

A Work Project, presented as part of the requirements for the Award of a Masters Degree in

Management from the NOVA – School of Business and Economics.

# IMPROVING CONTACT CENTER COST EFFICIENCY AND CUSTOMER EXPERIENCE IN A RETAIL COMPANY

Booklet 1 of 2

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# **Table of Contents**

1 - Abstract
2 - Introduction: The Purpose of the Project
3 - Overview
3.1 - The MAICO SR Company and the HOGO Retail Store
<b>3.2 - Contact Center Services in the Retail Industry</b>
3.2.1 - Outsourcing Contact Center Services
4 - Methodology
5 - Data Analysis
5.1 - Historical data analysis of the volume of Customers' calls
5.2 - Focus on the Repair Service's calls – Problem Understanding
5.3 - Wiretapping Phase Conclusions
5.3.1- Store/Supplier Repair Processes within the Defined Deadline: Problem Definition 13
5.3.2- Home Repair Processes Within the Defined Deadline: Problem Definition
6 - Proposed Solutions and Value Creation
6.1 - Store/Supplier Repair Processes Within the Defined Deadline: Proposed Solutions and
Value Creation
6.2 - Home Repair Processes Within the Defined Deadline: Proposed Solutions and Value
Creation
6.3 - Risks and Other Possible Consequences Related with the Proposed Solutions
7 - Conclusion, suggestions and possible further developments on the HOGO Contact Center
having this Work Project as a basis
8 – Bibliography
9 – Other Appendixes of the Work Project - Booklet 2 of 2

#### 1 – Abstract

The purpose of this Work Project is to recommend feasible solutions aimed to decrease the costs of a Retail Company Contact Center associated to the high volume of inbound calls. In order to promote a higher impact on the volume of calls reduction, the Work Project focuses on the Portuguese Customers contacts regarding repair processes within the defined period for the Company to proceed with the repair and centers the research on a profound understanding of the main motivations for the Customers to call.

The proposed solutions diverse from Stores and Contact Center new specific training modules to specific actions as a follow up SMS adapted to the different types of processes, a new IVR, among others. For the solutions which are possible to compute a cost-benefit analysis, the annual savings may reach values between 41.500 and 47.100 for the Company.

Keywords: Contact Center Services, Retail Industry, Efficiency Improvement Solutions, Cost Saving.

#### **2-** Introduction: The Purpose of the Project

"Do you remember that commercial from Clix<sup>1</sup>? That one that showed the Clix Contact Center employees with nothing to do, with no calls to answer, bored and playing silly games at the office? That's the ideal Contact Center! The different processes are so well defined, simple and efficiently

communicated to Customers that the Contact Center has a very low number of calls."

Dr. John Williams (Iberian Customers' Manager)

On the first meeting with the Company's advisors at the HOGO Contact Center, Dr. John Williams, the Iberian Customers' Manager, used the Clix 2007 TV commercial to express the idea that currently the Company's Contact Center is far from the ideal. It represents a high cost to the firm due to the high volume of calls received which, in his opinion, might be avoided if it was possible to profoundly understand the motivations for the HOGO Customers' to call.

Obviously, having a Contact Center with no calls is an utopia but the purpose of this Work Project is moving to a reality closer to this utopia by understanding the HOGO Customer, the reasoning behind his/her contact and through creating solutions to diminish the Customer's impulse for using the HOGO phone line.

As it is comprehensible, on a multi-functional Contact Center where more than 104 different possible actions may be performed, this Work Project will be a start on the demand of reducing the total volume of calls received since it will be focused in analyzing and decreasing the number of contacts associated with one of the services provided.

The final objective of the Company is to know its Customer in all its dimensions and discover new correlations between different services, different calls and different

<sup>&</sup>lt;sup>1</sup> Clix Commercial. **2007.** Clix.pt.

motivations for a single Customer to use the phone line creating coordinated actions to reduce the total volume of calls and the costs associated to it. A final aim that will strongly benefit from the new HOGO Loyalty Card which will be seen as a common identifier of the Client, allowing to study a Customer across different processes.

Therefore, summarizing, the purpose of this Master's Thesis, will be to focus on the service related to the higher volume of calls received at the HOGO Contact Center and define new actions to decrease the current number of calls received and the costs associated to it.

## 3. Overview

## 3.1- The MAICO SR Company and the HOGO retail store

Positioned on the non-food retail marketplace and shaped to be present in five different specialized markets (clothes, sports, electronic consumption, home appliances and entertainment), the MAICO SR Group is a sub-holding of the MAICO Group.

Taking advantage of a market opportunity, in 1994 MAICO SR created the HOGO insignia aimed to be the Portuguese leader in the fields of home appliances, electronic consumption and entertainment. Currently, HOGO is composed by more than 160 stores in Portugal and has experienced a singular growth in a Spain holding more than 60 stores.

Focused on Customers, HOGO claims quality low priced products and assumes a competent after-sales support service which includes an innovative all-in-the-same-place service, located in some stores and developed to be a place where Customers may find all the after-sales support they may need; a certified complains process, which guarantees a quality Customer's complains management audited by an external firm and a Contact

Center composed by inbound, outbound and back office operations aimed to support both Customers and the Company's stores.

As a reference operation on the after-sales service, the Contact Center provides Customer's support in what regards to product information, repairs processes (home and store/supplier), home deliveries, online purchases, complains, services (guarantees and insurance), product parts purchase, budget repairs management, last resort line (intended to find solutions for Customers on stores about to complain) and e-mail answering. It also provides store's support, service quality surveys and second line sales<sup>2</sup>.

In 2012, the MAICO SR Group's Turnover was €1.180M.

# **3.2-** Contact Center Services in the Retail Industry

As Customer's demands become increasingly refined, retail companies continuously adapt its offer in order to keep satisfying and surprising Clients. When for Customers purchasing "became a multi-sensory experience, retailing became something more than just a series of transactions"<sup>3</sup>. Nowadays, following the new consumer trends, "retail companies have begun learning how to sell a complete experience, not just a product" (Shaun Smith, 2010). "A retail company Contact Center is part of a large Customer interaction universe that manages Clients' contacts through a variety of ways such as phone, fax, letter, e-mail and

 $<sup>^{2}</sup>$  When answering a product information call, the operators may convert the contact on an income to the Firm by proposing the Customer a second line purchase (phone purchase).

<sup>&</sup>lt;sup>3</sup> Guiding Smarter Interactions in Retail. 2013. Cincom Sistems, Inc.

online live chats<sup>3,4</sup>, furthermore, "it is a critical touch point for building Customer relationships that result in brand loyalty, lifetime value, and bottom-line impact<sup>3,5</sup>.

Statistical information refers that "73% of European Consumers said they would do business with a company based on a great Contact Center experience and, of these, 15% would do so even if prices were higher than the average"<sup>6</sup>. On the other hand, "almost 25% of all Customer callers base their departure from a company solely on their experience with the Company's Contact Center"<sup>7</sup>. Accordingly, these numbers "should be reason enough to start elevating Contact Centers to a higher priority company-wide"<sup>7</sup>, moreover, since recent reports state that "progressively more, Customers use the phone call contact only when they have a complex question"<sup>8</sup>, managers should also consider driving Contact Centers towards a high skilled and high knowledgeable operation.

Specially for retail firms, that greatly depend on Customer satisfaction to promote repeated purchasing, it is worth mentioning that "a company that fails to invest resources in Contact Center operations to assure delivery of satisfaction rather than frustration is taking an enormous risk with one of its most important assets: the satisfied Customer.<sup>7</sup>"

## 3.2.1 - Outsourcing Contact Center Services

Despite of the pros and cons concerning outsourcing Contact Center services, increasingly it has been a choice for companies. In fact, it "might be a good solution for organizations that find multichannel Customer service daunting, helping organizations improving relationships with their Customers" (Wadsworth 2013).

<sup>&</sup>lt;sup>4</sup> Definition sources: **Satisfaction with Contact Centers Drives Customer Loyalty.** 2007. CFI Group. and **Contact Center Business.** 2013. Wikipedia Org.

<sup>&</sup>lt;sup>5</sup> The Contact Center: Low Cost Driver...or Strategic Differentiator?. 2013. Telerx.

<sup>&</sup>lt;sup>6</sup> Customer Strategies for the Retail Industry. 2008. Genesys Telecommunications Laboratories, Inc.

<sup>&</sup>lt;sup>7</sup> Satisfaction with Contact Centers Drives Customer Loyalty. 2007. CFI Group.

<sup>&</sup>lt;sup>8</sup> 20 Predictions for the Contact Center of the Future. 2013. Call Center helper.

The key advantages of Contact Center outsourcing rely on "performance improvement by service providers, significant cost reduction potential, ability to deal with rising Customer demand for multiple support channels and declining in-house capabilities in terms of dated tools, processes and methods due to other investment priorities<sup>9</sup>". Still, there are also strong disadvantages regarding this solution as "proper communication of brand values by the outsourced company, loss of vital insights from the Customer conversations, decreased control over business functions, security and privacy concerns and linguistic and cultural barriers on the case of Contact Center offshore outsourcing<sup>10</sup>".

It is worth mentioning that the negotiation between a company and the outsourced solution is based on contracts that may differ on its characteristics. Among others, some of the most common contracts stand on agreed costs per minute of call answered, agreed cost per specific task (as answering an e-mail), a cost per process (as with complains that must be followed through a diversity of stages) and a cost per resource, when there is a specific employee working for the company and it is not possible to define a specific task to charge. In addition, other service level agreements, for more general metrics, are also usually defined as the rate for the ratio between calls answered and received (e.g. 90%) or waiting time period on the line (e.g. lower than 30 sec) and sanctions or bonuses may be applied according to the performance of the outsourced company.

In conclusion, "the Contact Center services provider landscape has been changing with new entrants trying to differentiate themselves with new technology applications and service

<sup>&</sup>lt;sup>9</sup>Contact Center Outsourcing. 2013. Information Services Group.

<sup>&</sup>lt;sup>10</sup> The Pros and Cons of Call Center Offshore Outsourcing. 2013. Talkdesk Blog. and In-House Versus Outsourced Call Centers. 2013. International Customer Management Institute.

offerings<sup>11</sup>", that is why it has been increasingly a choice for companies that search for lowering costs while improving Customers' interactions.

#### 4 - Methodology

As it was stated on the Work Project introduction, the purpose of this thesis is to address the question "*How to reduce the high volume of calls received on the HOGO Contact Center and the costs associated to it*" through understanding the Customer's motivations for using the HOGO phone line and by proposing solutions to reduce the Customer's impulse to call.

The Work Project is divided in two parts, the initial part has the objective to lead the reader through the understanding of the problem and the reasoning behind the definition of the focus of the Project and the second part aims to propose feasible solutions to face the main motivations that generate the call from Customers to the Company's Contact Center.

**Work Project Internship:** An Internship of five months was carried out on the Company within the Contact Center Management Team and with strong involvement on projects such as the new Company's Loyalty Card launch, the Store Reservation Program launch, the Repairs Microsite launch and the *All-In-The-Same-Place* service certification, which allowed building a broad base of knowledge regarding the after sales service functioning and the purpose and intervention of the Contact Center.

**Documental Analysis:** A documental analysis study was used firstly on the Data Information Analysis stage, the analysis of the historical data concerning the Contact Center functioning allowed to clarify the Work Project's main question and, on a second

<sup>&</sup>lt;sup>11</sup> Contact Center Outsourcing. 2013. Information Services Group.

moment, on the Wiretapping Phase, through listening to the Customers' calls and consulting their files, using July and September as the two reference months, it was possible to typify motivations for the Customer's call.

**Interviews:** To enrich the Work Project, interviews were conducted with the Contact Center Manager, with the Iberian Customer's Manager and with IT experts in order to understand their view point on the problem of the Work Project and Proposed Solutions.

**Analytical Analysis:** The analytical study of the problem stated and of the cost benefit analysis of the solutions proposed was conducted using Microsoft Office Excel. No scenarios for the solutions proposed were stated, instead, the cost benefit study was conducted using break-even points for costs and volume of calls reduction.

To conclude, it is worth mention that the definition of these methodological steps was to ensure that the final results and proposals were accurate and feasible on the context of the HOGO Company.

## 5. Data Analysis

## 5.1- Historical data analysis of the volume of Customers' calls

The motivation that supports the challenge of reducing the volume of calls on the HOGO Contact Center comes from the analysis of the existent historical data concerning the Contact Center metrics. It becomes essential to promote this analysis in order to profoundly understand the problem and further define actions to solve it.

As it is possible to see on *appendix 1*, the volume of Portuguese inbound calls is significantly higher when compared to the Spanish, a predicted conclusion given the fact that there are significant differences on the dimension of the Insignia in the two neighbor

countries. However, in spite of this difference, in both countries is possible to perceive a growth of the total volume of calls from January to October 2013. It was observed a total growth of the volume of calls of 18% in Portugal and 9% in Spain.

An additional analysis regards the interactive voice response system (IVR<sup>12</sup>) which gives information concerning the most selected queries when a Customer calls for the HOGO Support Line. Through the analysis of this information it is possible to understand the main motivations for the Customers to use the HOGO Contact Center and then define in what service should this Work Project focus to be succeeded in its objective.

As it is possible to observe on *appendix 2*, repairs and product information constitute, by far, the two main purposes that originated the Customers' call for the Contact Center.

Making use of these data, and having in mind that the objective of this Work Project is to decrease the number of calls and so reduce the Contact Center costs for the Company, the decision was to focus the analysis and the solutions proposing on the Portuguese inbound calls motivated by Repair services<sup>13</sup>.

It is worth mentioning that this decision was taken having in consideration that the volume of the Portuguese inbound calls is largely higher than the Spanish, and that the repairs services is clearly the main motivation for the Costumer to call. By focusing on this category it is expected this Work Project to promote a larger impact on the volume of calls than focusing in any of the other possible options.

<sup>&</sup>lt;sup>12</sup> "Automated telephone information system that speaks to the caller with a combination of fixed voice menus and data extracted from databases in real time. The caller responds by pressing digits on the telephone or speaking words or short phrases". *Font:* **Definition of: IVR. 2012.** pcmag.com.

<sup>&</sup>lt;sup>13</sup> The calls regarding repairs are also the costly ones for the Company as it is possible to see on *Appendix 3*.

#### 5.2- Focus on the Repair Service's calls – Problem Understanding

Having defined the focus of the Work Project on the last chapter, and still within the Data Information Analysis Stage, it becomes relevant to look at the information stated on the scripts (small forms) that appear from five to five calls for the Contact Center Operators to fill. These scripts contain more detailed information regarding the last call answered by the Operator and will be helpful to go deeper on the problem definition.

As it is possible to observe on the scripts information revised on *Appendix 4*, within the Repair's IVR, the majority of the calls regard Customers with open repair processes both in Store/Supplier (48.5%) and at Home (27.72%). Furthermore, independently of the nature of process, Store/Supplier or at Home, calls mainly concern processes within the defined period for the Company to proceed with the repair.

Hence, it is possible to state that the higher volume of calls received at the HOGO Contact Center concern open repair processes (both in Store/Supplier and at the Customer's Home) within the defined deadline for the Company to proceed with the repair. As it is not possible to go further on the motivations for a Customer that has an ongoing repair process to use the HOGO phone line, the Wiretapping Phase must focus on this matter.

## **5.3-** Wiretapping Phase Conclusions

Making use of the information described on the last chapters, a sample of 2% of the calls from the month of July (for in Store/Supplier repair processes within the defined deadline) and September (for at Home repair processes within the defined deadline), considered as

"reference months",<sup>14</sup> was wiretapped and the conclusions reached were determinant to complete the problem definition analysis.

<u>5.3.1- Store/Supplier Repair Processes within the Defined Deadline: Problem Definition</u><sup>15</sup> After compiling the information gathered while wiretapping 114 calls from the month of July categorized as contacts related with in Store/Supplier repair processes within the defined deadline, the main conclusions were:

# Table 1: Summary of Contact Motivations for Store/Supplier Repair Processes Within the

Contact Motivation	Absolute Value	% Total Audited Calls
Customer's request of information about the		
status of an ongoing repair process	77	67,54%
Fault in communicating that the repaired		
product had already returned to the store	24	21,05%
Delay on the outbound call from the Contact		
Center/Technician communicating to		
customers the budget for the repair	6	5,26%
Demand from Customers to introduce		
changes on their ongoing repair process	3	2,63%
Customer's return call to a Contact Center		
contact	3	2,63%
Customer's request of information about the		
technicians modus operandi	1	0,88%

## **Defined Deadline**

Focusing on the main motivation for the call, concerning the contacts categorized as *"Customer's request of information about the status of an ongoing repair process"*, 44,16% of them regarded IT products, 24,68% Telecom products and 20,78% Household Appliances. Going further on the analysis, 69% of these contacts were related to Warranty processes and the Customers' call was, on average, on the 17<sup>th</sup> day counting from the

<sup>&</sup>lt;sup>14</sup> Further information on the Sample definition on *Appendix 5*; Further information of types of processes available on *Appendix 6*.

<sup>&</sup>lt;sup>15</sup> Please see schematically detailed information on the Wiretapping Phase Conclusions for in Store/Supplier Repair Processes within the Defined Deadline on *Appendix 7*.

beginning of the process; 14% reported Budget processes and the Customers' call was, on average, on the 27<sup>th</sup> day counting from the beginning of the process; 12% were about Insurance processes with calls, on average, on the 19<sup>th</sup> day counting from the beginning of the process and 5% were related to reopening processes with calls, on average, on the 13<sup>th</sup> day counting from the beginning of the process.

Regarding contacts concerning a "Fault in communicating that the repaired product has already returned to the store", the Customers' call was, on average, 9 days after the repaired product had return to the store.

5.3.2- Home Repair Processes Within the Defined Deadline: Problem Definition<sup>16</sup> The main conclusions taken from wiretapping 72 calls from the month of September of at Home repair processes within the defined deadline were:

 Table 2: Summary of Contact Motivations for at Home Repair Processes Within the Defined

Contact Motivation	Absolute Value	% Total Audited Calls
Customer's request of urgency in scheduling		
the visit from the Technician	29	40,28%
Opening of a new at Home repair process	28	38,89%
Customer's demand to introduce changes on		
his/her at Home repair process	5	6,94%
Reopening of an at Home repair process	5	6,94%
Customer's call reporting a problem with		
Technicians during the repair process	2	2,78%
Customer's demand for a more specific time		
period for the technician's visit	1	1,39%
Customer's request of information regarding		
at Home repair processes	1	1,39%

# Deadline

<sup>&</sup>lt;sup>16</sup> Please see schematically detailed information on the Wiretapping Phase Conclusions for Home Repair Processes Within the Defined Deadline on *Appendix 9* 

Focusing on the main motivation for the call, 55% of the Customers that contacted the Contact Center hadn't received yet the call from the Technician to schedule the visit, 24% of the Customers had a registration of attempt to contact missed on their file from Technicians to schedule the visit to their home and 21% of the calls regarded Customers waiting for the second visit of the Technician to finish the repair process. It is worth say that 96,55% of these Customers had a Warranty process and just 3,45% of them had a Budged repair process.

## 6- Proposed Solutions and Value Creation

Having performed an in depth analysis of the motivations for a Customer with an ongoing repair process within the defined deadline (in Store/Supplier or at Home processes) to call for the Contact Center, it is time to propose solutions that are expected to decrease the volume of calls for the Contact Center, reduce the costs of some of the current activities performed in the Contact Center operation and increase the Customer's satisfaction with the Company's after-sales support service.

It is worth mention that, on average, from January to September, the Company dealt with 50.539 monthly repair processes in Portugal, 16% regarding at Home repair processes and 84% concerning in Store/Supplier repair processes, which generated a monthly average of 15.565 calls from Customers.

# 6.1 - Store/Supplier Repair Processes Within the Defined Deadline: Proposed

#### **Solutions and Value Creation**

As it was possible to read on the problem definition section dedicated to this specific category of processes (chapter 5.2.1), there are 6 main motivations for Customers to call for the Contact Center regarding their in Store/Supplier repair process within the defined deadline. However, it is possible to assembly these 6 motivations in three different groups: Group A will deal with the two main motivations for the call which together compose 88,6% of the audited calls within this category (Customer's request of information about the status of an ongoing repair process and Company's fault in communicating that the repaired product had already returned to the store) so, on this chapter, due to its weight, it will be given greater importance to this group; Group B will focus on the two motivations within this category which are considered to be easy to solve (Delay on the outbound call from the Contact Center communicating to Customers the budget for the repair and Customer's request information about the Technicians modus operandi) and finally, Group C, will cluster the two motivations for calling that are unexpected and considered not to have or not intended to have a solution (Customer's return call to a Contact Center contact and Demand from Clients to introduce changes on their ongoing repair process).

Starting with **Group A** and regarding the motivation "*Customer's request of information about the status of an ongoing repair process*", it is important to state that, first, it represents **67,54%** of the audited calls on this category, secondly, that with these contacts the Customer has the purpose to be informed regarding the status of his/her ongoing repair process, and third, that, on average, the duration of the call is 03:44:33 minutes, which

means an estimated monthly average cost of  $\notin 4.051,81$  for the Company with this motivation materialized in about 4.076 monthly answered calls<sup>17</sup>.

Since the cause for the contact regards to the lack follow-up from the Company to Customers about their repairing process, six different solutions were studied and will be presented on the next paragraphs.

• <u>Solution A</u>: follow-up SMS to inform the Customer about the status of the process.

An SMS sent from the Company to the Customer with the updated status of his/her repairing process is expected to, on one hand, reduce the number of calls generated by this motivation since the SMS will clarify the Customer's question usually made on a call and, on the other hand, increase Customer's satisfaction with the Company through generating a feeling of uniqueness and care on the Client.

However, sending an SMS has costs associated and a cost-benefit analysis must be conducted to enable further comparisons with the other solutions proposed.

To perform this cost benefit analysis, five hypotheses were considered: first, since it is not possible to predict what Customers will contact the Contact Center to ask about the status of their repairing process, the text message must be sent to all the in Store/Supply repairing processes. Secondly, the Repairs System of the Company is new and a huge development plan is being mapped and budgeted, so despite of an automatic SMS generated by the system being the best alternative, that won't be possible in the near future and since the repairing calls problem must be faced as soon as possible, this future automatism won't be considered. Thirdly, the development of the means to send the SMS (system extraction

<sup>&</sup>lt;sup>17</sup> Estimated monthly average cost computed with data from January to September 2013, please see *Appendix* 9 for more detailed information

query) will be done by the support team that currently works for the Company, since this development cost can't be measured without confidential data (as the salary of the technician) it will be considered zero. Fourth, if it is the case that this SMS has to be sent by the Company and not by the Outsourced Contact Center Company, it is worth mentioning that the cost of 1 daily hour to perform this task can't be accurately measured since it would be needed confidential data (as the salary of the worker) thus it will be considered that the monthly cost for the worker to perform the task is  $\in 170, 45^{18}$ .

Finally, in order not to be limited by specific values or percentage reductions in terms of calls and costs, this cost-benefit analysis was performed to reach a breakeven value of costs and calls reduction (as for example "the reduction of this category of calls must be higher than X% to be worthwhile to send the SMS, is it attainable?") and having in mind that the cost of the task "sending follow-up SMS to Customers" performed by the Company is  $(0,045 \in + VAT)$  per SMS +  $\ell 170,45$  (monthly worker cost to perform the task) and performed by the Outsourced Contact Center Company is  $0,09 \in +VAT$  (per SMS).

Moreover, and to finish this introduction, for this study it was considered that the SMS can be sent depending on the type of process (Warranty, Budget or Insurance)<sup>19</sup> or depending on the type of product and process, particularly IT and Telecom products which represent 43% of the repairing processes and 69% of the calls answered concerning this motivation.

The main conclusions were that:

 $<sup>^{18}</sup>$  Assuming an employee income of €1000 per month and a 30 minutes daily task.

<sup>&</sup>lt;sup>19</sup> For Warranty Processes it was considered 1 SMS on the  $15^{\text{th}}$  day, for Insurance Processes 1 SMS on the  $20^{\text{th}}$  day and for Budget Processes 2 SMS, one on the  $10^{\text{th}}$  day counting from the beginning of the process and one on the  $15^{\text{th}}$  day counting from the day of the approval of the budget, or just 1 SMS, the one on the  $15^{\text{th}}$  day counting from the day of the budget (please see detailed information on *Appendix 10*).

			For this	solution to be valu	iable,			
SIN B A	AS Cos enefit Break Even nalysi	st t is	SMS Sent by	Number of SMS	Monthly Cost (€)	the reduction of the COST OF THE CALLS associated to "Customer's request of information about the status of an ongoing repair process" must be higher than:	the reduction of the NUMBER OF CALLS associated to "Customer's request of information about the status of an ongoing repair process" must be higher than:	the reduction of the NUMBER OF CALLS associated to "in Store/Supplier repair processes" must be higher than:
	٥		Company	1 Warranty; 2 Budget; 1 Insurrance	2.066€	51,00%	48,38%	32,67%
	Type Cess		company	1 Warranty; 1 Budget; 1 Insurrance	1.861€	45,93%	43,57%	29,43%
	Pro Pro		Outsourced	1 Warranty; 2 Budget; 1 Insurrance	4.266€	105,28%	99,87%	67,45%
	SM		Company	1 Warranty; 1 Budget; 1 Insurrance	3.804€	93,89%	89,06%	60,15%
ъ	8		Company	1 Warranty; 2 Budget; 1 Insurrance	1.136€	28,03%	26,59%	17,96%
Type	(Just	(mo	company	1 Warranty; 1 Budget; 1 Insurrance	1.034€	25,53%	24,21%	16,36%
Sby	duct 11 a	Telec	Outsourced	1 Warranty; 2 Budget; 1 Insurrance	2.172 €	53,60%	50,84%	34,34%
SM	Pro		Company	1 Warranty; 1 Budget; 1 Insurrance	1.944 €	47,97%	45,50%	30,73%

According to the Contact Center Manager, Mary Wilson, an SMS is expected to reduce the number of calls regarding "*Customer's request of information about an ongoing repair process*" in about 40%, which, through the observation of the table above, dismiss six from the eight options stated.<sup>20</sup> However, the proposed, and more efficient, solution option is the Company's SMS by type of process 1 warranty, 1 budget and 1 insurance.

The new Company Loyalty Card may also aggregate value to this solution since it would be interesting have the possibility to ask the Customer if he/she was interested in receiving this information via new free communication *apps* (as *whatsapp* and *viber*) which would eliminate the costs of the SMS from the equation.

• <u>Solution B</u>: E-mail to inform the Customer of the status of his/her process.

Rather than the use of a text message, an e-mail with updated information regarding the repairing process status was considered. However, despite the low costs that this solution

 $<sup>^{20}</sup>$  A different SMS, without the process status information and not adapted to the type of process, just informing that the Company is monitoring the Customer's process started to be sent daily in November to in Store/Supply Warranty processes on the 10<sup>th</sup> day from the beginning of the process. So, no results are known about its efficacy yet, but it is expected that an SMS as the proposed one, with Status information about the process and adapted to the different periods of the different types of processes, to be more powerful and effective than the current one.

comprises (price per e-mail equals zero) there are two main problems that may occur that have led to forget this option. First, the number of Customers that don't have an e-mail account or that doesn't communicate it due to promotional marketing is still high and secondly, as technology evolves, the filters for spam are becoming more and more efficient, and an e-mail informing of the status of the repairing process from HOGO that is seen after some days on the spam box might generate a Customer's call to understand if there was an evolution since the e-mail receivable, which would be counterproductive.

• <u>Solution C</u>: Design a Microsite available for Customers to check the status of the Repairing Process

The creation of a Microsite within the Company's website aimed to let Customers to check the status of their repairing process was a solution already in progress. In fact the Company expects that this  $\notin$ 4.000,00 investment decreases in 10% the calls regarding this motivation. The increasing use of the internet among Clients and the demand for low time waiting to check information will determine the success of this project.

Since this solution was already in progress, I integrated the project development team and participated on meetings to define the solution's details and completed the tests to check the performance of the Microsite. A proposed improvement is to format the Microsite to be compatible in Smart Phones and tablets due to the increasing use of these devices since it is cheaper to format it than to create a specific App for consulting repairs, moreover the link for the Microsite could be written on the SMS.

## • <u>Solution D</u>: Automatic IVR linked to the Repairing System

The solution would be to create a new IVR system, linked to the repairing system and integrated on the current repairs IVR, for that, when calling to the Contact Center, the Customer could, through pressing the number of the process on his/her phone buttons, check the status of his/her repairing process. The Customer would be informed about this new system and about the advantages of the reduction on time waiting on the line when using it, through a voice message after pressing the Repairs IVR number.

The cost of this solution is estimated to be around  $\in 1.500^{21}$  and would decrease the need for the intervention of a Contact Center Operator since the automatic IVR would conduct the Customer and inform him/her on the status of his/her repair process (decreasing the costs of the Company with the Contact Center), moreover, it is believed that the reduction number of calls related to this motivation with this new system implementation would be of 30%, which means that, it would be fully paid in 1 month and a few days.<sup>22</sup>

Still on **Group A**, concerning the second motivation for calling present on this group, "Fault in communicating that the repaired product had already returned to the store", two activities were developed. On one hand it was needed to understand the source of the problem and, on the other hand, there was the need to turn this activity more efficient.

The Repairing System sends an automatic SMS informing Customers that their repaired product is already on the store to processes in which the cell phone number is positioned on the right place of the system's form. However, many times, the cell phone number is

<sup>&</sup>lt;sup>21</sup> Assuming the cost of a Senior IT Consultant (€90 per hour) and 2 days working. Font: IT Consultant

<sup>&</sup>lt;sup>22</sup> Considering a decreasing of 30% of the contacts related to this motivation, a total time of each call and the period of the day that the call occurs on the average of the month of July and a  $\in$ 1.500 IVR development cost.

positioned on the place of the landline phone and the system generates a list of "errors" that require the Contact Center Management Team to send manually the SMS.

There are three important facts that are worth mentioning: first, this problem is being solved since for new processes the system will automatically position the cell phone number on the right place of the form. Secondly, on the wiretapped calls from the reference month (July), Customers affirm that didn't receive the SMS. This situation happened mainly due to the fact that the extraction of the "errors" from the main repairing system wasn't being done at this time and the SMS wasn't being sent manually, so Customers with a system's message of "failed SMS" were not being informed that their product was ready to be picked on the store at this time<sup>23</sup>. Thirdly, for Customers just using landline phone numbers, a list is also extracted from the system and sent to the Contact Center Outsourced Company to callback and inform the Customer.

Having in mind the cost of  $(\notin 0, 04 + VAT)$  per SMS if it is sent by the Contact Center Management Team,  $(\notin 0, 09 + VAT)$  per SMS if sent by the Outsourced Company, the  $\notin 1.10$ + VAT cost of each callback from the Outsourced Company and the  $\notin 0.15 + VAT$  cost of an Automatic pre-recorded phone message sent to Customers<sup>24</sup>, a table with values for more efficiency and cost reduction on this task was produced and the result was an annual saving of more than  $\notin 19.000^{25}$ .

Regarding **Group B**, on the motivation "*Delay on the outbound call from the Contact Center communicating to Customers the budget for the repair*" it was considered calls from

<sup>&</sup>lt;sup>23</sup> For detailed information of the causes for this motivation, please see *Appendix 12*.

<sup>&</sup>lt;sup>24</sup> Automatic IVR PRO is a new service from the Optimus Telecom Company which allows sending prerecorded phone messages to the Company's contacts (landline or cell phone numbers).

<sup>&</sup>lt;sup>25</sup> Please see Appendix 11.

Customers which have a Budget repairing process and that called for the Contact Center before the After Sales Service had contacted them to communicate the value of the budget for the repair. Having in account that the average number of days between receiving the budget produced by the Technician on the repairs system and the Customer's call is 3 days and that the Contact Center is complying with the defined period to communicate the value to the Client and that usually the decision is taken by the Client on the moment of the call, the delay caused on the process is considered not to be significant.

Asking to the partner company to reduce the number of days to communicate the budget may not involve a high cost and since this motivation for calling represents only 5,26% of the calls received on this category, only very anxious Clients may feel damaged by this delay

Concerning the motivation "*Customer's request information about the technicians modus operandi*", the technicians *modus operandi* is clearly defined particularly when it involves the technicians from the All-in-the-same-place concept. The solution for the 0,88% of the calls on this category is to upload on the Company's website or on the All-in-the-same-place Microsite the existent designed *modus operandi* and give special attention to the way Customer's data on IT products is treated when there is a need for repairing.

Finally, Concerning **Group C**, the motivation *Customer's return call to a Contact Center contact* was considered when, for example, the customer ran out of battery on his/her phone during the call to take the decision of approving or rejecting the budget to proceed with the repairing process. Regarding the motivation "*Demand from clients to introduce changes on their ongoing repair process*", was considered when, for example, the Client realized that the problem was on the memory card and not on the camera that went for repairing.

23

As it is possible to conclude with the given examples, sometimes the return call is necessary and since Customers return the contact, there is no need for an outbound call from the Contact Center, furthermore changes on the processes may involve Customer's satisfaction and may also prevent not needed repairing process (as with the camera example) which improve the Company's image among Costumers and, sometimes, may save money to the suppliers.

In conclusion, since this **Group C** represents 5% of the calls received on this category and it is not possible to typify a solution for the calls comprised on it given the fact that the situations that generate the contact are not expectable and many times it is not on the interest of the Company to avoid the call, no solutions will be proposed.

# 6.2 - Home Repair Processes Within the Defined Deadline: Proposed Solutions and Value Creation

Similarly to chapter 6.1, there were identified seven different motivations for the Customer's contact within the category "at Home repair process within the defined deadline" which are possible group in three different clusters: **Group D** will deal with the major motivation for the contact which represents 40.28% of the calls audited within this category (*Customer's request of urgency in scheduling the visit from the Technician*), **Group E** will focus on the motivations which represent 48.61% of the calls audited within this category and are considered as easy to solve (*Opening of a new in Home repair process, Reopening of an in Home repair process, Customer's demand for a more specific time period for the technician's visit and Customer's request for information regarding in Home repair processes*) and finally **Group F**, will cluster the two motivations that are

unexpected and considered not to or not intended to have a solution (*Customer's demand to introduce changes on his/her repair process and Customer's call reporting a problem with Technicians during repairing*).

Concerning Group D, for the motivation "Customer's request of urgency in scheduling the visit from the Technician" the proposing solutions will be directed to Warranty processes (which compose 96,55% of the audited calls) since, for Budget processes there are no deadlines defined. In what concerns to this motivation, 55% of the audited calls regard Customers waiting for the first visit and with no registration of missed calls from the Technician on the Repairing System. On one hand, the problem regards the information given by the Contact Center Operators or by the Store's Employees on the moment of the creation of the process that Technicians would contact to schedule the visit in 48 hours and not in 48 working hours. Since 25% of these processes are created on Fridays or Saturdays, Customers would never be contacted in two days which generate a call. The solution regards training. On the other hand, for calls related to processes not created on Fridays and Saturdays, 75% of these processes, the average number of days from the beginning of the process to the Customer's contact is four days, which means that there is a delay from the Technicians on the contact to schedule a visit which materializes on a out of deadline situation. For this problem, HOGO is already strict with repairers and if Customers demand the substitution for deadline crossed the new product is charged to the Repairer/Brand.

Still on this motivation, 24% of the contacts are from Customers waiting for the first visit but with registration of non-answered calls on the Repairs System. The Technician tried to call but the Client didn't answer, if the Contact Center tries to call two times more and still the Customer doesn't answer, the Repairs System sends an SMS to the Customer's cell phone asking him/her to return the call. So there is already a solution for this situation and since this is a wanted call, no solutions must be presented.

Finally, 21% of the audited calls on this topic, were from Customers that were waiting for the second visit from the Technician (as for example, there was needed a special part and the Technician has to go two times to the Customer's home) and had not a missing call registration on the system. For this Clients, the deadline still on the 7 days as for any other at home repair process so, if the call is received, on average, on the 15<sup>th</sup> day from the beginning of the process, this Clients have an out-of-deadline process and the Contact Center, in order to avoid complains and increase the Customer's satisfaction, usually has to substitute the product and charge its value to the Repairer/Brand.

Regarding **Group E**, two of the motivations considered "*Opening of a new in Home repair process*" and "*Reopening of an in Home repair process*" concern Contact Center Operators training since it is a matter of faulty filing of the Script form. These motivations should be considered as "*No process created (information) – Home*" when the call respects to the creation of a new in Home repair process and as "*Closed process (complaint or recurrence)*" when the contact respects the reopening of a closed at Home repair process.

It is worth mentioning that these contacts are wanted contacts to avoid unnecessary queues on the stores to open in Home processes, so, through giving more emphasis to the scripts filing matter on the training of new Operators and through sending a simple e-mail with this information and referring the importance that this subject has to current operators this problem will be solved.

Concerning the motivation "*Customer's demand for a more specific time period for the technician's visit*", the visit to the Customer's Home has to be schedule in 48 working

hours but this task is performed by the Technicians, so some will define the hour for the visit and others will define a period of time to do it. A possible solution would be to standardize this matter, however, it would be probably standardized as a period of visit and not as a determined hour to comply with the requests of the Technicians with more work, decreasing some Customers' satisfaction which could have a specific hour for the intervention. So, since this motivation counts just for 1.39% of the audited calls, HOGO should define a maximum interval of 2 hours as the maximum interval of hours possible for the Technician to schedule the visit in order to increase Customers' satisfaction.

Finally, regarding "*Customer's request of information regarding in Home repair processes*", processes are already defined and through publishing the terms and deadlines on the website, it is expectable the number of calls related to this motivation to decrease.

In what concerns to **Group F**, on the motivation "*Customer's demand to introduce changes on his/her repair process*" there is no interest of the Company in decreasing the number of contacts respecting to it. Usually they regard a solution found by the Costumer as "my neighbor repaired it" which avoid the need for the Technician's visit, saving money. Finally, on the topic of the "*Customer's call reporting a problem with Technicians during* 

*repairing*", it matters to HOGO to know these situations to re-design processes and improve its service.

#### 6.3 – Risks and Other Possible Consequences Related With the Proposed Solutions

Considering the solutions proposed on the chapters above, it is possible to identify two major risks related with the possibility that currently the Company has to mask mistakes and inefficiencies from Customers. On one hand, since the follow-up SMS, the Repairs Microsite and the new IVR system source information from the Repairs System, if there are inefficiencies on the side of the Stores, Logistic Operator or Technician it will be immediately perceived by the Customer. For example, if, after 15 days from the beginning of the in Store/Supplier Warranty process a Client receives an SMS and the status is "On the Store" that will generate a call since half of the deadline period has already past and the product is still on the Store and not on the repairer.

On the other hand, turning information about processes available and easy to find on the website may increase costs for the Company when inefficiencies exist, for example, if the in Home repair process is not solved at the end of the 7<sup>th</sup> day, the Customer will immediately ask for a new product to substitute the damaged one, and that will increase costs both for the Company and Repairers/Brands.

## 7- Conclusion and possible further developments on the HOGO Contact Center

Based on an in-depth study of the current Company's processes and with a research centered on a profound understanding of the main motivations for the Customers to call for the Contact Center, the presented Work Project proposes and discusses the viability of different solutions to answer the question *"How to reduce the high volume of calls received on the HOGO Contact Center and the costs associated to it"*.

Focused on the Portuguese Customers' contacts regarding both in store/supplier and at home repair processes within the defined period for the Company to proceed with the repair, this work states what are the current weaknesses and in what motivations should the solution proposing process focus in order to promote a higher impact on the volume of calls reduction objective. The solutions stated diverse from new and specific training modules for Stores and Contact Center operators to particular actions as a follow up SMS sent to Customers and adapted to the different types of processes, a new IVR and a new Microsite enabling new ways for Customers to consult the status of their repairing process, an increasing efficiency revision of the procedure "sending SMS to Customers informing that the repaired product is ready to be picked", a new maximum interval of hours for Technicians to schedule the visit to the Customers' homes and an increase on the volume of information available to Customers about the different types of repair processes.

Regarding the solutions for which it is possible to compute a cost-benefit analysis, the annual savings may reach values between  $41.500 \in$  and  $47.100 \in$  for the Company<sup>26</sup>, however, it is worth mentioning that the different solutions proposed were not tested in a real business environment which may impact on the values presented.

This paper confirms that it is possible to increase a Retail Industry Contact Center cost efficiency and Customer experience and that through implementing the proposed solutions and making a similar reasoning for other services provided by the Contact Center, it is possible moving to a reality closer to the *Clix Contact Center commercial* mentioned on the introduction of the Work Project.

Further developments to comply with the volume of calls reduction objective may consider focusing in other services of the Company finding new solutions to decrease the number of calls received while improving Customer's satisfaction, being watchful to what new technologies can bring regarding efficiency and adapting and continuously improve processes to the new and changing Consumer habits.

<sup>&</sup>lt;sup>26</sup> For more information regarding the annual saving computations, please see *Appendix 13*.

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# IMPROVING CONTACT CENTER COST EFFICIENCY AND CUSTOMER

# **EXPERIENCE IN A RETAIL COMPANY**

Booklet 2 of 2

OTHER APPENDIXES OF THE WORK PROJECT

# Appendix 1: Historical data analysis of the volume of Customers' Calls

In both countries, Portugal and Spain, it is possible to perceive a growth of the total volume of calls from January to October 2013. It was observed a total growth of the volume of calls of 18% in Portugal and 9% in Spain.

On the graphs below it is possible to visually perceive the growth on the number of calls received. The values stated regard the number of calls received per month in 2013 (from January to October 2013) which is not necessarily equal to the number of calls answered on the Contact Center operation.



#### Portugal: Volume of Inbound Calls



Spain: Volume of Inbound Calls

# Appendix 2: Analysis of the Interactive Voice Response (IVR) information

As it is possible to observe on the graph below, repairs and product information constitute, by far, the two main motivations that originated the Customers' call for the Company's Contact Center. This information was provided by the Outsourced Company, which measures on a daily basis the number of Customers that called regarding each of the possible Interactive Voice Response.





## Appendix 3: Costs of calls answered on the Contact Center per IVR

Independently of the IVR, the inbound calls received on the Outsourced Contact Center are charged to HOGO depending on the number of minutes of conversation. Since the price per minute of conversation is equal across all the IVR options, by observing the table below it is possible to conclude that the Repairs IVR is not only the IVR that receives more calls from Customers, but also the one with more minutes of conversation accumulated per month.

Number of	Number of minutes paid per queue = number of answered calls *average number of minutes per call						
	Product Information	Repairs	Online	Deliveries	Services	Stores Support	Sum
July	47.528	69.057	10.317	32.719	20.911	39.792	220.324
August	39.146	66.294	10.793	23.881	17.840	32.428	190.381
September	39.067	69.750	11.608	17.352	18.369	26.664	182.810

#### Number of Minutes paid per queue

## **Appendix 4: Analysis of the Scripts Information for Portuguese inbound Calls**

As it is possible to observe on the scripts information revised on the table below, within the Repair's IVR, the majority of the calls regard Customers with open repair processes both in Store/Supplier (48.5%) and at Home (27.72%). Furthermore, independently of the nature of process, Store/Supplier or Home, calls mainly concern processes within the defined period for the Company to proceed with the repair.

The scripts information may change according to the month, however on the table below an average between January and September 2013 is presented.

Scripts PT - Repair processes in Portugal				
Script Information	Average (Jan - Sep 2013)			
With repair process - HOME	27,72%			
Process with deadline exceeded	4,29%			
Process within the defined deadline	94,76%			
Closed process (complaint or recurrence)	0,94%			
With repair process - STORE / SUPPLIER	48,05%			
Process with deadline exceeded	6,53%			
Process within the defined deadline	92,04%			
Closed process (complaint or recurrence)	1,43%			
No process created (information) - Home	10,10%			
No process created (information) - STORE / SUPPLIER	14,13%			
Total	100,00%			

#### **Scripts Information**

# **Appendix 5: Sample Definition**

The sample of audited calls was defined based on two mains assumptions: first, the calls had to be from reference months and secondly, the sample had to be at least two percent of the calls from that month, if it was needed, more calls could be audited to better typify the problem.

<u>Stage one:</u> Two reference months were chosen (July and September) and according to the scripts information the sample of two percent of the calls was defined.

Scripte PT - Penair processes in Portugal	e.	2013
Scripts P1 - Repair processes in Portugal	July	September
With repair process - HOME	30,72%	26,569
Process with deadline exceeded	1,92%	1,719
Process within the defined period	28,51%	24,369
Closed process (complaint or recurrence)	0,30%	0,499
With repair process - Store / Supplier	41,65%	44,199
Process with deadline exceeded	3,40%	6,009
Process within the defined period	37,81%	37,219
Closed process (complaint or recurrence)	0,44%	0,989
No process created (information) - Home	13,15%	15,189
No process created (information) - Shop / Supplier	14,48%	14,089
Total	100,00%	100,009

Scripts information (July and September 2013)

#### Sample definition for in Store/supplier and at Home repair processes within the defined deadline

Methodology	Volume of answered Repair calls Portugal	Estimated volume of calls for Customers With repair processes - Store / Supplier (using Scripts information)	Estimated volume of calls for Customers With repair processes - Store / Supplier and processes within the defined period for the Company to proceed with the repair (using Scripts information)
July	14798	6164	5596
Proposal: audit 2% of the calls to typify the problem			112

Methodology	Volume of answered Repair calls Portugal	Estimated volume of calls for Customers With repair processes - at Home (using Scripts information)	Estimated volume of calls for Customers With repair process - at Home and processes within the defined period for the Company to proceed with the repair (using Scripts information)
September	14788	3928	3602
Proposal: audit 2% of the calls to typify the problem			72

Stage two: Definition of number of calls to be audited per day of the reference month:

a) For in Store/Supplier Repair Processes – Month of July:

PORTUGAL	Volume of Repair Calls	Sample: Number of Calls Audited per Day
Day	14798	112
1	602	5
2	556	4
3	516	4
4	493	4
5	508	4
6	273	2
7	203	2
8	637	5
9	622	5
10	536	4
11	556	4
12	433	3
13	307	2
14	217	2
15	624	5
16	571	4
17	533	4
18	529	4
19	472	4
20	260	2
21	198	1
22	550	4
23	629	5
24	557	4
25	613	5
26	494	4
27	231	2
28	219	2
29	664	5
30	610	5
31	585	4





# b) For at Home Repair Processes – Month of September:

PORTUGAL	Volume of Repair Calls	Sample: Number of Calls Audited per Day
Dia	14788	72
1	225	1
2	690	3
3	532	3
4	523	3
5	435	2
6	449	2
7	319	2
8	222	1
9	660	3
10	629	3
11	548	3
12	578	3
13	600	3
14	309	2
15	235	1
16	696	3
17	598	3
18	600	3
19	513	2
20	566	3
21	339	2
22	231	1
23	687	3
24	613	3
25	664	3
26	556	3
27	569	3
28	348	2
29	238	1
30	616	3





# **Appendix 6: Types of Repair Processes**

# Product Type Description

Product Type	Description
Products categorized as "Big Household Products"	Products that are at sale and are eligible for home delivery. Examples: Home Appliances (as washing machines), TVs over 28 inches, etc
Products categorized as "Small Household Products"	Products that are at sale and are not eligible for home delivery. Examples: TVs lower than 28 inches, Irons, Tablets, Laptops, etc

Proc	ess	Observations	In Store/Supplier Repair Process	At Home Repair Process
	SAT24	For products purchased for less than 15 days	<ul> <li>For products categorized as "Small Household Products": <ul> <li>If the Product is considered as on the Satisfaction/Devolution policy, it may be substituted for an equal product or follow a regular warranty process;</li> <li>If the Product is not considered as on the Satisfaction/Devolution policy, it may follow a regular warranty process;</li> </ul> </li> </ul>	<ul> <li>For products categorized as "Big Household Products":</li> <li>48 hours maximum repair period (including non-working days)</li> </ul>
Warranty	Regular	For products purchased for less than 2 years (legal warranty) or that are proven to have a warranty extension for more 1 or 3 years over the legal warranty	<ul> <li>For products categorized as "Small Household Products":</li> <li><b>30 days maximum</b> repair period (including non-working days)</li> </ul>	<ul> <li>For products categorized as "Big Household Products": <ul> <li>7 days maximum repair period (including non-working days)</li> </ul> </li> <li>The technician has to contact the Customer within 2 days (working days) from the beginning of the process to schedule the visit to the Client's home.</li> <li>For products categorized as "Small Household Products" but that are eligible for home delivery: <ul> <li>30 days maximum repair period (including non-working days)</li> </ul> </li> </ul>
Budget	Regular	For products purchased for more than 2 years (legal warranty) that don't have a warranty extension for more 1 or 3 years over the legal warranty or have exceeded the warranty extension period; For products that are damaged and may not be repaired as in a warranty process	<ul> <li>For products categorized as "Small Household Products": <ul> <li>75 days maximum repair period (including non-working days)</li> </ul> </li> <li>The technician has 30 days to produce a budget (including non- working days)</li> <li>The customer has 15 days for to accept the budget (including non-working days)</li> <li>If the Customer accepts the budget, the technician has 30 days to repair the product and deliver it to the store   If the Customer doesn't accept the budget the Technician has 30 days to send the product back to the store</li> </ul>	<ul> <li>For products categorized as "Big Household Products": <ul> <li>No deadline defined</li> </ul> </li> <li>For products categorized as "Small Household Products" but that are eligible for home delivery: <ul> <li>The process follows the timeline defined for Budget in Store/Supplier Repair Process (please read the box on the left)</li> </ul> </li> </ul>

# Appendix 6: Types of Repair Processes (continuation)

Insurance	Regular	For products that are proven to have an insurance bought on the purchase moment for 1 or 2 years and that haven't exceeded this period	<ul> <li>For all products except home appliances and accessories:</li> <li>60 days maximum repair period (including non-working days)</li> <li>The technician has 30 days to produce a budget (including non-working days)</li> <li>The insurance company has 30 days to accept the budget and decide for repairing or substitution (including non-working days)</li> </ul>		
Reopening Process	Regular	For products that have more than one registered repair process	<ul> <li>For products categorized as "Small Household Products":</li> <li>15 days maximum repair period (including non- working days)</li> </ul>	<ul> <li>For products categorized as "Big Household Products": <ul> <li>7 days maximum repair period (including non- working days)</li> </ul> </li> <li>For products categorized as "Small Household Products" but that are eligible for home delivery: <ul> <li>The process follows the timeline defined for Reopening Process In Store/Supplier Repair Process (please read the box on the left)</li> </ul> </li> </ul>	

# Appendix 7: Detailed Wiretapping Conclusions for in Store/Supplier Repair

# Processes

**Motivation:** *Customer's request of information about the status of an ongoing repair process* 

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the beginning of the process and the 1st call to CC	Average number of days between the beginning of the process and the 1st call to CC (removing 2 outliers)	Average duration of the Call
Customer's request of information					
about the status of an ongoing repair					
process	77	67,54%	20	18	00:03:44:33

Location of the product at the moment of the call				
At the Repairer	76,62%			
At the Store	11,69%			
Logistic Operator	11,69%			

Product Category							
IT		Telecom		Home Appliances			
44,16	%	24,68	3%	20,78	%		
As		As		As			
Tablet	47,06%	Cell Phones	94,74%	Coffee	25,00%		
Laptop	41,18%	Wireless	5,26%	Iron	31,25%		
Others	11,76%			Others	43,75%		

Warranty Processes or Warranty Extension Processes									
% Warranty Processes or Warranty Extension Processes	Average number of days between the beginning of the process and the 1st call to CC	% audited calls on the last day of the repairing defined period or already in default period	Location of the product at the moment of the call		Average duration of the Call				
69%	17	13%	At the Store	9%	00:03:26:23				
			At the Repairer	74%					
			Logistic Operator	17%					

Budget Processes									
% Budget Processes	Average number of days between the beginning of the process and the 1st call to CC	Average number of days between budget approval and the call for the CC (for Clients with approved budget)	% audited calls on the last day of the repairing defined period or already in default period	Location of the pro moment of th	f the product at the ent of the call				
14%	27	17	0%	At the Store	27%	00:04:13:11			
	Average number of days between the beginning of the process and the budget release	% Calls received after the budget approval		At the Repairer	73%				
	16	45%		Logistic Operator	0%				

Insurance Processes							
% Insurance Processes	Average number of days between the beginning of the process and the 1st call to CC	% audited calls on the last day of the repairing defined period or already in default period	Location of the pro of th	oduct at the moment he call	Average duration of the Call		
12%	19	0%	At the Store	0%	00:04:09:13		
	Average number of days between the beginning of the process and the budget release	Average number of days between the beginning of the process and the Insurance Company approval of the budget	At the Repairer	100%			
	9	13	Logistic Operator	0%			

Reopening Repair Processes									
% Reopening Repair Processes	Average number of days between the beginning of the process and the 1st call to CC	% audited calls on the last day of the repairing defined period or already in default period	Location of the product at the moment y of the call		Average duration of the Call				
5%	13	50%	At the Store	0%	00:05:31:00				
			At the Repairer	100%					
			Logistic Operator	0%					

**Motivation:** *Fault in communicating that the repaired product had already returned to the store* 

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the arrival of the item to the store and the Customers' call	Average number of days between the arrival of the item to the store and the Customers' call (removing 2 outliers)	Average duration of the Call
Fault in communicating that the					
repaired product had already returned					
to the store	24	21,05%	12	9	00:02:41:12

Waynest: Presses or Waynest: Estansion Presses							
% Warranty	Average number of days between	Average number of days	Average				
Processes or	the beginning of the process and	between the arrival of the item	duration of				
Warranty Extension	the arrival of the product to the	to the store and the Customers'	the Call				
Processes	store	Call	che out				
71%	14	15	00:02:31:28				
	Budget Proc	esses					
	Average number of days between	Average number of days	A				
06 D	the beginning of the process and	between the arrival of the item	Average				
% Buget Processes	the arrival of the product to the	to the store and the Customers'	duration of				
	store	Call	the Call				
17%	33	6	00:03:28:15				
Insurance Processes							
	Insurance Pro	cesses					
	Insurance Pro Average number of days between	cesses Average number of days					
	Insurance Pro Average number of days between the beginning of the process and	cesses Average number of days between the arrival of the item	Average				
% Insurance	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the	cesses Average number of days between the arrival of the item to the store and the Customers'	Average duration of				
% Insurance Processes	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store	cesses Average number of days between the arrival of the item to the store and the Customers' Call	Average duration of the Call				
% Insurance Processes 8%	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store 42	cesses Average number of days between the arrival of the item to the store and the Customers' Call 3	Average duration of the Call 00:02:58:30				
% Insurance Processes 8%	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store 42 Reopening Repair	cesses Average number of days between the arrival of the item to the store and the Customers' Call 3 Processes	Average duration of the Call 00:02:58:30				
% Insurance Processes 8%	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store 42 Reopening Repair Average number of days between	cesses Average number of days between the arrival of the item to the store and the Customers' Call 3 Processes Average number of days	Average duration of the Call 00:02:58:30				
% Insurance Processes 8%	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store 42 Reopening Repair Average number of days between the beginning of the process and	cesses Average number of days between the arrival of the item to the store and the Customers' Call 3 Processes Average number of days between the arrival of the item	Average duration of the Call 00:02:58:30 Average				
% Insurance Processes 8%	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store 42 Reopening Repair Average number of days between the beginning of the process and the arrival of the product to the	cesses Average number of days between the arrival of the item to the store and the Customers' Call 3 Processes Average number of days between the arrival of the item to the store and the Customers'	Average duration of the Call 00:02:58:30 Average duration of				
% Insurance Processes 8% % Reopening Repair Processes	Insurance Pro Average number of days between the beginning of the process and the arrival of the product to the store 42 Reopening Repair Average number of days between the beginning of the process and the arrival of the product to the store	cesses Average number of days between the arrival of the item to the store and the Customers' Call 3 Processes Average number of days between the arrival of the item to the store and the Customers' Call	Average duration of the Call 00:02:58:30 Average duration of the Call				

**Motivation:** Delay on the outbound call from the Contact Center/Technician communicating to customers the budget for the repair

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the beginning of the process and the 1st call to CC	Average number of days between the budget release and the call for the CC	Average duration of the Call
Delay on the outbound call from					
the Contact Center/Technician					
communicating to customers the					
budget for the repair	6	5,26%	15	5	00:04:07:00

Location of the								
moment of the call			Product Category					
At the			π					
Repairer	66.67%		66,67%					
At the			As:			As:		
Store	50,00%	Tablet		25,00%		50.00%		
Logistic		Printer		25,00%	Film	50,0070		
Operator	0,00%	Laptop		50,00%	Photo	50%		

**Motivation:** Demand from Customers to introduce changes on their ongoing repair process

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the beginning of the process and the 1st call to CC
Demand from Customers to introduce changes on their ongoing repair process	3	2,63%	1
	Average duration of the Call	% Warranty Processes or Warranty Extension Processes	% Budget Processes
	00:02:43:20	66,67%	33,33%

Location of	Product Category							
at the moment of the call		п		Film&Photo		Telecom		
At the		33	33,33%		33,33%		33,33%	
Repairer	33,33%							
At the Store	0,00%		As:		As:		As:	
Logistic						Cell		
Operator	66,67%	TDT	100,00%	Photo	100,00%	phone	100,00%	

Motivation: Customer's return call to a Contact Center contact

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the beginning of the process and the 1st call to CC	Average duration of the Call
Customer's return call to a Contact Center contact	3	2,63%	16	00:04:31:20

		Product Category				
Location of the product		п		Film&Photo		
at the momen	at the moment of the call		(( (70)		22.220/	
At the		00	,0770	33,3370		
Repairer	100,00%					
			As:	A	As:	
At the Store	0,00%					
Logistic		Laptop	50,00%	Cell		
Operator	0,00%	Tablet	50,00%	Phone	100,00%	

Motivation: Customer's request of information about the Technician's modus operandi

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the beginning of the process and the 1st call to CC	Average duration of the Call
Customer's request				
of information about	1	0,88%	1	00:06:33:00

Location of the product at the moment of the call				
At the Repairer 0.00%				
At the Store	100,00%			
Logistic Operator	0,00%			

Product Category			
п			
100,00%			
As:			
Laptop	100,00%		

# **Appendix 8: Detailed Wiretapping Conclusions for at Home Repair Processes**

# Motivation: Customer's request of urgency in scheduling the visit from the Technician

Contact Motivation	Absolute Value	% Total Audited Calls	Average number of days between the beginning of the process and the 1st call to the CC	Average number of days between the beginning of the process and the 1st call to CC (removing 2 outliers)	Average duration of the Call
Customer's request of urgency					
in scheduling the visit from the					
Technician	29	40,28%	7	6	04:43:21

Customers waiting for the FIRST visit of the technician - with NO record of missed calls on their file							
% Customers waiting for the FIRST visit of the technician - with NO record of missed calls on their file	Average number of days between the beginning of the process and the 1st call to the CC (removing 1 outlier)	Average number of days between the beginning of the process and the 1st call to CC for processes NOT created on Fridays or Saturdays (removing 1 outlier)	Average number of days between the beginning of the process and the 1st call to the CC for processes CREATED on Fridays or Saturdays	Average duration of the Call	% of processes created on Fridays or Saturdays		
55%	4	4	3	04:49:38	25%		

Customers waiting for the FIRST visit of the technician - with Record of missed calls on their file							
% Customers waiting for the	Average number of days between the beginning	Average number of days between the beginning of the process and	Average	% of processes			
FIRST visit of the technician - with Record of missed calls on their file	of the process and the 1st call from the Customer to the CC	the call from the technician to the Customers recorded as missed call on their file	duration of the Call	created on Fridays or Saturdays			
24%	7	4	04:49:09	43%			

Customers waiting for the SECOND visit of the technician - with NO record of missed calls on their file					
% Customers waiting for the SECOND visit of the technician - with NO record of missed calls on their file	Average number of days between the beginning of the process and the 1st call to the CC	Average number of days between the first visit of the technician to the Customers' home and the call for the Contact Center	Average duration of the Call	% Warranty Processes or Warranty Extension Processes	
21%	15	11	04:19:50	100%	

Product Category				
Home Applian	ices	Hifi		
82,76%		17,24	%	
As:		As:		
Washing Machine	41,67%	τv	100,00%	
Freezer	29,17%			
Dishwasher	8,33%			
Others	20,83%			

Type of Process				
% Warranty Processes or Warranty Extension Processes	% Buget Processes			
96,55%	3,45%			

<b>Motivation:</b>	Opening	of a new	at Home	repair process
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Contact Motivation	Absolute Value	% Total Audited Calls	Average duration of the Call
Opening of a new at Home			
repair process	28	38,89%	05:58:11

Warranty Processes or Warranty Extension Processes % Warranty Processes Average or Warranty Extension duration of					
		Product Category			
Processes 89%	06:02:36	Home Appliances		Hi Fi	
		82,14%		17,869	6
Budget Processe	25	As		As	- 1
	Average	Washing Machine	47,83%	TV	100,00%
% Buget Processes	duration of	Freezer	26,09%		
the Call		Dishwasher	8,70%		
11%	05:21:20	Others	17,39%		

Motivation: Customer's demand to introduce changes on his/her at Home repair process

Contact Motivation	Absolute Value	% Total Audited Calls	Average duration of the Call
Customer's demand to introduce changes on his/her at Home repair process	5	6,94%	02:22:24

		Product	Category
Warranty Processes or Warranty Extension Processes		Home Appliances	
		100,00%	
% Warranty Processes or Warranty Extension Processes	Average	As:	
	of the	Freezer	60,00%
	Call	Washing Machine	20,00%
100%	02:22:24	Stove	20,00%

# Motivation: Reopening of an at Home repair process

Contact Motivation	Absolute Value	% Total Audited Calls	Average duration of the Call
Reopening of an at Home repair process	5	6,94%	05:41:24

Warranty Processes or Warranty Extension Processes		Product Category Home Appliances	
Average% Warranty Processes ordurationWarranty Extension Processesof theCallCall	100,00% As:		
	Call	Washing Machine	80,00%
100%	05:41:24	Dishwasher	20,00%

**Motivation:** *Customer's call reporting a problem with Technicians during the repair process* 

Contact Motivation	Absolute Value	% Total Audited Calls	Average duration of the Call
Customer's call reporting a problem with Technicians during the repair process	2	2,78%	07:31:00

Warranty Processes or Warranty Extension Processes % Warranty Processes or Warranty Extension Processes the Call		Product Category Home Appliances 100,00% As:	

**Motivation:** *Customer's demand for a more specific time period for the technician's visit* 

Contact Motivation	Absolute Value	% Total Audited Calls	Average duration of the Call
Customer's demand for a more specific time period for the technician's visit	1	1,39%	03:44:00

Motivation: Customer's request of information regarding at Home repair processes

Contact Motivation	Absolute Value	% Total Audited Calls	Average duration of the Call
Customer's request of information regarding at			
Home repair processes	1	1,39%	01:47:00

# **Other Information:**

Average number of days between the beginning of the process and the schedude of the 1st visit from the technician to the Customers' home or missed contact from technician to schedule the visit (audited Calls)

5

Product Category							
Home Applian	ces		Hi Fi				
84,72%			15,28%				
As:			As:				
Washing Machine	45,90%	TV		100,00%			
Freezer	27,87%						
Dishwasher	8,20%						
Air-Conditioning	6,56%						
Freezer cabinet	3,28%						
Stove	3,28%						
Outros	3,28%						

# Appendix 9: Repair Calls - Estimated cost per motivation of in Store/Supplier repair processes

In what concerns to the repair calls, there was the need to estimate the cost per motivation of in Store/Supplier repair processes to further use it on the breakeven cost benefit analysis of the proposed solutions. To comply with this objective there was a number of steps that were followed:

a. Gather information regarding the scripts from January to September 2013:

Scripts PT - Repair processes in Portugal	2013								
	Jan	Feb	Mar	Apr	Mag	Jun	Jul	Aug	Sept
Vith repair process - HOME	31,92%	31,02%	29,59%	25,97%	25,93%	22,91%	28,62%	26,92%	26,56%
Process with deadline exceeded	1,19%	1,02%	0,52%	0,35%	1,13%	1,29%	1,96%	1,53%	1,71%
Process within the defined period	30,52%	29,69%	28,89%	25,55%	24,37%	21,44%	26,44%	25,13%	24,36%
Closed process (complaint or recurrence)	0,21%	0,31%	0,18%	0,07%	0,43%	0,18%	0,21%	0,26%	0,49%
Vith repair process - Store / Supplier	52,41%	49,01%	49,37%	50,74%	50,39%	46,07%	44,52%	45,78%	44,19%
Process with deadline exceeded	2,20%	1,67%	1,55%	1,76%	3,12%	3,75%	4,08%	4,09%	6,00%
Process within the defined period	49,22%	46,83%	47,24%	48,34%	46,57%	41,71%	39,96%	40,98%	37,21%
Closed process (complaint or recurrence)	0,99%	0,51%	0,59%	0,64%	0,69%	0,61%	0,48%	0,70%	0,98%
No process created (information) - Home	4,85%	7,65%	7,85%	8,40%	8,07%	13,88%	12,24%	12,79%	15,18%
No process created (information) - Shop / Supplier	10,81%	12,32%	13,19%	14,89%	15,61%	17,14%	14,63%	14,51%	14,08%

 b. Design a Table compiling the information from the Scripts, the number of calls per month regarding Customers with in Store/Supplier repair processes within the defined deadline and the total number of minutes per call.

Month	Answered Repair Calls	Estimated number of answered Repair Calls for Customers With repair processes - Store / Supplier within the defined deadline (using Scripts)	Estimated total number of minutes per month for calls regarding repair processes - Store / Supplier within the defined deadline [using the sample of July each call has 03:33 minutes]	Estimated total number of minutes per month for calls regarding repair processes - Store / Supplier within the defined deadline concerning the motivation "Customer's request of information about the status of an ongoing repair process" (using the sample from July)
January	15861	7807	27715	18720
February	12939	6059	21511	14529
March	13237	6253	22197	14993
April	13264	6412	22763	15375
May	12273	5716	20292	13706
June	11480	4788	16998	11481
July	14798	5913	20991	14178
August	14308	5864	20817	14061
September	14788	5503	19534	13194
Average	13661	6035	21424	14471

c. Create a process to find the average cost per minute of call using the sample of the month of July:

		July					
	Calls IN Working Days (08-22)	% Calls IN Working Days (22-24)	% Calls IN Saturdays	% Calls IN Sundays and Holydays			
Number received Calls on the month of July	38517	1198	4833	3351			
% Number of received Calls on the month of July	80,41%	2,50%	10,09%	7,00%			
Cost per minute of Call	0,26€	0,32€	0,32 €	0,38 €			
Average Cost per minute of Call			0,28€				

d. Estimate the cost per month regarding this category of calls:

Month	Estimated total number of minutes per month for calls regarding repair processes - Store / Supplier within the defined deadline [using the sample of July each call has 03:33 minutes]	Estimated Cost for Calls regarding repair processes - Store / Supplier within the defined deadline [using the sample of July each minute of call has an average cost of 0,28€]	Estimated total number of minutes per month for calls regarding repair processes Store / Supplier within the defined deadline concerning the motivation "Customer's request of information about the status of an ongoing repair process"	Estimated Cost for Calls regarding repair processes - Store / Supplier within the defined deadline concerning the motivation "Customer's request of information about the status of an ongoing repair process" [using the sample of July]
January	27715	7.760,26€	18720	5.241,58€
February	21511	6.023,13€	14529	4.068,26€
March	22197	6.215,19€	14993	4.197,98€
April	22763	6.373,55€	15375	4.304,94€
May	20292	5.681,75€	13706	3.837,67€
June	16998	4.759,31€	11481	3.214,62€
July	20991	5.877,45€	14178	3.969,86€
August	20817	5.828,90€	14061	3.937,06€
September	19534	5.469,50€	13194	3.694,31€
Average	21424	5.998,78€	14471	4.051,81€

# e. Create a summary table:

Summary Table	Average Cost per month	Estimated monthly volume of calls
Repair Calls regarding repair processes - Store / Supplier		
within the defined deadline	5.998,78€	6035
Repair Calls regarding repair processes - Store / Supplier		
within the defined deadline concerning the motivation		
"Customer's request of information about the status of an		
ongoing repair process"	4.051,81€	4076
Repair Calls regarding repair processes - Store / Supplier		
within the defined deadline concerning the motivation		
"Fault in communicating that the repaired product had	1 050 74 5	1070
aiready returned to the store"	1.262,74€	1270
Repair Calls regarding repair processes - Store / Supplier		
Within the defined deadline concerning the motivation		
"Delay on the outbound call from the Contact		
Center/lechnician communicating to customers the	245 54 6	217
budget for the repair	515,54€	517
Repair Calls regarding repair processes - Store / Supplier		
within the defined deadline concerning the motivation		
"Demand from Customers to introduce changes on their		
ongoing repair process"	157,77€	159
Repair Calls regarding repair processes - Store / Supplier		
within the defined deadline concerning the motivation		
"Customer's return call to a Contact Center contact"	157,77€	159
Repair Calls regarding repair processes - Store / Supplier		
within the defined deadline concerning the motivation		
"Customer's request of information about the technicians		
modus operandi"	52,79€	53

# Appendix 10: Proposed SMS for processes for in Store/Supplier Repair Processes

# within the defined deadline

Type of Process	OBS	Proposed SMS 1	Proposed SMS 2
Warranty	The Warranty processes have a deadline of 30 days. According to the data presented, Customers call, on average, on the 17 <sup>th</sup> day. The proposed SMS should be sent on the <b>15<sup>th</sup> day</b> .	"O seu processo de reparação HOGO nº xxx/xxxxx encontra- se no reparador/Loja/em transporte para a loja. Esperamos ser breves na sua conclusão" "Your HOGO repairing process number xxx/xxxxx is on the repairer/store/in transport to the store. We hope to be brief on its resolution"	_
Budget	The Budget processes have a deadline of 75 days – 30 days for the technician to evaluate the product and produce the budget for repairing, 15 days for the Customer to take a decision and 30 days to perform the repair or to return the product to the store. 55% of the Customers call before the budget receivable from the technician and 45% after. The proposal is to send an SMS before receiving the budget (on the $10^{\text{th}}$ day from the budget (on the $10^{\text{th}}$ day from the budget (since Customers call on the $17^{\text{th}}$ day after the approval of the budget (budget (budget (budget customers)) and another SMS 15 days after the approval of the budget (budget (budget customers)) and another budget (budget customers) and another budget (budget customers) after the approval of the budget (budget customers) after the budget (budget customers) after the approval of the budget (budget customers)) after the budget (budget customers) after the budget (budget customers) after the budget (budget customers)) after the budget (budget customers) after the budget (budget customers)) after the budget (budget customers) after the budget (budget customers) after the budget (budget customers)) after the budget (budget customers))) after the budget (budget customers))) after the budget customers)) after the budget customers)) after the budget customers)) after the budget customers)) after the budget customers)))	"O seu processo de reparação HOGO nº xxx/xxxxx encontra- se em fase de produção de orçamento, esperamos ser breves na comunicação do mesmo." "Your HOGO repairing process number xxx/xxxxx is on budget production, we hope to be brief on its communication"	"O seu processo de reparação HOGO nº xxx/xxxxx encontra-se no reparador/Loja/em transporte para a loja. Esperamos ser breves na sua conclusão" "Your HOGO repairing process number xxx/xxxxx is on the repairer/store/in transport to the store. We hope to be brief on its resolution"
Insurance	The Insurance processes have a deadline of 60 days – 30 days for the technician to evaluate the product and produce the budget for repairing and 30 for the insurance Company to approve the budget and to proceed with the repairing or with the substitution of the product, Since Customers usually call on the 19 <sup>th</sup> day after the beginning of the	"O seu processo de reparação HOGO nº xxx/xxxxx encontra- se no reparador/Loja/em transporte para a loja. Esperamos ser breves na sua conclusão" "Your HOGO repairing process number xxx/xxxxx is on the repairer/store/in transport to the store. We hope to be brief on its resolution"	

	process, the proposal is to send an SMS on the 20 <sup>th</sup> day counting from the beginning of the process.	
Reopening Processes	Since the Reopening processes deadline is 15 days, no SMS will be	

# Appendix 11: Efficiency table for "Fault in communicating that the repaired product had already returned to the store"

Having in mind the cost of  $(\notin 0, 04 + VAT)$  per SMS if it is sent by the Contact Center Management Team,  $(\notin 0, 09 + VAT)$  per SMS if sent by the Outsourced Company, the  $\notin 1.10 + VAT$  cost of each callback from the Outsourced Company and the  $\notin 0.15 + VAT$ cost of an Automatic IVR sent to Customers<sup>1</sup>, a table with values for more efficiency and cost reduction on this task was produced and the result was an annual saving of more than  $\notin 19.000$ .

No VAT included					
		Monthly cost in € (average number			
Possibility	OBS	of processos Jan-Sept)	Montly Cost Variation	Monthly Savings	Annual Savings
Current Situation	SMS (Worten) + callback (Outsourcing)	3.482,83 €			
Solution A	SMS(Outsourcing) + callback (Outsourcing)	5.511,66 €	58%	2.028,83 €	24.345,98€
Solution B	SMS (Worten) + IVR SMS Pró "tarifário livre" (Worten)	1.961,20€	-44%	-1.521,62 €	-18.259,49€
Solution C	SMS (Worten) + IVR SMS "Pró tarifário 1000" (Worten)+ IVR SMS Pró "tarifário livre" (Worten)	1.911,27 €	-45%	-1.571,56€	-18.858,75€
Solution D	SMS (Worten) + IVR SMS "Pró tarifário 1000" (Worten) + IVR SMS "Pró tarifário 1000" (Worten)	1.918,07 €	-45%	-1.564,76€	-18.777,15€
Solution E	SMS (Worten) + IVR SMS "Pró tarifário 1000" (Worten) + IVR SMS "Pró tarifário 500" (Worten) + IVR SMS Pró "tarifário livre" (Worten)	1.886,27 €	-46%	-1.596,56€	-19.158,75€
Solution F	SMS (Worten) + IVR SMS "Pró tarifário 5000" (Worten)	2.285,57 €	-34%	-1.197,26€	-14.367,15€
Solution G	SMS(Outsourcing) + IVR SMS "Pró tarifário 1000 " (Outsourcing) + IVR SMS "Pró tarifário 500" (Outsourcing) + IVR SMS Pró "tarifário livre" (Outsourcing) - Assuming costs for SMS equal for the outsourced Company	3.915,10 €	12%	432,27€	5.187,23€

<sup>&</sup>lt;sup>1</sup> Automatic IVR PRO is a new service from the Optimus Telecom Company which allows sending prerecorded phone messages to the Company's contacts (landline or cell phone numbers).

# Appendix 12: Main causes for the motivation "Fault in communicating that the repaired product had already returned to the store"

The Repairing System sends an automatic SMS informing the Customer that the repaired product is already on the store to processes in which the cell phone number is positioned on the right place of the system's form. However, many times, the cell phone number is positioned on the place of the landline phone and the system generates a list of "errors" that require the Contact Center Management Team to send manually the SMS.

As it is possible to see on the table below, the main cause for the existence of this motivation regards the fact that during the reference month chosen (July), the Contact Center Management team hadn't the tools to extract from the main repairing system the list of "errors" to send manually the SMS. Since Customer's didn't receive the information, they didn't know that the repaired product was ready to be picked on the store which generated a call.

The second cause for this motivation regards a matter of training on the side of the Stores, the information of "error" or "SMS not sent" is directed both to the Contact Center and Stores and sometimes Stores answer that information and do not contact the Customer informing that his/her product is ready to be picked. A changing on the system's definition for that this notification could only be answered by the Contact Center would avoid this problem.

The last cause for this motivation regards a fail from the system that does not generate the information of "failed SMS" and so neither Stores nor the Contact Center receive the information that they should send the SMS manually or contact the Customer.

58

Causes for the motivation "Fault in communicating that the repaired product had already returned to the store"					
The Customer should have received the SMS but at the time the					
extraction of the "errors" from the main repairing system was not	11	46%			
being done					
The Store wrongly answers to the System's notification of "error"	7	29%			
The sistem does not inform of an error	6	25%			
Grand Total	24	100,00%			

•

# Appendix 13: Cost/Benefit analysis Summary for the Proposed Solutions which are possible to compute a cost-benefit analysis

Cost Saving for Actions in Which a Saving Value is Possible to Compute							
Type of repair process	Motivation	Solution	Observation	Montly Saving	Year Saving		
In store/supplier	Customer's request of information about the	SMS	Having as basis a reduction of 40% of the number of calls related to this motivation (or, for the proposed follow up SMS just for IT and Telecom repairing products, the computation had as basis a reduction of 40% on the number of calls regarding this motivation and these specific category of products).	Between 0 € and 465,39 €	Between €0 and €5584,68		
	status of an ongoing repair proces	Microsite	Having as basis a reduction of 10% of the number of calls related to this motivation, and not considering the cost of the solution $(3.000 \in)$ .	427,15 €	5.125,80 €		
		IVR	Having as basis a reduction of 30% of the number of calls related to this motivation, and not considering the cost of the solution $(1.500\mathbb{E})$ .	1.281,46 €	15.377,52 €		
In store/supplier	Fault in communicating that the repaired product had already returned to the store	Increase the efficiency regarding the task "Send a closed process SMS informing the Customer that the repaired product has returned to the store"	For more information please see <i>Appendix 11</i>	1.596,56 €	19.158,75 €		
At Home	Customer's request of urgency in scheduling the visit from the Technician	Increase training of the operators regarding at Home repair processes deadlines	Having as basis a reduction of 15% of the number of calls related to processes created on weekends whose Customers did not receive a call from the Technicians in two days (working and non-working days).	158,27 €	1.899,28 €		
SUM				Between 3.463,45 € and 3.928,84 €	Between 41.561,35 € and 47.146,03 €		