or where there are no local providers.

Recommendation



- Define a combination of the 4 actions for each county¹, based on the refusal data from August to November 2019;
- **Communicate changes** to the respective providers, particularly for the ones that are changing priorities. It is important to explain that the changes are meant to make the most of the provider's capacity, and not to decrease the volume they receive from EAP. This is also a good opportunity to understand why the provider has a high refusal for specific counties.



- Communication is especially important for the **eliminated providers**, as it should be a learning opportunity for how to improve.²
- The analysis of Critical Zones should be **revised on a trimester basis**. In the future, analysis could be extended to less volume/relevant counties.

Implementation



Communication of these changes to the providers may require personal visits in the most sensitive cases, including the providers that are to be eliminated.



In order to **re-structure the critical zones** the recommendations were divided in **four actions**: maintain priorities in the county, change priorities in the county, eliminate providers from the network and find new local providers.

6 Recommendations | Re-structure the Critical Zones | Summary table of 4 actions recommendations

Table 19: Summary of Recommendations for each Critical Zone

| Recommendations to | Maintain Priorities | Change Priorities | Eliminate Providers | New Local Providers ¹ |
|--------------------|------------------------|--|-----------------------------|-------------------------------------|
| Barreiro | | Total Rodagem Car, Lda 🗪 Telereboques, Lda | | |
| Gondomar | | Reboques Santos Castro, Lda 🛛 — Silva & Sousa, Lda | | |
| Lamego | | | | |
| Loulé | | 365 – Transportes, Lda 🛛 → Auto Reb. T.C & Cristina, Lda | 365 Dias – Transportes, Lda | |
| Mafra | | Auto Caeiros Transportes, Lda → Assisteoeste, Lda | | |
| Maia | | Serviarregadas, Lda 🛶 A.R.T II | | |
| Matosinhos | | Serviarregadas, Lda 🛶 Auto Pintura Lima & Lima | | |
| Peso da Régua | | | | |
| Porto | | Rui Brandão & Correia Silva → Garagem Lapa | | |
| Torres Novas | | FélixCar, Lda → António Vieira dos Santos, Lda | M.A Gameiro, Lda | |
| Valongo | | Assislongo, Lda> New Provider | | |
| Viseu | • | | | |

TASK adds value for providers by being a no-cost tool that allows for the digital tracking of the towing trucks. However, some of the app's functions need to be improved, so that providers have a good experience and EAP increases digitalization while europ assistance decreasing refusal rate. The proposed actions should be implemented in the beginning of 2020 and revised within 6 months.

6 Recommendations | Improve TASK

Situation

During the analysis of critical zones, a high disparity was identified between the share of refusals between missions requests sent by TASK and by Inosat, particularly refusals by time-out This lead to the believe that the **TASK software may be suffering some issues**. In general, it was observed that the missions were accepted in the base, but the **driver** was not able to accept on time. Some cases were identified, including one where the provider had up to 100 refusals in 1 month by time-out in TASK. When contacted, the provider was surprised, and later reported that one driver was unable to receive mission requests by TASK on his phone. Other provider reported that occasionally, he would get TASK requests with 1-day delay. Moreover, some providers have reported that they will not accept missions via TASK, due to the current payment method which does not consider the exact distance the provider had to complete for the mission.

Confronted with this reality, it was decided that there should be a swift revision of the **TASK system**, starting with the providers who currently use it, to understand the **root** cause of the problem and resolve it.

Improve TASK

For providers to be able to leverage the benefits from TASK, it is crucial to guarantee a flawless performance of the system. Not doing so can hurt providers own performance. Thus, understanding what is causing the **high refusals by time-out** is a priority.



Some **hypothesis** that should be tested are:

- 1. Drivers do not listen to the notification sound of the app;
- 2. Lack of compatibility between the phone software and the TASK app;
- 3. Network connectivity gaps between the HQ and/or the driver.

Recommendation

- Send an email to all the providers using TASK, to understand what is their 凤 overall experience using the app and what problems they experienced.¹
 - Collect internal data on the statistics of TASK and Inosat refusals to check if the problem is ongoing, or if it has worsen/improved. Additionally, collect error reports from the TASK app developers with details regarding the errors.
 - Sound notification on the phone equal to the one received in the HQ, to guarantee that the driver hears the TASK notification with EAP's mission request, thus decreasing refusals by timeout.
 - Simplify acceptance process, by allowing one of two option: (1) EAP sends the mission request and the provider central accepts/refuses service; or (2) EAP sends the mission request and the driver accepts/refuses service.
- **E** Define a **fair payment** method that considers the exact kilometres completed by the provider, by setting the starting point where the tow truck is.



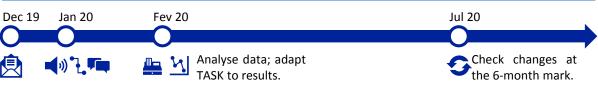
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- Improve communication between the Providers' Team and the IT **department**, so that the former is kept updated on progresses made and the latter is aware of providers' challenges dealing with the app. Promote monthly follow-ups on the tickets created.

Implementation



Some providers with scores between 0 and 2 may be able to deliver a good service despite being in the low performance group. Still, 14 providers were identified as not having a good performance, and **should be excluded** to create a better performing network without compromising capillarity, in the beginning of 2020.

6 Recommendations | Rearrange Bottom Performers¹

Situation

From the analysis derived from the **performance pillar**, it was found that from the current network of 329 providers, 63 of them had **scores between 0 and 2**.

These providers make the network less efficient and less effective, due partly to their **high refusal rate** and **low digitalization rate**. However, some of them are considered to be necessary in order to ensure the high capillarity of the network.

Still, it is believed that from these 63 providers, there are those who are **not relevant to the network**, in terms of volume as well as capillarity.

Rearrange Bottom Performers

Providers that are found to have an extremely low performance and no relevance for the network's capillarity should be **excluded from the network**.

These providers are not contributing to the optimization of the provider's network, due to their **low relevance**, coupled with **high refusal rates.**

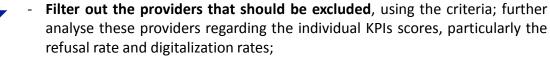
The criteria used to identify providers that should be **excluded** from the network were:

- 1. Overall performance score between 0 and 2;
- 2. **Low relevance** in the acting counties (below 33.3% share of missions in all the counties it completes missions).

By excluding the **identified 14 providers**, more than a thousand missions can be allocated to better performing providers, thus **improving efficiency** within the network.

A deeper analysis of these providers and the counties they act in is then necessary to assess the effect their exit will have on the network and to always guarantee that the **network's capillarity is not being compromised**.

Recommendation



- Decide if providers should be excluded from the network, and consider the **implications**;
- In case the provider is excluded, decide if it needs to be replaced, and by whom: (1) exclude provider and replace with another from the network; or (2) exclude provider and replace with another from outside the network (potential provider);
- **Initiate contact** with the **potential** provider and negotiate contracts with proposed SLAs linked to EAP's KPIs.
- After 1 year of being in the network, newly added providers' performance can be **assessed**.

Implementation

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RoS is beneficial for EAP as well as the customer, which can have the vehicle repaired faster. One of the aspects that allows for the increase of RoS missions is its diagnosis, which depends on the call-center operators as well as the customer correctly identifying the type of vehicle breakdown.

6 Recommendations | Improve RoS Diagnosis

Situation

One of the targets for 2020 is a **RoS rate of 18%**. This increase, from the current 12%, would imply a **reduction in external costs**, via second services.

However, **not all vehicles can be repaired on spot**, either due to the breakdown itself or because of the place of the breakdown, as it is not possible to carry out a RoS on vehicles in highways, some vehicles from fleets as well as vehicles involved in accidents. Moreover, some breakdowns cannot be repaired on spot, and will need to be towed.

In this sense, it is crucial that all potential **RoS missions are properly identified** as such, so as to maximize the number of RoS missions.

Customers benefit from a successful RoS service by allowing the customer to proceed with their journey faster without need for **unnecessary towing**. However, in interviews with providers, it was revealed that some customers do not want their vehicles to be repaired on the road, but rather **want it towed to a repair shop**.

Improve RoS diagnosis

For the number of RoS missions to increase, it is crucial to **identify potential RoS missions** that come through the system.

The **provider** should be informed of the nature of the mission, to take any necessary specialized equipment, and the **customer** also informed of the potential of an RoS, so it doesn't suspects the provider's intentions. The customer should also be made aware, previously, if the **insurance policy prioritizes RoS over towing**.

Recommendation

- For the digitally activated channels, make sure that in case of a breakdown, the priority is to rule out a potential RoS (using the script questions).
- Increase training of the call-center operators to improve identification of RoS missions. Additionally, instil the use of the RoS script on every potential RoS mission, and inform the provider regarding the RoS issue.
- Collaborate with providers, to **promote communication with the customer**, in the sense that after the mission is accepted, the provider should call the customer and try to understand the type of breakdown faced by the vehicle and if it **possible to RoS**.

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Consider the feasibility of a **Phone Fix solution**¹, dedicated to vehicles with an **on-board diagnostic** system, which would not require the dispatching of a provider to the scene. It could be **particularly useful for EVs**.

Implementation



Priority should be given to internal improvements, that represent minimal effort. The Phone Fix solution requires a higher investment, and should not be implemented in the next 2 years.



Linking KPIs to SLAs could help to improve business relationships, where potential problems and incidents can be avoided or its impact can be minimized. Furthermore, these tools help businesses to improve service quality and to stay competitive.

6 Recommendations | Linking KPIs to SLAs (1/2)

SLAs and KPIs in the business context

Conducted at Erasmus University Rotterdam, the study analyzed the role of business relationships in the transport and logistics sector. It was concluded that SLAs may contribute to the **improvement** of medium and large sized **business relationships**.

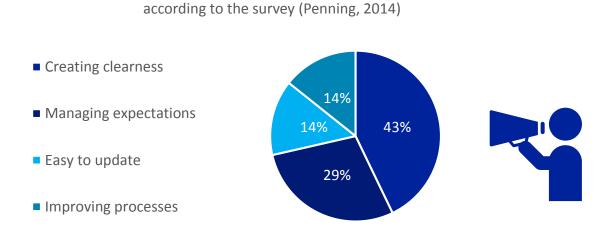
A chapter of the study explores scenarios where some problems may arise when two independent companies cooperate with each other. SLAs play an important role regarding **problem management**, which aims to **minimize the impact of incidents and problems**, and this area can try to **resolve potential incidents** that may arise.

Similar to this study, Europ Assistance Portugal cooperates with various providers, thus the existence of SLAs will help mitigate the impact of potential problems. Without SLAs, providers do not know exactly what level of service is expected from them and if problems arise, they do not know where the responsibility lies.

However, the link between SLAs and KPIs is a doubled edged sword: it designs the role of **problem management** between the cooperating companies and it **tracks**, **reports**, **monitors**, and **measures performance**. By reviewing service performance levels regularly, the provider may **improve performance** and help **prevent potential problems**. The performances may be tracked as benchmarks, targets, and metrics, such as KPIs.

Due to the effectiveness and transversal role of the SLAs and KPIs, many industries adapted these tools to **improve service quality** in order to stay **competitive**. The study also recognises that SLAs are a useful tool for identifying the **key services** and **processes** required to meet business needs.

Benefits of SLAs in business relationships



Graph 25: Main Benefits of SLAs,

According to the survey regarding the **benefits of establishing SLAs** to various professionals in the transport and logistics business, the most important benefit of SLAs is the fact that it **creates clearness**. This means that the operational processes and performance levels of the services are recorded in a document, and as a result, problems and conflicts are prevented.

Additionally, the expectations are clearly stated, and they can also be adapted quickly to new developments.

KPIs should be **clearly communicated** to the providers and SLAs should be linked according to each provider's capabilities. In order to **increase performance**, providers must be monitored and KPIs must be assessed every year, with annual check-ups, and recalibrated according to the changing environments.

6 Recommendations | Linking KPIs to SLAs (2/2)

Situation

Setting KPIs is as important as communicating them clearly to the providers. It is crucial for providers to be knowledgeable of what are the key performance metrics, in order to keep the services at an agreed quality level.

The service-level agreement (SLA) is the **contract** between the service providers (in this case towing companies) and the client (EAP) that defines the service standards that the provider is obligated to meet.

Linking KPIs to SLAs

The following KPIs should be included in the providers' contracts as SLAs:

TTA – Time to arrival is one of the most important KPIs because it is an **industry standard** to serve the customer at the breakdown location within 45 minutes, starting from the dispatch of the truck to arriving at the scene. Missions in the highways would have a different TTA.

RR – Refusal rate is a key indicator of the provider's willingness to accept a service. There are multiple reasons for why a provider does not accept to receive a mission, but the important factor is to reduce it. A **low refusal rate** indicates a content provider.

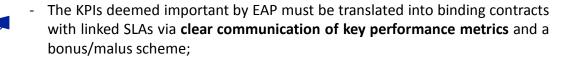
GPS – GPS is the **digitalization rate** KPI, which indicates the missions that are traceable. This component is critical for EAP in order to **retrieve accurate data**. Currently, the digitalization rate is at 42% and it should target 60%.

RoS – Repair on Spot is a service that fixes certain issues of a car in the assistance requested place. When repair is successful, RoS can **lower average costs** per mission as a second service will not be necessary.

Recommendation

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- Align realistic targets KPIs with each providers according to their capabilities, following a minimum target;
- KPIs should be **annually revised and adapted** to the changing environment to guarantee the accurate reflection of providers performance and assess if it is still in line with SLAs;
- Deliver to providers a quarterly **dashboard report** on their performance level as part of the communication plan, thus making the provider aware of its own progress.

Implementation



Assess if target KPIs are met and monitor providers compliance. Annually, revise and update KPIs and respective SLAs.



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The main risks associated with the major projects' implementation are categorized in a table, based on a qualitative analysis. This exercise allows for the ideation of the causes that lead to the occurrence of these risks and the potential responses, needed to control its impact.

Risk Analysis (1/2)

Table 20: Analysis Of Risks Associated With The Major Projects, Regarding Potential Causes, Probability, Impact And Potential Responses

| | Risk Description | Causes | Probability | Impact | Potential Response |
|---|---|---|-------------|--------|---|
| | Planning Error ¹ | Underestimating the time needed for each project (developing, negotiating, implementing, etc.) due to poor forecast. | Medium | Medium | Redefine deadlines and implementation dates. |
| 1 | Difficult relationship management with relevant providers | No more quotas and new criteria selection imply that some current high-priority providers will not be the first selection choice. | High | High | Communicate system changes before implementation and explain benefits of new system (performance is key). |
| | Misfit between composite score and individual KPIs score | Weighted average is not adequate; company targets changed. | Medium | Medium | Update score based on the company's strategy throughout time (yearly). |
| | High levels of complexity on developing and implementing the new system | IT department doesn't have enough resources (time, capabilities) to create the new system. | Medium | High | Outsource an IT developer's team to create the new system. |
| 2 | Low demand for RoS services | RoS only for specific simple repairs, thus cannot fix all RoS problems. | Low | High | Increase offer to include more "useful" services (expand to include pickups). |
| | Low success rate of RoS missions | Wrong diagnosis of simple RoS cases (operations identify a wrong RoS; impossible to complete RoS with motorbike). | Low | Medium | Accurate diagnosis of the type of breakdown (operations). |
| | Bureaucracy's problems of creating an independent company | Fiscal problems not predicted when creating a new company or a subsidiary. | Medium | Medium | Incorporate Motorbike Repair Project inside EAP without creating a new company or subsidiary. |
| | Lack of transparency as perceived by institutional clients | Institutional clients do not know how the premium paid is being managed by EAP. | Medium | High | Clarification to the clients about the payment application. |



Only one of the risks was classified as having **high probability** as well as **high impact**. Additionally, five other risks were identified as having high impact, although the probability of them occurring is low/medium.

Risk Analysis (2/2)

Table 20: Analysis Of Risks Associated With The Major Projects, Regarding Potential Causes, Probability, Impact And Potential Responses (Continuations)

| | Risk Description | Causes | Probability | Impact | Potential Response |
|---|---|---|-------------|--------|---|
| 3 | Partnership is not implemented, due to the unsuccessful outcome of the negotiations | Providers have high volumes to negotiate, thus already have high discounts (or high switching costs) or institutional partners may not be interested in the partnership | Low | Medium | Re-design partnership scheme (consider the feasibility of different types of bundles; or expand the scheme to all the network providers) |
| | Partnership is not implemented, due to the lack of providers' commitment | Providers who have lower discounts do not adhere to partnership scheme by not wanting to get out of their comfort zone and for being risk averse | Medium | Medium | Good communication regarding the benefits providers would gain by adhering the partnership |
| | Providers' compromise company's name | Providers don't comply with the volume agreed with the institutional partners | Low | High | End the partnership scheme (does not make sense to continue, once proven its unsuccessfulness) |
| | The time/effort does not compensate for the benefits of this partnership | Providers do not change their behavior; or time/effort to implement is underestimated | Medium | High | Re-design the monitoring of the providers performance (consider penalties) |

The Quick Wins selected by the Team were pointed out throughout the project, during the several meetings with internal experts. These were always identified as low risk measures, since they could be implemented in a few-months time and required negligible financial investment. This said, a risk analysis was not applicable to these recommendations. Even so, the Team performed Brainstorming Sessions and outlined some potential risk to assess the soundness of each recommendation.

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"... group has different backgrounds (...). These **differences** should not be considered obstacles but on the contrary, an **advantage to achieve better outcomes**."

10 Appendix | Individual Reflections | João Lima # 25721





João

International Masters in Management

Key learnings

In the future, I want to pursue consulting, since I believe it is a great career starter. Thus, I joined the Consulting Lab to have a **real-life consulting experience**. Now, I can say with confidence that I made the right decision.

"I've been playing sports since I was a kid: tennis, rugby, futsal, football... I love to be active!

I'm passionate about traveling. I went backpacking across South America for two months with friends, and was able to learn a lot about different realities and cultures." Several presentations and meetings with people which had different levels on the company's hierarchy, given that the members of the group took into consideration the person they were talking about and adapted the speech. Moreover communication within the group is key, communication should be clear and respectful, in order to achieve the project's success.



Belbin Analysis



Top: Teamworker, Operational

During this project, I focused on listening to each team members' opinions, valuing each one and transmitting that together the results will be greater. I am a very practical and logic person, who appreciates working in a methodical and organized way. I was able to develop the capability of making decisions under pressure.

Bottom: Intellectual, Finisher

This project made it even more clear that for a group project to be successful, cooperation is key. Even more, when the group has different backgrounds, such as: Engineering, Financial, History, Management. These differences should not be considered obstacles but for on contrary, an advantage to achieve better outcomes.

