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**Mestrado em Gestão de Informação**

Master Program in Information Management

## **DESIGN OF AN ACCELERATOR TO MAKE PORTUGUESE PARISHES SMARTER**

Inês Vizela de Freitas

Dissertation presented as partial requirement for obtaining  
the master's degree in Statistics and Information  
Management

NOVA Information Management School  
Instituto Superior de Estatística e Gestão de Informação  
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SMARTER**

by

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Dissertation presented as partial requirement for obtaining the master's degree in Information Management, with a specialization in Information System and Technologies Management

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## **ABSTRACT**

The key problem for performing this study was the need to get citizens and parish councils closer. As it was known, the lack of communication between these two is real. So, a main objective was set, to make an innovation accelerator to bring some smartness to parishes. To get all insights needed to achieve this objective, there was the need to learn more about public administration and Portuguese specificities compared to other realities, which was done related to smart cities as well as understand what such a broad concept involves and to get to know a bit more on innovation and creativity in general and case studies of previous of innovation accelerators. As the main objective was to make parishes smarter, there was a need for a clear definition of it, so it was defined that smartness inside a parish must include an improvement on the relationship with citizens, citizens who feel that their opinions count, training for citizens to promote digital inclusion and also for parish employees to make sure that their processes are more citizen centered, and, last but not the least, an improvement of citizens quality of living inside the parish. It was concluded at the focus group meeting, used to validate the proposed framework, that it is possible to get all this smartness through the implementation of the proposed framework in a parish inside Portugal as it is aligned with what parishes want for them in the near future.

## **KEYWORDS**

smart cities; local e-government; innovation accelerator; smart parish; citizens; local public administration; lean startup; agile;

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>PUA</b>	Predominantly urban areas
<b>IUP</b>	Intermediately urban parishes
<b>PRA</b>	Predominantly rural areas
<b>ICT</b>	Information and communications technology
<b>PAS</b>	Portuguese Association of Software
<b>GPS</b>	Global Positioning System
<b>CRM</b>	Customer relationship management
<b>R&amp;D</b>	Research and development
<b>PDCA</b>	Plan, do, check and act
<b>V.U.C.A.</b>	Volatility, uncertainty, complexity and ambiguity
<b>ASA</b>	Anje Startup Accelerator
<b>DSR</b>	Design Science Research
<b>ANAFRE</b>	Associação Nacional de Freguesias
<b>IPSG</b>	Innovative Public Service Group

# 1. INTRODUCTION

## 1.1. BACKGROUND

During the last decades of the twentieth century, new concepts for public services arose, associated with them also arose concepts like trust, collaboration, participation and liability as founding stones in administration and citizens' relationships so, there was the compulsory need to grant more power to public administration and to get the citizens more involved in all processes around them (Cardoso, 2014).

The World Wide Web concept was defined as becoming an essential and revolutionary part of citizens daily lives in different contexts and places. A kind of paradigm shift had occurred which led to changes not only in the dissemination but also in processing information (Cardoso, 2014).

Crowdsourcing is also an interesting topic to be evaluated in the context of this master's thesis as a way to use citizens and stakeholders' knowledge to solve municipal problems like the ones they experience during their daily routines. All of this, through e-participation. there was the need for some expertise on this topic inside parishes in order to gather as innovative and creative contributions as possible (Royo & Yetano, 2015).

A smart place had been considered the one that combines perfectly the physical and the virtual world in only one location, where information and communication technologies are considerably essential in order to make the bridge between these two realities (Walters, 2011).

All this new integration of technologies in citizens lives derived into two new research areas related to e-governance, such as how technology mediates citizens participation or e-participation (Panagiotopoulos, Al-Debei, Fitzgerald, & Elliman, 2012). But, most of the studies were much more focused on the website of this municipalities and not in the overall internal processes and interaction with the citizens.

Although this question has been addressed in main cities/municipalities but neglected at a local level. Unfortunately, and despite the implementation of dozens of smart city projects, citizens are still far away from their parish councils (EUROCITIES, 2017) and many times, they are made aware of what is being implemented at their own city through the media and not because of a good communication with their parishes.

Desires to the near future were also defined on how it should be and how citizens' proximity shall be valued, regarding that, Portuguese republic said in 2018 that public administration power should be decentralized from central to local administration (República Portuguesa, 2018) which may be understood as a step ahead on taking citizens and local administration closer.

This improvement will only be possible after taking advantage of "the relationship between municipalities and the government" because, nowadays it "is very scarce" which distances local and central administration (Rodrigues C. , 2011) which may have caused a lack of communication which directly affected citizens.

So, the main question that will be addressed with this master's thesis is "How to make Portuguese parishes smarter?", to achieve the answer, there was need of an understanding on what kind of technologies, innovation techniques and methods could be useful to obtain a smarter parish.

The feeling of transparency between the two main actors of this master's thesis has been considered as a key element for the success of local e-government projects and also to be able to lead with a smart democracy system (Grimmelikhuijsen & Meijer, 2017).

## **1.2. MOTIVATION**

The reasons for conducting this research were the inexistence of a smart concept for parishes and the fact that most of smart initiatives were implemented in the context of a municipality and not at a parish level.

Parishes were also chosen as the focus of this master's thesis as they were considered the most important way to link citizens with public administration, even though this link was made, most of the time, through traditional clerk services. So, parishes needed to become part of today's information society in order to take some advantage from it (Silva, Lamas, Castro, Silva, & Rocha, 2018).

As an advantage for this study is the fact that the Portuguese smart cities section was considered the biggest one inside national association of Portuguese municipalities (Cabrita-Mendes, 2017), what lead us to think that Portugal invests in smartness and to hope that the output artifact of this study may be implemented in parishes in the future.

As another motivation to start this study, there is the fact that e-governance in Portugal has been considered an unknown topic and the majority of parishes does not know how they are supposed to apply this kind of twenty first century hot topics to their daily routines (Silva, Lamas, Castro, Silva, & Rocha, 2018).

Another motivational factor to go ahead with this master's thesis around innovation for Portuguese parishes was knowing that it was already part of "Lisbon agenda" the aim to create "a knowledge-based economy in Europe driven by innovation" (Helbing & Balietti, 2011).

## **1.3. OBJECTIVES**

Having all the motivations set, it was important to define the main goal behind this study, that is to **make parishes smarter by proposing an innovation accelerator for them.**

In order to propose this accelerator, three main topics needed to be studied, those were public administration, smart cities and innovation to understand how the relationship between citizens and parishes may be improved through the combination of those.

Having that in mind, were needed answers to the following questions as intermediate steps to achieve an innovation accelerator for parishes to be validated and implemented in the future.

- How does Portuguese public administration work?
- Which technology was already implemented to improve government services?
- What is a parish and what are their competencies?
- What is innovation and how it could be stimulated?
- Which are the main blocks of the existing accelerators?
- Which are the main blocks of smart cities and what was already implemented inside Portugal related to it?

## **2. LITERATURE REVIEW/ THEORETICAL FRAMEWORK**

To start introducing the problem behind this study there was the need for a theoretical background to understand what were the works that had already been done on this topic and what kind of concepts are needed to explore to start working on the new smart parish's accelerator.

To be more familiar with all these concepts, we started by studying a bit further the main topics behind this master's thesis, public administration, smart cities as well as innovation and creativity.

### **2.1. PUBLIC LOCAL ADMINISTRATION**

#### **2.1.1. Concepts**

##### Global Public administration

Globally speaking, public administration faced uncertain times that led to cultural changes and to the need of learning how to overcome the fact that competitors were now global, fact that led to an increase of the competitiveness level (Mateus, 2008).

Also, at the global level, there was a need to reinforce what were public administration responsibilities and how to turn it more economical. At the same time, operational strategies and processes should be "organized around fluid models based on teams, communities and collaborative alliances structured in networks of knowledge" and horizontal processes were needed to better fit citizens' needs – "horizontal networks of interinstitutional work or value chains" (Mateus, 2008).

According to what was mentioned above about the following steps for public administration, it was predicted that collaborative and interdepartmental technologies will take center stage at public administration future initiatives (Mateus, 2008).

About information, it is seen as an asset for many companies and it has been the key element for today's information networks. With all previous experiences using it, now, it is known that "inconsistent and redundant information is much worse than the wrong information but, because it is shared, can be quickly corrected and credible" (Mateus, 2008). So, as future work for public administration, systems needed to be integrated and information should be managed by citizens and public administration in one single point.

So, in the context of this study, global public administration was understood as the common characteristics/ challenges of public administration around the globe, not country specific.

##### E-government

It was not possible talking about public administration improvements without mentioning the emergence and innovation on e-government services, a theme that was understood as "vital process for administrative modernization" and as a way to obtain openness and agility for public administration to meet society's needs (Mateus, 2008).

At an European level, e-government has been seen not only as ICT adoption by the public administration, but also as a combination of it with an organizational change and the development of new skills (Cardoso, 2014).

This, because technologies could be a very important starting point for administrative modernization, but their success depends entirely on the use that citizens and businesses make of it. However, technology is still seen as a critical success point in promoting digital inclusion associated with administrative modernization (Mateus, 2008).

The European Commission has identified five phases of developing e-government strategies (Mateus, 2008):

- **Information:** only basic information is available online to the public;
- **One-way interaction:** making available to the public forms to start a process;
- **Two-way interaction:** possibility of submission of the online form;
- **Transaction:** total availability of the online service, from the effectiveness of the service to the payment;
- **Personalization:** Through a system integration it may be possible to customize the processes, for example by filling out the forms or sending alerts to the user at decisive moments.

Improved public services and all they involve was only possible with a truly involvement of public officials in all phases, like processes modernization, organizational changes, acquisition of new skills and improvement of delivered services, bureaucratic processes and policies (Mateus, 2008).

### **2.1.2. European Reality**

Public administration should focus its concerns on what was mentioned by European Union IPSP (Innovative Public Service Group) which stated that there is the need to focus on citizens and in the understanding on how they are involved with e-government services and how the improvement of this relation could help to reduce e-government costs (Mateus, 2008).

According to what was studied by Sabine Kuhlmann, Hellmut Wollmann (Kuhlmann & Wollmann, 2014), Carlos Rodrigues (Rodrigues C. , 2011), Nick Thijs, Gerhard Hammerschmid and Enora Palaric (Thijs, Hammerschmid, & Palaric, 2017) regarding administrative systems around Europe, it was possible to synthesize their conclusions as follows:

Internationally speaking, France public administration is known to be a unitary centralized state, although, since 1982, there has been greater autonomy for regions, departments and municipalities.

Its public administration was divided into three levels: state administration, regional administration and local administration, with administration subdivided into three levels that were region, department and municipality. Departments and municipalities were responsible for secondary education, urban planning, infrastructure and social housing, local public services for water and electricity supply, waste treatment, public transport, culture, municipal police,

employment and business support, health services as well as construction and maintenance of elementary schools.

Inside United Kingdom, the source of political-administrative power is the parliament that is authorized to legislate on all matters. The political system is very flexible, mainly because of the absence of a constitution like the one Portugal has.

Their public administration structure is composed by ministerial departments, public agencies and regional and local administration, which in turn is segmented into two or three levels and the three levels only apply to non-metropolitan areas of Great Britain. In the cases where there are three levels, those are counties, districts and parishes.

Public agencies are lead by executive directors who play a role related to day-to-day management, applying resources and reporting results.

Education and social services are responsibility of the counties as they are the sectors that hold the highest financial weight, while the districts are responsible for public services more related to their specific locality.

Germany has also a different public administration system. For them, the most important figure is the Chancellor, who decides who are the ministers, who, when in office, enjoy a great deal of autonomy in their functions. The Chancellor has approximately 500 people working for him. Their work consists of aiding in the process of decision making.

The administrative organization of Germany is organized in three levels: the federal state, aka Land, the district, aka Kreise, and the municipality, aka Gemeinde, being the last two regional and local administration organs.

All these levels being endowed with great autonomy in the exercise of their functions. Each federal state has legislative, administrative and jurisdictional power in its possession, with specific constitutions for each of them, thus having independent public administrations with their own governments and parliaments.

At the local level, in Germany, there was collaboration between the two administrative levels because they operate according to the principle of subsidiarity, which means that everything that has not been resolved at the municipality level is now managed at district level. The municipalities' responsibilities include the management of various public services such as local social services, water and gas supply, local transport, among others.

Sweden is known as the largest public sector when considering the Western world, but few central government officials are the only support for the political decisions implemented at lower levels. However, the district administration has a lack when talking about autonomy associated with the decision-making process.

Its administrative model is organized in three levels: central, comprising ministerial departments, agencies and public companies, regional, composed of district councils and district administration, and local constituted by municipalities.

Public agencies are the ones responsible for the practical implementation of the political programs elaborated by the government, however, the municipalities are characterized by a high level of autonomy.

At the regional level administration has functions related with regional planning, health care, public transport and everything related with communication as well as parks, roads, education, culture and social assistance, education and culture.

About modernization strategies defined for the public administration of the four countries mentioned above, these involved:

In United Kingdom, initiatives such as "emphasis on providing services with quality to the client", "greater transparency of information" and "competition and contracting services outside the administration" (Rodrigues C. , 2011).

For France were defined "modernization programs to improve the provision of service to users" (Rodrigues C. , 2011).

"Privatization of services and implementation of outsourcing" is something that integrates the agenda of administrative modernization of Germany (Rodrigues C. , 2011).

And last but not the least, in terms of administrative modernization, Sweden intends to "make the public sector more efficient" (Rodrigues C. , 2011).

### **2.1.3. Portuguese Reality**

#### Central public administration

In Portugal, public administration has been known as a large and complex reality (Direção-geral da administração e do emprego, 2018) and like other ones in Europe, it has a set of micro public administrations inside, such as the government, "public institutes, public companies, public associations, regulators, local authorities and autonomous regions" (Rodrigues C. , 2011).

All of them fulfilling constitution of Portuguese republic principles, even though each one is part of one of these three groups: direct and indirect government administration and self-government (Direção-geral da administração e do emprego, 2018).

Local authorities, that were the focus of this master's thesis, are part of the self-government group that is responsible for a specific territory (Direção-geral da administração e do emprego, 2018) and, according to what was defined in the constitution of Portuguese republic, it has been divided into three main types: parishes, municipalities and administrative regions (Gaspar, 2013) that are endowed with the characteristic of self-government with the objective of promoting the decentralization of power, not depending on the central administration except with respect to "enforcement" (Rodrigues C. , 2011).

Local authorities are essentially characterized by two dimensions: self-determination - "ability to define its own administrative orientation" (Rodrigues C. , 2011), self-responsibility - "failure to submit the merits of its acts to the control of the state administration" (Rodrigues C. , 2011).

However, and besides the independence delegated to self-government groups, the Portuguese government has a direct relationship with them, being responsible for directing the services and activities and for holding guardianship power, responsible for enforcing the law (Direção-geral da administração e do emprego, 2017).

Also, there is one entity with management responsibility related to local authorities. On 2013, this responsibility was being represented by Portuguese finances general inspection (Gaspar, 2013).

Portuguese government has as main organ, the government. Composed by the Prime Minister, ministers (the ones responsible for administrative management), government Secretaries and sub secretaries, having the Prime Minister the responsibility to coordinate all other governmental entities (Direção-geral da administração e do emprego, 2017).

The Portuguese Government is known as the strongest political influencer in Portugal, holding political, legislative and administrative competences (Direção-geral da administração e do emprego, 2018), which lead public administration to be very centralized (Rodrigues C. , 2011).

#### Local public administration

But let us return to municipalities and parishes, they are both known as executive bodies with their own assemblies to deliberate about their parish or municipality (Ministério Público, 2013).

These are composed as defined by the citizens that live in them (Gaspar, 2013), they choose who should make decisions for them on subjects like rural and urban equipment, public supply, education, culture, free time and sports, primary healthcare, social action, civil defense, environment and health, development, urban and rural planning, community's protection and last, but not the least, investment planning, management and achievement (Ministério Público, 2013).

Knowing that the result of this master's thesis was to propose an innovation accelerator to make parishes smarter, it was considered important to describe what were the competencies of a parish according to the 16<sup>th</sup> article of the Portuguese law, 75/2013 from September 12<sup>th</sup> (Ministério Público, 2013):

- a) To prepare and submit to the approval of the parish assembly the options of the plan and the proposal of the budget, as well as the respective revisions;
- b) To perform the plan and budget options, as well as approve its changes;
- c) Acquiring, disposing or encumbering immovable property;
- d) To alienate in public auction, regardless of authorization of the parish assembly, real estate;
- e) To prepare and approve the internal control standard, as well as the inventory of assets, rights and liabilities of the parish and its evaluation, as well as the documents of accounting, to be submitted to the parish assembly;
- f) To carry out the works that are included in the options of the plan and to have adequate budget allocation in the pension management instruments approved by the parish assembly;

- g) To approve urban operations in real estate integrated in the private patrimonial domain of the parish, after prior opinion of the competent entities;
- h) To prepare and submit to the approval of the parish assembly the projects of external regulations of the parish, as well as to approve internal regulations;
- i) To discuss and prepare with the city council contracts of delegation of powers and agreements of execution, in the terms foreseen in the present law;
- j) To submit to the assembly of parish, for authorization purposes, proposals for the conclusion of contracts of delegation of powers and executive agreements, as well as their resolution and, in the case of contracts of delegation of powers, revocation;
- k) To discuss and prepare with the organizations of resident's protocols of delegation of administrative tasks that do not involve the exercise of authority powers;
- l) To submit to the parish assembly, for the purposes of authorization, proposals to conclude the protocols for delegation of administrative tasks provided for in the previous paragraph;
- m) To discuss and prepare collaboration protocols with public, private and cooperative institutions that develop their activity in the territorial circumscription of the parish, especially when the respective equipment is property of the parish and to safeguard their use by the local community;
- n) To submit to the parish assembly, for the purposes of authorization, proposals to conclude the collaboration protocols referred to in the previous paragraph;
- o) To resolve on ways to support legally existing entities and bodies, with a view to carry out works or carry out events of interest to the parish, as well as to inform and defend citizens' rights;
- p) To pronounce on projects of construction and occupation of the public highway, whenever this is required by the city council;
- q) To participate, in the terms agreed on with the city council, in the process of elaboration of the municipal plans of spatial planning;
- r) To collaborate, in the terms agreed on with the city council, in the public discussion of the municipal planning of the territory;
- s) To provide for the consultation of interested parties in the municipal planning of the territory;
- t) To promote and execute community intervention projects in the areas of social action, culture and sport;
- u) To participate, in collaboration with private social solidarity institutions, in social action programs and initiatives;
- v) To support social, cultural, educational, sporting, recreational or other activities of interest to the parish;
- w) To issue opinion on the denomination of streets and squares of localities and towns;
- x) To provide other public bodies with all the cooperation requested, particularly in the fields of statistics and others of interest to the population of the parish;
- y) To collaborate with the municipal civil protection authority on the imminence or occurrence of a major accident or catastrophe;
- z) To promote the conservation of existing passenger shelters in the parish;
- aa) To manage, conserve and promote the cleaning of public baths, lavatories and toilets;
- bb) To manage and maintain public playgrounds and sports facilities on a local level;

- cc) To preserve and promote the repair of fountains and public fountains;
- dd) To place and maintain toponymic plaques;
- ee) To preserve and repair the unlighted vertical signs installed in the municipal roads;
- ff) To maintain and preserve roads, streets and pavements;
- gg) To grant lands, in cemeteries property of the parish, for deposits, mausoleums and perpetual graves;
- hh) To manage, conserve and promote the cleaning of cemeteries owned by the parish;
- ii) To administer and conserve the patrimony of the parish;
- jj) To prepare and keep up to date the register of movable and immovable property owned by the parish;
- kk) To acquire and dispose movable property;
- ll) To declare that graves, mausoleums or other works, as well as perpetual burials installed in cemeteries owned by the parish, should be prescribed in favor of the parish, after publication of notices, when owners are not known or for whom it is shown that, after judicial notification, maintains disinterest in its conservation and maintenance in an unmistakable and lasting way;
- mm) To provide cleaning and expediting supplies to elementary school and pre-school education establishments;
- nn) To proceed to the registration and licensing of canines and felines;
- oo) To proceed to the administration or the use of barns whenever there are no shared assemblies;
- pp) Under the census commission, to carry out voter registration operations, as well as to carry out the functions determined by electoral laws and referendums;
- qq) To establish terms of identity and administrative justification;
- rr) To attest to information;
- ss) To know and take a position on the definitive reports of tutelary actions or of audits carried out to the organs or services of the parish;
- tt) To comply with the Statute of Opposition Law;
- uu) To resolve on the formation and participation in the associations provided for in Chapter IV of Title III;
- vv) To remit the accounts of the parish to the Court of Auditors;
- ww) To exercise the functional powers and to perform the diligences determined by the parish assembly;
- xx) To present proposals to the parish assembly on matters within its competence.
- yy) It also refers to the parish councils the licensing of activities like lotteries sales, car upholstery and noisy activities of a temporary nature that respect popular festivals, pilgrimages, fairs, camp and dances.

Since 2014, parishes have been categorized according to three levels, depending on their population density. Those levels were: predominantly urban areas (PUA), intermediately urban parishes (IUP) and predominantly rural areas (PRA) (INE, 2018).

The main distinguishing factor between PUA and IUP was that PUA must have a population density greater than 500 men/km<sup>2</sup> or have a population of more than or equal to 5 000 inhabitants, on the other hand, IUP were non-urban parishes with a population density greater

than 100 men/Km<sup>2</sup> and minor than or equal to 500 men/km<sup>2</sup> or if has a population between 2 000 and 5 000 inhabitants (INE, 2018).

Having in mind the evaluation of the output framework of this master's thesis in the context of a parish from the Lisbon Metropolitan Area, it was considered relevant to study how parishes have been classified according to the levels explained above.

So, according to pordata, at the end of 2017, the Lisbon Metropolitan Area was comprised of 118 parishes (PORDATA, 2018). From those, 83,9% belong to the PUA category, 12,7% belong to IUP and only 3,4% are from PRA (Grupo técnico para a definição de critérios para a avaliação da reorganização do território das freguesias, 2016).

Further studies characterized parishes from the Lisbon Metropolitan Area as a ratio between average of person by Km<sup>2</sup> and number of residents belonging to each parish's level. It was concluded that in PUA parishes lived 2 711 439 people (INE, 2017) with an average of 1 494 people by Km<sup>2</sup> (INE, 2018), being the most impressive category in numbers.

It was also concluded by INE, that parishes categorized as PUA and PRA had a lower impact at the Lisbon Metropolitan Area population density, represented by 92 522 people (INE, 2017) - 158 by Km<sup>2</sup> (INE, 2018) and by 17 924 people (INE, 2017) - 29 by Km<sup>2</sup> (INE, 2018) respectively.

#### **2.1.4. Challenges/Desires**

Through the time, Portugal has presented many administrative modernization strategies, the ones considered relevant to the scope of this thesis were "introduction of administrative simplification systems", "improving the quality of services provided to citizens by the administration" and " dialogue with the citizen " (Rodrigues C. , 2011) because it clearly demonstrated citizens' power inside public administration and how improving the relationship between them and public administration could be crucial to reach a modern public administration.

Also, the idea behind using e-government at Portuguese public administration was supported by an assumption that a citizen must communicate with it by different channels using their identification card or other legal unique authentication way to submit what they need, and public administration must be responsible to manage an internal workflow to get the answer and return to the citizens as soon as possible (Cardoso, 2014).

A study from 2008 shows that Austria and Portugal were the best European union countries applying e-government practices not only in the availability of online public services but also in online satisfaction levels (Rodousakis & Mendes dos Santos, 2008).

Throughout the various theories for implementation of e-government in Portugal, desires were defined as: reducing costs for both citizens and public administration, greater transparency, promoting citizenship and the information society, and obtaining recognition (Cardoso, 2014).

It was also very important to take note that an e-government system mostly requires the use of opinion pools to get citizens and companies closer to government (Helbing & Baliatti, 2011) feeling that their opinion counts.

Desires to the near future were also defined, on how it should be and how citizens' proximity shall be valued, regarding that, Portuguese republic said in 2018 that public administration power should be decentralized from central to local administration (República Portuguesa, 2018), a theme being analyzed as a way to improve Portuguese public administration and to get it closer to citizens.

Although it was shown that the implementation of modernization processes at the public administration level inside Portugal had not been so easy until 2011, one of the biggest challenges felt was that "the relationship between municipalities and the government is very scarce" which distanced local and central administrations (Rodrigues C. , 2011) which may be understood as an advantage when talking about the independence that local e-government must have. Even though it may have caused a lack of communication which directly affected citizens.

The importance of ensuring a good relationship with citizens was reinforced by decree-law 135/99 from April 22<sup>th</sup> where it was declared that every time an answer was possible to a citizens' service request it must be done at that time (Cardoso, 2014) without letting them wait too long or even thinking they have been forgotten.

Luís Newton, president of the parish council of Estrela, states that only in 2009 a transversal dynamic implementation with the communities and the citizen was possible, where his involvement began to be valued. He also said that the greatest challenge for a mayor at that time was to communicate between the different stakeholders to base smart-city initiatives on solid and interconnected structures capable of supporting this initiative in the medium and long term (Nóbrega, 2017).

It also reinforced the idea that there was funding for smart-city initiatives, it was only necessary that their implementations went according to the specific needs of the citizens as well as having the necessary involvement of parish employees, which was not always the case and therefore lead to the failure of its implementations (Nóbrega, 2017).

Despite all reasonable efforts trying to modernize public administration in Portugal, it was mentioned by an author that "modernization has had no effect" and according to him this was due to organization structure aspects as a warped traditional governance system (Rodrigues C. , 2011).

A technological challenge that was being felt by municipalities, has been the result of not knowing the technological power and capacities in the 80's when "every division within a municipality had its software" (Nóbrega, 2017) which led us to a lack of integration between municipalities and has made it difficult or impossible when talking about the possibility to integrate them as an end-to-end solution.

Luís Newton also told us, from experience, that the involvement of public administration employees during the changing process, that took place in Estrela's parish council, facilitated its implementation as well as increased the success rate of its implementation, which was only possible by collecting employee's opinions, which sometimes had included a possible solution to known problems but that were never given an opportunity to share it (Nóbrega, 2017).

Another big challenge faced during attempts to modernize public administration was related with non-access to virtual world by elderly people, but more and more parishes have majorly old populations. They understood technologies as a way to get some information (ex.: about health), as an entertainment and, the ones who are more familiar with it, understood it as an aid for services execution (e.g.: buy things, planning a trip, to help in financial management or as a new way to communicate with their families to reduce the sense of social exclusion and abandonment) (Azevedo, 2013).

Elderly people felt more and more they were being left behind and that they did not make part of this new modern world they lived in, so it is essential to try new ways to integrate elderly people in the virtual world, also to get relevant knowledge from them (Azevedo, 2013).

They used to say that the non-use of internet services was due to a lack of education, as well as the idea of internet as a useless thing or simply because they do not know how to deal with it, in fact, an absence of digital literacy (Azevedo, 2013).

Another challenge when trying to modernize cities around Portugal was the involvement of citizens in e-services and from government side, a major challenge is the ability to effectively answer to citizens participations (EUROCITIES, 2017).

#### **2.1.5. Technological current use state**

For some authors in the last decade there was already a greater awareness of the benefits of adopting technologies for public sector processes, making them "more efficient and effective in responding to citizens' needs in an internet-centric way" (Mateus, 2008).

Also, at this time, people already had notion that "... much of the mechanical merits of the traditional bureaucratic model can be secured by automated information systems with the rigor and determinism with which human nature is unable to compete" (Mateus, 2008).

"Nothing better than technologies to minimize decision-making arbitrariness," technologies such as "multiple and universal interaction channels, business intelligence, automated reporting and alerting, workflows, mobile technologies" are the future (Mateus, 2008).

The use of ICT was increasingly part of the Portuguese public administration objectives to adapt the ways of communication between administration and its citizens and companies, offering something innovative such as e-services. With this adaptation a public administration "more proactive, efficient, transparent and oriented to the provision of services according to the needs of citizens is expected " (Cardoso, 2014).

It was also considered possible to turn bureaucracy into something "genuine, efficient, effective, transparent, independent, regulated, equitable and personalized" without discrediting government and citizens and always following the law (Mateus, 2008).

Although pure and hard application of the technology went nowhere, it was considered that transversal projects were needed to approach administration and administered. Only this way will the efficiency and competitiveness necessary for the success of these initiatives be achieved. The use of technologies aims to "increase citizenship, transparency and citizen participation" (Mateus, 2008).

Since the last decade, in technologies it is apparent the profit of getting information from dissimilar sources, systematize it and reuse it in real time, as well as the possibility to work on a collaborative network. Also, the use of ICT enabled the emergence of a Digital Era Governance that intended to reintegrate processes, a holistic view based on citizens' needs (removing unnecessary parts of processes) and foster a digital culture (to help people to deal with e-services that are always increasing) (Cardoso, 2014).

A big concern made public by the Portuguese Association of Software (PAS) was that more than 750 parishes had in some way illegal software in-house. Which, according to Luís Sousa, president of PAS, happened after the merger process of parishes to reduce them to only those that government considered needed (pplware, 2014).

A technological innovation in public administration was also a new application called *Juntar a Junta*, launched at April 2017, and had as main objective bringing closer parishes and their citizens by an active and aware community. Since the first day there had been identified three trend topics: danger associated with possibility of trees about to fall, cleaning some woods, garbage collection and abandoned vehicles (Calheiros, 2017).

The users of this application do not necessarily need to belong to the parish to where they are reporting the issue they found, because all issues will be redirected to the correct parish by using GPS coordinates to do so (Calheiros, 2017).

In Portugal, it has been more and more frequent to encounter one-stop services available for citizens where they had at their disposal different services in a unique location, this kind of services were only available after a change in public administration viewpoint from a power centered focused on a service provider attitude taking into account not only their individual activity but the whole system where collaboration and interoperability were mandatory (Cardoso, 2014).

Based on this shift away from the traditional view, new concepts like *network state* and *networked public administration* have emerged leading the Portuguese governance to let away the onus of being the key public services provider and becoming an entity that has as main role to disseminate rules and regulations, guidelines and values, transferring their own power to local administration level, closer to citizens and as a way to promote interaction and cooperation between citizens and public administration (Cardoso, 2014).

The citizens' will to have access to information has been increasingly growing not just on "political, but also economic, financial and management" information so, more and more public administration has been made accessible on the internet "specific documents, publication of yearbook on the processes of activity, etc." (Rodrigues C. , 2011).

An innovation in Portugal was the citizen portal symbolized in 2013 as a great advance in the process of simplification of the interaction between administered and the public administration. It was followed by initiatives such as "*Empresa na Hora*", "*Empresa online*", "*Predial online*", "*Automóvel online*" and "*NETemprego*", all related to public services that had been made available by the new channel that had appeared, internet. With initiatives like this and others,

Portugal had been recognized at European level as the best provider of e-services in the twenty categories that had been evaluated (Cardoso, 2014).

Customer relationship management (CRM) systems were considered as an important starting point for an improvement in the relationship between the public administration and its citizens, taking into account that, with this system it was possible to draw up a profile of each one managed by tailoring the services to their specific needs, it is a system "where the citizen comes into the spotlight" (Cardoso, 2014).

29% of Portuguese parishes had some presence online which was shown in a study from 2005 which means a growth of 327% comparing to another study from the year before (Santos & Amaral, 2008) and the majority of this presence only included making available information about parishes and not delivering value to citizens and stakeholder through it.

Also, in the same study from 2005, it was evaluated the usage of email and the results were very surprising because less than 25% of evaluated parishes answered the email sent to them during the study (Santos & Amaral, 2008), which showed a not so good relationship with the technology and its use as one of the or the most important communication channel.

Another study, this time from 2013, comes to confirm that parishes tend to prefer to make information available about themselves than to call on the citizens' participation. There was also a lack of suggestions and claims by the citizens and stakeholders and well as frequent forum participations (Dias & Gomes, 2014).

In 2015, the success on the implementation of e-government services was evaluated in 4 Portuguese municipalities and with that it was found that most of e-government services available at the time of this study were very strict to the presentation, download and print of information through their websites which was also the type of things that citizens said they did there (Santos & Amaral, 2008).

It was found interesting that most of the citizens know that their municipalities had a website but most of them did not go there because they did not feel any advantage in going there (Ferreira, Ferreira, Marques, Ilander, & Çipi, 2015).

Although, one interesting thing is that citizens identified advantages on having a website available like being easier to use, the cost reduction and the decrease of the level of bureaucracy inside cities, the two dimensions that were mentioned as not so good in the available e-government services were the modernity of it and the difficulty on interacting with this type of services (Ferreira, Ferreira, Marques, Ilander, & Çipi, 2015).

The major reason identified to unused e-governmental services by citizens were the absence of necessity to use them and the preference for a personal contact service (Ferreira, Ferreira, Marques, Ilander, & Çipi, 2015). What led to think that in here there are some type of factors that should be improved in the e-government services to increase their adoption.

## **2.2. SMART CITIES**

To introduce smart cities, it was interesting to mention that it is known that around 75% of the world's population lives in urban areas and that this percentage tends to grow at least to 80% in 2020. The main objective of governments identified in 2015 was to support this continuous growth by making cities more sustainable, always ensuring the quality of life supported by the implementation of smart cities initiatives (Albino, Berardi, & Dangelico, 2015).

### **2.2.1. Concept**

There is no one size fits all concept for smart cities but, along the time, some authors made definitions for smart city concept, as it was the main concept behind all smart topics (Albino, Berardi, & Dangelico, 2015). Mainly, a smart city, is the one who address its problems with the help of technology and all the know-how from its stakeholders (Khatoun & Zeadally, 2016).

Alawadhi, an author, had advocated in 2012 that smart cities were the ones, that legally required technology to survive and that these cities had been designed based on the technology they have. Also, in 2012, another author, Batty, strengthened the fact that technology should not be considered as a crucial factor in smart city's daily lives, the main and key point are people's needs and the involving community (Albino, Berardi, & Dangelico, 2015).

Another author, Ballas, in 2013 held that the smart city concept should considered things like the development of a sustainable city, economic growth, the improvement of the quality of life and the possibility to provide happiness (Albino, Berardi, & Dangelico, 2015).

Some years later, governance center of Ottawa University argued that the governance model of a city was the factor that could define a city in terms of smartness, evaluating governance model, the social capital of a city as well as the relationships between all the parts that are part of this city (Albino, Berardi, & Dangelico, 2015).

By the merge of all the previous concepts presented, smart cities could be a combination of three dimensions that should be perfectly aligned to have success in smart cities initiatives.

The dimensions considered were people, community and technology (Albino, Berardi, & Dangelico, 2015). Because of this crucial role taken by people in smart cities, in the smart cities initiatives one must include elements like creativity, education, learning and knowledge. Regarding education it was known that in smart cities, generally, people have higher degrees of education and more access to education (Albino, Berardi, & Dangelico, 2015).

In 2015, there was a need to split smart cities definition into three sub categories according to the initiatives that made cities become smarter.

So, those sub categories were "smart cities 1.0: technology driven" – cities that had adopted technological solutions proposed by the market without analyzing if this would fit the specific needs of that city and their citizens as well, "smart cities 2.0: technology enabled, city led" – in this case a city would only adopt a specific technology when it was ensured and the benefits of implementing it to it reality was well explained improving the quality of living in the city, "smart cities 3.0: citizen co-creation" – when citizens happen to have some relevance and active

participation in the proposed initiatives for that city to become smarter by “optimize underutilized resources” and promote “sharing activities amongst citizens and fostering sharing startups as well” (Cohen, 2015).

### 2.2.2. Fundamental areas

In 2016, Khatoun and Zeadally had considered that a smart city needs to have: broad banding infrastructure to allow connectivity between all people involved or that are part of this city, e-services to provide information anytime, anywhere and open governmental data to be used for commercial and non-commercial purpose (Khatoun & Zeadally, 2016).

After all the theories mentioned above, in 2017 Giffinger had defined that a smart city should be composed, in a more generic way, by: industry, education, participation and technical infrastructure. These lists of components were updated to incorporate smart economy, smart mobility, smart environment, smart people, smart ways of living and smart governance. This was the time when quality of life started being part of a smart city concern, because cities are the people that live or move around them and not only the technologies used to make them fashionable (Albino, Berardi, & Dangelico, 2015).

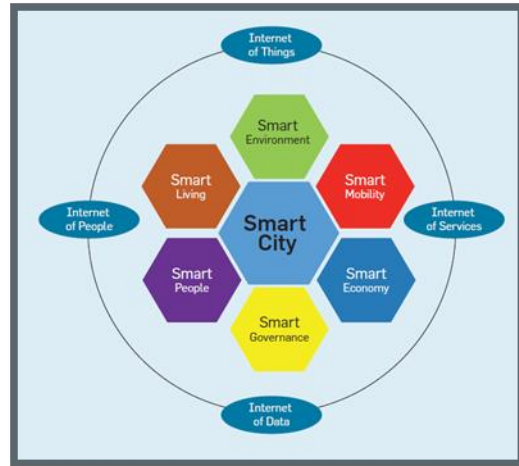


Figure 1 - Main components of a smart city (Khatoun & Zeadally, 2016)

So, a smart city needed to have in its genesis people capable of creating new and smart solutions to urban problems that were already happening (Albino, Berardi, & Dangelico, 2015). Because of these it was still very important to reinforce the communication between all the people that were somehow related with the city.

Innovative solutions were a key factor addressing social, economic and environmental problems and in fact these problems have always been part of a smart city (Khatoun & Zeadally, 2016).

### 2.2.3. Some relevant cases

Southampton, a city inside the United Kingdom, was considered the first county’s smart city because of the implementations of multi-application smart cards to use for public transports, recreation and leisure-related transactions (Albino, Berardi, & Dangelico, 2015).

Smart cities were defined as a worldwide concept, cities like Singapore, Taiwan and Hong Kong also thought about the implementations of smart city programs (Albino, Berardi, & Dangelico, 2015).

Regarding connectivity, Singapore was able to achieve its objective making available a free wireless network through all the city allowing citizens to connect anytime, anywhere (Albino, Berardi, & Dangelico, 2015).

So far, the major smart city initiative could be found in Songdo, Korea, a city built from nothing and because of this, it was possible to install a telepresence system in each of the residences to

make them able to communicate through the devices they have inside (Albino, Berardi, & Dangelico, 2015).

### **2.2.3.1. The Portuguese situation**

Themes such as “climate change, demography, energy dependency and social exclusion” were in the front line of cities worries (INTELI, 2014).

Since 2009, Portugal has a smart cities network which at 2017 was composed of 46 municipalities inside Portugal. The intervention areas of this network until that time, covered areas such as “governance, energy, environment and buildings, mobility, society and quality of life, Internationalization, entrepreneurship, funding and regulation” (Lopes & Oliveira, 2017).

On 2015 working groups were created which aim to improve successful projects implementation inside cities, those groups involved external stakeholders, cross-department people that work inside or with that specific municipality and the idea behind it was to cover initiatives like “urban platforms for smart city development, open data, open innovation and interoperability projects, e-mobility, building retrofit, citizens engagement and communication” (EUROCITIES, 2017).

By 2014 Portugal had a collaborative platform called smart cities Portugal, where “companies, clusters, universities, R&D centers, municipalities and other economic and social players” acted together to improve smart cities experience inside Portugal (INTELI, 2014).

Also important is the understanding of the Portuguese people feedback, so, when they were asked about the way smart cities could help them, in the answers was noticed the reference to cost reduction for residents, better quality of life like what was said before and the improvement of service delivery by public entities (Ferreira, Ferreira, Marques, Ilander, & Çipi, 2015).

Related to how could smart cities help them, answers included different concepts such as new ways to manage expenses with water and electricity as well as to plan a system to collect garbage in a more effective way (INTELI, 2012).

Portugal had become increasingly important concerning smart concept but one of the main obstacles that people were leading with was the lack of support by programs like *Portugal 2020* because they did not understand the enormous potential behind smart projects and how they could improve the quality of life (Cabrita-Mendes, 2017). Besides that, Vodafone and Ericson, two companies that invest and believe in the power of technology, have had a competition to get smart ideas from startups to put the best ones in practice and test them in a real city like Cascais (Rodrigues M. V., 2017).

The village of Cascais also made a partnership with Deloitte to create a delivery center focused on “mobility and smart cities initiatives” by combining the knowledge of people from city hall and local citizens with the technological expertise of Deloitte. This partnership was made having always in mind the main goal of Cascais becoming a smart city 3.0 – Citizens co-creation (Deloitte, 2018).

During this research, it was also found that the Portuguese smart cities section is the biggest one inside national association of Portuguese municipalities (Cabrita-Mendes, 2017), what may lead us to conclude that although investment funds did not seem very confident concerning smart

projects, there was at a national level a belief that the future of municipalities passes through slowly incorporating some smartness inside.

According to the smart city index from 2016, the ranking of smart cities in Portugal made by IDC (International data corporation), the ten smartest cities in Portugal were: *Porto, Águeda, Cascais, Bragança, Guimarães, Matosinhos, Braga, Sintra, Aveiro* and *Santarém* (INTELI, 2012).

Regarding open government, *Águeda* and *Porto* were considered the best ones with a variety of ways to engage citizen participation and some open data initiatives implemented (INTELI, 2012).

An interesting study made by NOVA IMS students has proved that municipalities provided data to an open source repository because they were bound to do it in a regular attendance, and not because they wanted to share data or even understood the benefits of sharing it regarding the increase of transparency, participation, quality of services, efficiency and economic development (Neto, Rego, Neves, & Cartaxo, 2017).

A huge part considered smart initiatives were related to the availability of wi-fi networks through the cities to allow connectivity associated with mobility. *Porto* was not an exception, an investment in wi-fi networks was made to allow an average of 2 access points per 1000 habitants (INTELI, 2012).

Another hot topic derived from smart city innovations was the waste management systems, *Cascais* has already implemented some sensors inside trash containers to manage how full they were and change garbage collection route in real time (INTELI, 2012).

Smart initiatives in Portugal also include normal lights replaced by LED ones, which allowed, in *Évora*, a reduction of 40% to 50% of energy consumption. Furthermore, traffic lights have also been changed and started to use LED lights, which had an impactful reduction of 80% in energy consumption. Regarding the importance of energy in the city mentioned above, an app was also created to manage energy consumption, smart cities are known as places where electric networks have some intelligence (INTELI, 2012).

The fundamental areas of a smart city that were studied in Portugal were the ones presented in the figure 2 (INTELI, 2012).

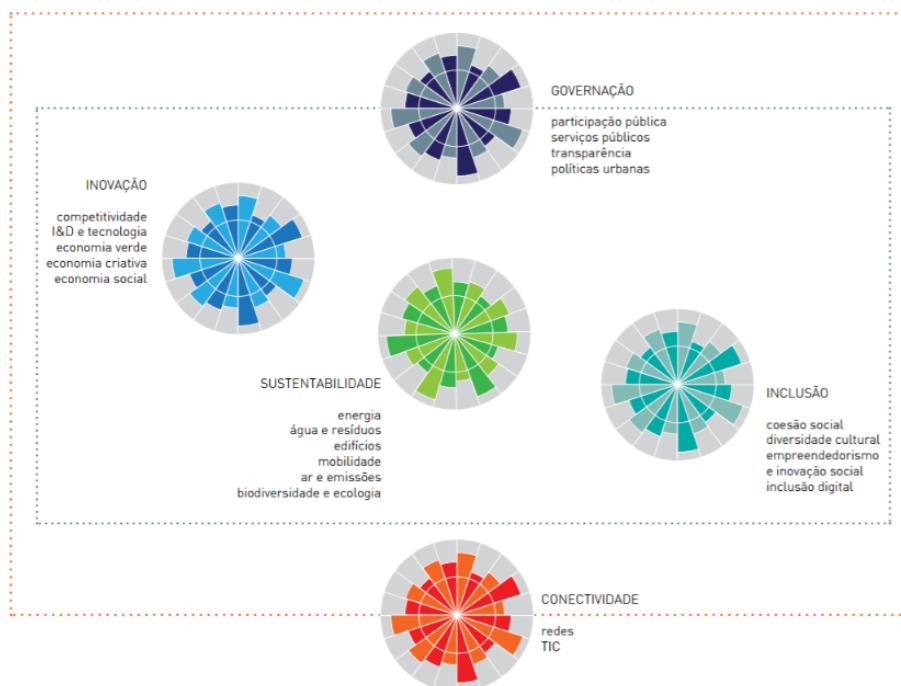


Figure 2 - Dimensions and Subdimensions of Intelligent Cities (INTELI, 2012)

Related to governance initiatives like participatory budget were found, which was a way to let citizens' decide on which will be the future of some part of the municipal budget and with this they feel that their opinion counts, mobile applications to register any problem that was happening in the street or neighborhood to accelerate the damage repair and identification of those problems and some systems to provide virtual help desks and data sharing about this specific cities with the citizens themselves or with tourists (INTELI, 2012). Participatory budget was adopted by Lisbon in 2008 for the first time in a European capital (EUROCITIES, 2017).

Regarding innovation the type of initiatives that have been taken were the promotion of networking between different enterprises in one common space, join several types of businesses and promote the change of ideas between them to generate innovative solutions and the promotion of youngest people to contribute to innovative ideas or solutions to known problems and situations in the municipalities they lived in (INTELI, 2012).

Many of the sustainability initiatives already implemented were related with the promotion of the reduction of the use of cars by substituting them with bicycles and with the monitoring of water, energy and gas consumption in real time. Also, related to sustainability initiatives, *Guimarães*, a Portuguese city, included an educational garden to teach children the basic concepts on where the food comes from and how it was being generated (INTELI, 2012).

Concerning quality of life's initiatives, there was talk about projects to combine the energy and creativity of young people with the knowledge of the elderly, strengthening the bonds of union between different social classes inside the same communities and promote solidary events (INTELI, 2012). There was also talk about initiatives to "build trust and involve citizens" (EUROCITIES, 2017).

The connectivity component of smart cities was most of the times related with the increase of wi-fi connections through the city and the creation of systems that could be used for the citizens and tourists inside the city to get to know it better (INTELI, 2012).

#### **2.2.4. Technologies**

Some of the smart projects that have already been implemented around the globe included concepts like artificial intelligence as well as smart houses and buildings. In these cases, and in so many others where smart concepts were trying to be part of city's daily routines, it was necessary to expand the concept of each smart place, to the whole city (Albino, Berardi, & Dangelico, 2015).

Other types of technologies being used in smart projects were: ubiquitous computing, big data, networking, internet of things, cloud computing, service-oriented architectures, cybersecurity architectures and so many other 21<sup>st</sup> century's hot topics (Khatoun & Zeadally, 2016).

People were already familiar with smart places so, the expansion of a known reality the whole city would help the adoption of the smart city concept that everyone talks about and that has always been present in a smaller scale in most of the cities. The technology adjustment will only be positive if the technologies that citizens already known are kept in the new smart city era and updated to fit smart city needs, without exposing citizens to an abrupt change (Albino, Berardi, & Dangelico, 2015).

The use of open data sources as was told before was very important and fundamental in smart cities to develop a knowledge base repository to gather, join and process all collected data (Albino, Berardi, & Dangelico, 2015).

Decision making has only been possible by the existence of a platform that centralizes all this process and all the interactions from all the parts involved from the start until the end, when a final decision comes. With the use of a platform that centralizes all these processes it will be possible to ensure more transparency to all the stakeholders. (Albino, Berardi, & Dangelico, 2015).

Another interesting thing related to the exponential growth of smart cities through the last years was that technological professionals were much more concerned with management topics like: internet of things management, data management, evaluating and defining indicators to do it in smart cities and manage renewable energies (Khatoun & Zeadally, 2016).

Despite the implementation of dozens of smart city projects, citizens are still far away from their parish councils (EUROCITIES, 2017) and many times, they know what is being implemented at their own municipality by the media and not because of a good communication with their parishes.

## **2.3. INNOVATION AND CREATIVITY**

### **2.3.1. Concepts**

Changes around the globe affected the way people do and think innovation. Crowdsourced creativity and software communities are two concepts that emerged during the last decades to accelerate innovation (Larry, 2014).

The truth was that “innovators... need to innovate innovation” (Larry, 2014).

On 2013, the 4<sup>th</sup> innovation era already started, a time where all developed things could be adopted and adapted to be a boost for companies to grow. Entrepreneurs were thinking more and more on “do more with less” which made a sweet environment for innovation to be part of company’s daily lives (Trotter, 2013).

For an innovation to succeed, innovators needed to be part of online communities to spread the news with all interested parts, only by doing so an idea may succeed because it would be known and understood by a group of people (Trotter, 2013).

Innovating was definitively not just having an amazing idea, innovating was defined as the process of picking that idea, bring it to the market and let a customer base be built upon it (Cox, 2016).

Accelerators were known as one of several innovation programs (EY; Cisco, 2016).

McKinsey in 2018 revealed that there was a “wide gap between the aspiration of executives to innovate and their ability to execute” although senior executive recognized that “people and corporate culture are the most important drivers of innovation”, people needed to feel comfortable on sharing their thoughts and also have the possibility to network with others that may have different ways of thinking which would allow a possible proposal of an idea to mature (Barsh, Capozzi, & Davidson, 2008).

At a smaller scale, Portugal in 2018 had been “ranked as one of the 13 most innovative countries in the world”, by Consumer Technology Association, being evaluated by the creation of “welcoming environment for innovation”, “economic growth” and “social progress” (Hinchliffe, 2018).

### **2.3.2. Mechanisms to stimulate innovation**

Searching by mechanisms that helped on stimulating innovation concepts like broadcasting, brainstorming, licensing out, networking and expert teams were found (ESADE Knowledge, 2018).

Also, as an example on how to stimulate innovation, Lisbon City Council had participated in testing a method to introduce creativity in the information system planning, by a practical application of this method in its context. (Santos V. , Amaral, Mamede, & Gonçalves, 2015)

At the end of a meeting that lasted for four hours, it was possible to come up with seven information system opportunities, which was only possible due to the use of two creative

techniques after a clear definition of the main objective to be achieved. (Santos V. , Amaral, Mamede, & Gonçalves, 2015)

The techniques used were Reversal and Brute Thinking, brute thinking helped participants to find not only out-of-the-box solutions but also the causes behind their problems, while reversal allowed participants to transform pre-set ideas into successful ones. (Santos V. , Amaral, Mamede, & Gonçalves, 2015)

An important part about thinking on innovation, was also to consider types of funding that may help to take an idea/ prototype to the next level, always having in mind that in early stages of innovation alternatives looking for funding will not seem an easy task (The Innovation Policy Platform, 2018).

Regarding the most common ways to fund innovations, we should mention: personal, family and friends funding, government grants, debt or equity funding, business angels, venture capital, crowd funding (Queensland Governemnt, 2016), academic partners, customers or employees' funds if in a corporate context, bankers (Innov8rs team, 2018) and so many other ways of get financial help.

Venture capitals and business angels were defined as the ones that by having a prototype of what is being innovated are more likely to invest (The Innovation Policy Platform, 2018).

Business angels typically were defined as individuals that want to invest their own capital in innovations with “potential to grow 30 to 40% per year”, although angels not only contribute financially but also with their own experience (Abdurazzakov, 2015) by, if possible, becoming part of the development process (The Innovation Policy Platform, 2018).

Venture capitals were also considered an option as financial funding, but they usually come up in later stages of innovations, they look for a more mature innovation (Abdurazzakov, 2015) instead of angels that look for new market segments or products that were not known yet and that will revolutionize the status quo (The Innovation Policy Platform, 2018).

A study from 2017 has concluded that the best way to get more money for an innovation was to combine equity and grant funds (Keeling & Bassett, 2017).

Crowdsourcing was seen as a way of involving people in supporting an idea, usually at a website, by giving a financial incentive to the idea(s) they want to see implemented (Queensland Governemnt, 2016).

Coworking spaces and Innovation labs have also been a way to stimulate innovation.

Coworking spaces allowed “cost-effective office spaces” with access 24/7 and a community of people who had the know-how about a specific theme/area (Harris, 2017), which may provide access to an “environment of like-minded entrepreneurs, ... specialized experts, ... high-value networking, and seminars” (Harris, 2017).

On the other hand, innovation labs, served as a way to bring together a group of people who barely knew each other to generate ideas by the discussion around different perceptions. By

using “design thinking and open innovation..., randomized controlled trials..., crowdsourcing..., and human-centric design” (Gryszkiewicz, Toivonen, & Lykourantzou, 2016).

A few years before 2014, there was a study on the possibility to combine Lean Startup and Design Thinking to foster innovation because “lean provides clearer business value while design thinking provides more product value” so, by combining them the best of the two worlds could be achieved (Haines, 2014).

Object of study was also relating agile development methodology with design thinking to encourage innovation on old problems by solving them in a new way (Perkins, 2018).

Design thinking helped on understanding customer needs getting the reasons on why people were doing things by generating “concepts and test ideas” and agile contributed in a way to do prototype splinted in smaller parts in an interactive way, always collecting feedback from real life scenarios during the time, letting people see “quick wins” over the time and achieve a corporate cultural change in a less aggressive way (Perkins, 2018).

In this study it was also reinforced the idea that people needed time to explore and inspire themselves by having contact with a real-life scenario or seeing online content on products or services they had done, also to brainstorm new ways to innovate the way things were being done (Perkins, 2018).

And if, as those were hot topics when thinking about innovation (Glaveski, 2017), we added design thinking, lean startup and agile methodologies to stimulate innovation? It was already being studied by Steve Glaveski. But to explain how they can be joined together, we gave a step back to deeper explain each concept before combining them all, having in mind that each one was only considered, at the end, one part of the whole innovation process.

Starting by design Thinking, it was defined as a “people-centered, collaborative and action oriented” approach that solved problems by using knowledge from open minds and customer empathy people, who think they are not creative. It was also characterized by involving customers in prototyping phases to get earlier feedback from them (Cox, 2016).

Design Thinking also reminded us that ideas could arise any time, normally the most improbable was to expect them to arise during a “high intensity group thinking environment” with a very tight timeframe to find an out-of-the-box solution. Although a good environment, with the right people at the right time, may help (Glaveski, 2017).

To follow a design thinking approach, there was the need to pass through four main steps: “problem definition, idea generation, prototyping and testing” (Glaveski, 2017).

Lean startup appeared to let proposed solutions become business models by testing a possible solution in an environment where customers could use it and test their use cases above it, giving feedback on early development stages without spending unnecessary money, improving the proposed solution to better fit market needs. All this by exploring “customer segment, distribution channels, marketing channels, revenue models, cost structures, messaging” and so many others (Glaveski, 2017).

Agile methodology, however, was considered useful to deliver products in an incremental way by incorporating feedback from one sprint to the other, helping to deliver the product to the market in a faster way (Glaveski, 2017).

To conclude, as shown in figure 3, combining design thinking, lean startup and agile methodologies made it possible to transform an idea into a business solution that better fits the market by delivering the final solution step by step. What decreased risk level associated with failure after launching new ideas to the market. Also, and one of the most important facts of using this combined approach was considered to get people involved in the process, letting them be more fulfilled with their work and proud of the final solution launched (Glaveski, 2017).

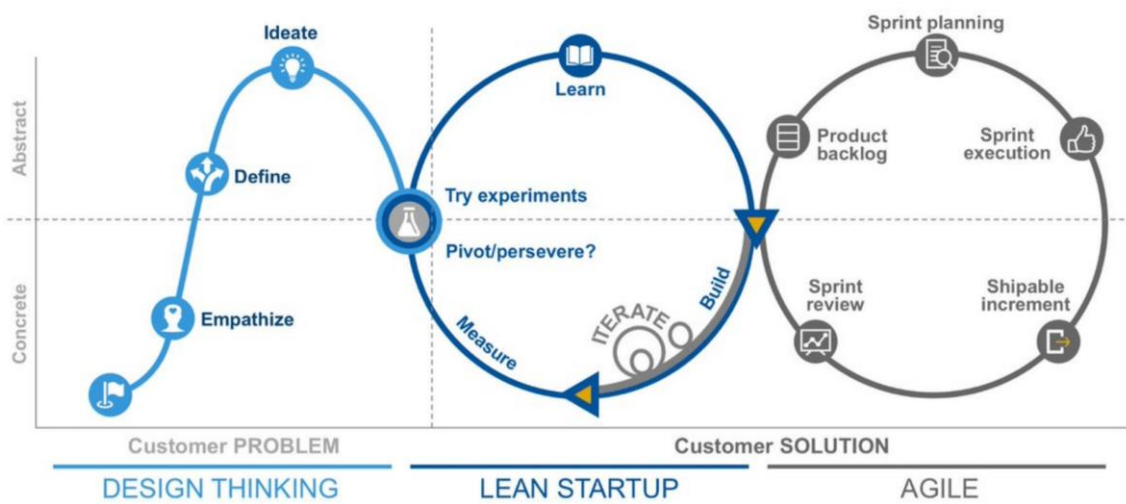


Figure 3 - Combine Design Thinking, Lean Startup and Agile (Glaveski, 2017)

### 2.3.3. Innovation accelerators

A set of authors defined, in a report from Small Business Administration – Office of advocacy from 2014, that “Accelerators [, in general,] select and invite a small group of entrepreneurs to startup boot camps, providing mentoring, resources, and, most important, industry connections during these programs” (Jennifer Auer & D'Ippolito, 2014).

An innovation accelerator was considered one of four types of accelerator, these are: social, university, corporate and innovation accelerators (Jennifer Auer & D'Ippolito, 2014).

It is known as the accelerator where people with more experience or knowledge about a specific business/technology will be partners in an innovation process by introducing participants like “consultants, investors, managers, designers, innovators, etc.” (Fernandes, 2016).

#### 2.3.3.1. Concept

When thinking about carrying forward an innovation accelerator, what people need to consider first is who will be part of the team, because they were mentioned as the essence of an accelerator and that which will make the difference at go, no-go moment (Trotter, 2013). There is need of a team that involves people from different generations, to get different inputs and perceptions, pursuing a way to meet consumer needs (Larry, 2014).

For a company to embrace an innovation accelerator project, its benefits must be considered first. Like the “acquisition of specialized knowledge”, “additional seed capital to proceed to the next stage of development or even an initial public offering, and ongoing proof of their concept throughout the accelerator experience” (Jennifer Auer & D'Ippolito, 2014).

Innovation accelerators were thought to be a tool that supports creative collaboration between substantial amounts of participants that could be reused in future similar contexts only by adjusting some of its build blocks (Helbing & Balietti, 2011).

Normally in terms of duration, an innovation accelerator could take from weeks to months (EY; Cisco, 2016).

Faster innovation programs like a hackathon differed from innovation accelerators mainly in the fact that they usually did not have the time to let people be familiar with the innovation methodology that needed to be followed, neither changing their mindset according to it. At an innovation accelerator all of these took some time but at the end the results were considered much more disruptive and that better fit core business objectives (Pirenne, 2015).

Talking about the definition of innovation accelerators, in 2012, a definition was published at The European Physical Journal, which said that it serves to “develop new incentive models, rules and interaction mechanisms to simulate true innovation, revolutionizing the way in which we create knowledge and disseminate information” (Harmelen, et al., 2012).

Vincent Pirenne had defined a corporate accelerator as “an innovation program to embed structural innovation in an organization by supporting corporate teams to create and develop new business concepts outside of the standard process, within a short period of time” (Pirenne, 2015).

One year before, accelerators were described, in general, as the engine to take startup to the next level. As well as “a fixed-term, cohort-based program, including membership and educational components, that culminates in a public pitch event, or demo day” (Jennifer Auer & D'Ippolito, 2014).

Considerations must be taken when considering implementing an innovation accelerator according to the team that will participate in it, having in mind that “A great team with a mediocre idea is more likely to succeed than a mediocre team with a great idea”. It was considered a good approach to believe in the internal knowledge even if it implies to go over some internal rules that were identified as bottlenecks for innovations (Trotter, 2013).

Also, the money to be invested in initial stages of the accelerator needed to be considered because, more money could lead the team to spend less, or no time in the test and learn phases (Trotter, 2013).

The selected team really needed to focus on solving the unsolved problems that were given to them by using an iterative approach to find the suitable solution to it. At the same time, innovation accelerator leaders needed to be managing expectations at business leaders level keeping them away from the whole innovation process (Trotter, 2013).

To obtain as an output of innovation accelerator, something innovative and disruptor, it was considered essential to involve external sources, because with an external point of view and feedback from different experiences it was concluded that is more likely to get a more robust output (EY; Cisco, 2016).

An innovation accelerator is something like a broad concept, as seen above, that could be shaped in many ways. Although all innovation accelerators agreed on “leverage corporate assets in service of speeding ideas on market” (Trotter, 2013).

According to Vincent Pirenne’s opinion a checklist with 9 bullet points should be followed to ensure that an innovation accelerator is in the right direction (Pirenne, 2015):

- Innovation drivers and barriers – these two were considered as the fundamental pillars of an accelerator and help to conclude if it will go ahead or not;
- Scoping – it was regarded as important to align expectations with all stakeholders and the team involved in accelerator about its result, one way to do it could be by using a matrix and let each part position itself according to some levels of how they think the market will receive the new solution as well as what they feel about what is being proposed (ex.: completely new, already existent);
- Speed – The word realistic was considered very important when defining the milestone of an accelerator to keep expectations aligned with what is being achieved in each phase;
- Continuity – Like a PDCA model (Plan-Do-Check-Act), it was recommended that accelerator phases must be iterative, only with this approach was it considered possible to foster an innovative culture inside an organization, improving the previous output by each iteration of it;
- Lean – By using lean startup principle it was possible to learn from other experience, other innovation accelerator programs, by checking the lessons learnt from them to make an accelerator as robust as possible;
- Selection criteria – Defining selection criteria was considered helpful in a way that an innovation could be evaluated based on criteria that all participants are aware of, and that will be considered when proposing something. Based on that it will be ensured that the innovation proposed is also aligned with business expectations;
- Strong and flexible innovation lead – It was studied that the success of an innovation accelerator largely depends on innovation lead performance, because it oversees the align between all participants as well as chooses and manages the right tools used to create innovation. It was considered important to never forget that “an accelerator will bring a lot of people out of their comfort zone, make sure not fall into traditional thinking process” (Pirenne, 2015), one more time innovation lead is responsible of making sure that this will not happen;
- Commitment – Commitment in the sense that there is the need for the organization to have a full understanding and certainty that investment will be needed for innovative ideas. It could be useful to make the accelerator known outside the company where it is being implemented and, also, to incorporate business leaders at decision phases for them to follow innovations creation exposing their point of view about it;

- Intrapreneurs – Innovation accelerator was mainly defined by his team and how good the ability to learn from the past experiences is.

There are five main elements that characterize an innovation accelerator: first of all there should be a definition of ways of funding created at the end of these initiatives, secondly find “company founders” and recruit people with technical background to be part of the team, after that, define the time window for each group, after having the people and a time window for them to meet it is time to organize an educational program to advise each team on business/ products and, last but not the least, a “networking program” to join all the teams and advisors to exchange opinions about what was done which may include the final demo day where all innovations that were created are presented to collect insights from people who better know the business (Fernandes, 2016).

Social networks, which were very different comparing to the beginning of the 21<sup>st</sup> century, brought a new feeling that no one stays isolated because an offline and online community was created that allows people to “share knowledge, best practices and stories, as well as to meet potential employees and investors” (Trotter, 2013).

Beyond social networks there was more technology involved in previous accelerators, like cloud-based software, mobile apps and its ubiquity characteristics, web-based platforms (Jennifer Auer & D'Ippolito, 2014), virtual conference systems, crowd sourcing system, public dashboard, network knowledge manager (Helbing & Balietti, 2011) integrated systems, creative design (Fernandes, 2016) and so many others.

The importance given to technological stuffs in a context of an innovation accelerator was mainly because this was defined as the most important distinguishing factor from other initiatives like incubators (Jennifer Auer & D'Ippolito, 2014). New systems based on ICT were expected to bring benefits not only for science but also societies and economies (Helbing & Balietti, 2011).

Main trends regarding innovation accelerators identified in 2016 were: mobile platforms which enabled real-time response depending on where and at what time a person interacted with the platform, internet, cloud services, CRM – Customer Relationship Management systems in order to better analyze and justify customer perceptions by their interactions with the business for example through social networks and integrated systems (Fernandes, 2016).

Many of today's cities were reinforcing community spirit by giving up co-working spaces to promote share of knowledge and knowledge creation (Trotter, 2013), which may be helpful on promoting the existence of innovation accelerators in the sense that those initiatives usually happened in “shared spaces” to promote exchange of thoughts between participants (Fernandes, 2016).

IDC at “The Tool Needed to Build a Digitally Native Enterprise” e-book has identified six innovation accelerators, these were internet of things, augmented reality, cognitive/ AI system, Next Gen Security, 3D Printing and Robots, it has also defined as 4 Pillar technologies to accelerate digital transformation that are mobility, big data/analytics, cloud and social (IDC, 2017).

An innovation accelerator, generally, includes activities like “brokerage services”, “mentoring and technical assistance services”, “a combination of cash and in-kind contributions” (Jennifer Auer & D'Ippolito, 2014), mentorship, educational programs focused on product/service and/or business advise, networking and a final public presentation on what has been done (Fernandes, 2016).

Regarding the kind of people generally involved in an accelerator, they were gamers, people (mainly men) technology enthusiasts, hackers or youngsters (Jennifer Auer & D'Ippolito, 2014).

The type of sponsors generally involved in an accelerator were universities and corporations (Jennifer Auer & D'Ippolito, 2014).

V.U.C.A. world is a concept that do not be let away when talking about innovation, because day by day, the world is becoming “more volatile, uncertain, complex and ambiguous” (Larry, 2014).

The time between an idea and a physical prototype “is getting shorter and shorter” (Larry, 2014) and at this V.U.C.A world, “speed matters more than perfection” (Giles, 2018) because over the last years the idea was to launch an incomplete product/service to the market and evaluate how it was going in a real life scenario and what should do next, without making a full solution and only then launching it to the market with a huge risk on mismatch of expectation between building team and the customer (Perkins, 2018).

Acceleration of technological changes helped in broadening the range of opportunities on how to innovate and as an assistant during an innovation process. Participation on social networks was no longer enough, the interesting part of it was how people interacted and who were the influencers inside it (Larry, 2014).

### **2.3.3.2. Some relevant cases**

Before start presenting some innovation accelerator best cases it is important to reinforce the idea that one size does not fit all, innovation accelerators are no exception, “every accelerator needs to be adjusted to your own organization”/reality (Pirenne, 2015).

**Coca-Cola startup weekends**, the idea behind startup weekends was to learn “a new way of thinking” by turning an idea into a valuable product/service in 54 hours base on “Lean Startup methodology”, also by promoting networking between entrepreneurs and startup leaders. Coca-Cola helped at startup weekends, as a non-technical partner, to share “knowledge, resources and assets like infrastructures, scale and expertise” (Startp weekend, 2018).

**Y-Combinator** was an accelerator launched in 2005 (Jennifer Auer & D'Ippolito, 2014) that had more than 4000 founders in 2018. It included a 3 months program where startups meet experts of a specific area that would advise them to mature their own ideas/products/services, until the point where it would be ready to be presented to investors in what was called the “demo day” (ycombinator, 2014).

Through those months, some presentations were made by important speakers like “startup founders, venture capitalists, journalists and executives from well-known technology companies”, having batches of startups participating at the same time in the accelerator which allowed them to help one another in a more enthusiastic and fluid way (ycombinator, 2014).

**Accel** was known as a type of accelerator that picked entrepreneurs with valuable and innovative ideas and helped them by funding their ideas and helping them to grow, by taking ideas and companies to the next stage and giving them new insights (Accel, 2018).

**Owens-Illinois** was an accelerator that took 8 months to be finished, 1 month per each phase. It included phases like preparations, ideation #1, ideation #2, boot camp #1, boot camp #2, boot camp #3 and last but not the least go/ no go (Pirenne, 2015).

Accelerators at the end made a pilot run of the accelerator considering only one part of the whole real environment (ex.: only applying it to the financial department) to get accurate feedback about its effectiveness and, if possible, incorporate it to be better at the next accelerator's iteration. With this approach it was possible to "build a strong innovation program based on learnings instead of assumptions" (Pirenne, 2015).

**EY Startup challenge**, a program which involved EY senior professionals and some EY clients that together were validating technological use cases proposed by startups. With the diverse backgrounds it was possible to generate innovation. During the program some workshops were made to share knowledge and share contexts between all participants (EY; Cisco, 2016).

**Fábrica de startups** had some accelerator programs like fast idea, fast start and entrepreneurs-in-residence. Fast idea was thought to generate ideas around a specific market segment by founding innovative solutions for it, fast start was thought to entrepreneurs who already had an idea but wanted to validate the business model associated with it. Last but not the least entrepreneurs-in-residence was the broader program because it started from an idea until the launch to the market of that idea (Fábrica de startups, 2018).

**ASA (Anje Startup Accelerator)** was known as a 6 months program that had as main goal to reinforce hard and soft skills of entrepreneurs by helping them turn their projects into more valuable ones, prepared to be launched to the market (Anje, 2015).

Also, it had workshops for all 30 teams that participated in the selection phase, to let them know what methodologies they had available and how to apply them to their business, a mandatory one was lean startup because acceleration phase was based on this methodology (Anje, 2015).

At the acceleration phase, where only 10 startups entered, an international experience took place to let entrepreneurs meet international mentors, "potential investors, partners and clients" (Restartup, 2018).

At the end, winner startups won funding from ASA (Anje, 2015).

**Startup Pirates** was one of the shortest accelerators, it took only 1 week and included workshops on "marketing, business model, financing and investment" as well as sessions with expert mentors to help them find the best way to go when applying what they learned to their business (Barbosa, 2015).

### 3. METHODOLOGY

After some thought about what should be the process to design an innovation accelerator for parishes, to follow a design science research methodology sounds like the best solution to get things done.

The choice of this methodology has had into consideration some of its characteristics like the fascination of combining synthesis brought by the design fundamentals and an analytic point of view that came from a scientific background (Baskerville, Kaul, & Storey, 2015)

Also, the fact that the desired output of this master’s thesis is an artifact which is known to be one way to classify the objective knowledge from DSR, although it was important to have in mind that the output artifact may not be a physical product/service, artifacts that came from DSR methodologies may also be conceptual ones like “design theories, constructs, methods, models, design principles, technological rules” (Gregor & Hevner, 2013).

Designing of artifacts is based on a problem solving approach which starts by identifying business needs and as a consequence the finding of a solution to organizational problems (Hevner, March, Park, & Ram, 2004) chosen to be addressed during this study (Gregor & Hevner, 2013).

However, it is important to mention that even the most abstract knowledge could be converted into a contribution to something that could be applied later in a more physical solution (Gregor & Hevner, 2013).

#### 3.1. DESIGN SCIENCE RESEARCH (DSR)

To use design science research methodology in this research process it was necessary to understand in which of the four quadrantes of figure 4 the research was placed.

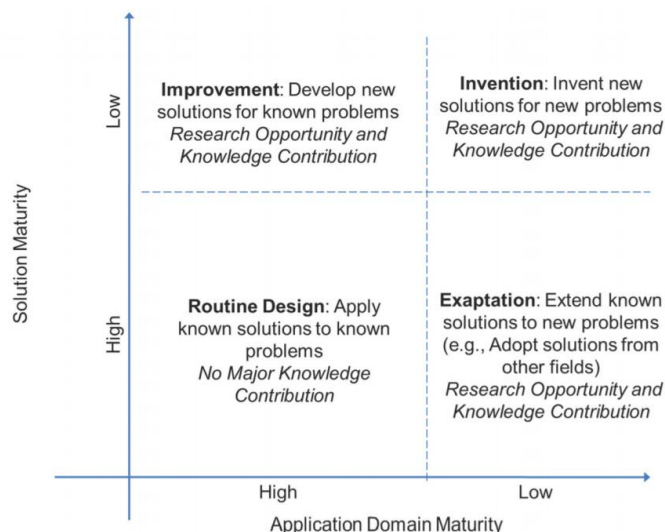


Figure 4 - DSR Knowledge Contribution Framework (Gregor & Hevner, 2013)

Regardless of the chosen quadrant, it was important to think that *“nothing is really ‘new’. Everything is made out of something else or builds on some previous idea”* (Gregor & Hevner, 2013).

Considering that expropriation was defined as a change on the purpose of a previous solution by an adaptation to the new context, expropriation artifacts are the ones that came from an adaptation of existing solutions in different fields to a new context with different characteristics, which is the desired output of this master’s thesis, an output artifact that will take into consideration inputs from smart cities main concepts and best cases, innovation and creativity initiatives and public administration status AS IS (Gregor & Hevner, 2013). Finding out a solution that is according with the parishes reality.

Design Science Research is a research method that involves creating/ improving something in an innovative way, that comes from a specific problem (Hevner, March, Park, & Ram, 2004), which regarding the scope of this master’s thesis is *“how to make Portuguese parishes smarter”*.

The search for a solution considering an exhaustive scientific research ensures coherence and credibility to the final proposed artifact. The effective communication of the final output is also a very important step that should not be left behind (Hevner, March, Park, & Ram, 2004).

To better explain the six fundamental stages of DSR methodology, shown in figure 5, each of them will be further explained right away.

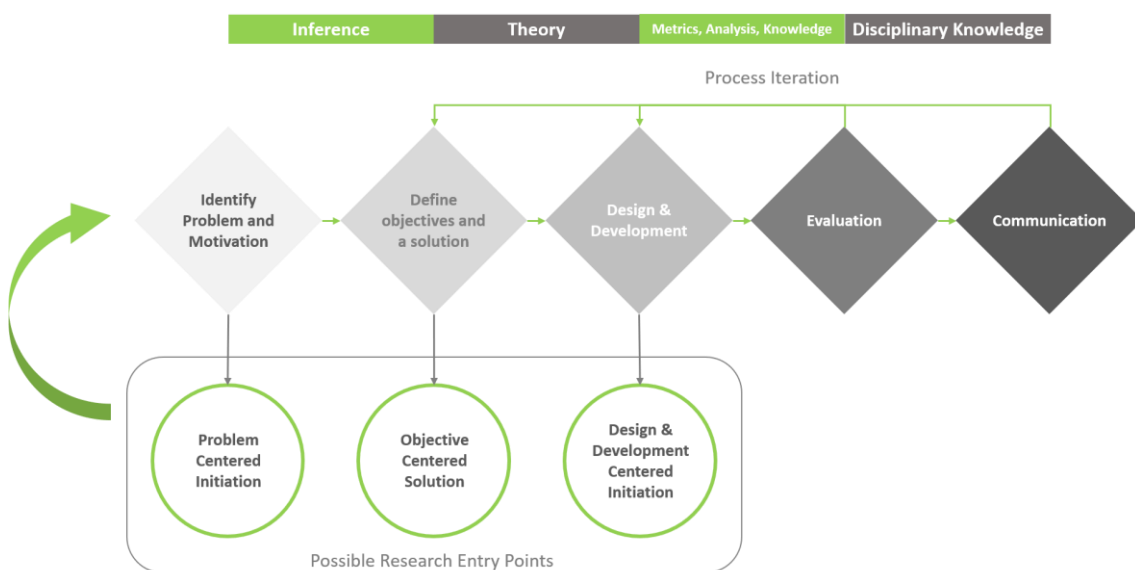


Figure 5 - DSR Method Adaptation (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007)

### Identify problem and motivation

Define the specific research problem and justify the value of a solution.

Start by defining a research question, that directly leads to a research problem by justifying the value of an effective solution to the stakeholders and what they will win with its output (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007).

## **Define objectives and a solution**

Specify objectives/requirements (quantitative or qualitative ones) to clearly set the basis for a solution based on problem definition and on what can or cannot be done (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007). The difference between phases stage AS IS and output search goal is the existence of a clear and objective problem definition (Hevner, March, Park, & Ram, 2004).

## **Design and Development**

Design and development stages aim to create knowledge by the design and development of the artifact itself (Gregor & Hevner, 2013) this could be achieved by the split of the main problem behind this research into simpler ones (Hevner, March, Park, & Ram, 2004).

There is need for a clear understanding of the solution value, justifying it with some theoretical background to have an effective/ consistent design in the next phase (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007). A solution that needs to meet business needs (Hevner, March, Park, & Ram, 2004).

To get the necessary theoretical background it is important to research and acquire knowledge on what is the current state of the problem and the existent solutions, analyzing direct or indirect solutions and how efficient they were (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007). Having the knowledge, it is possible to create a solution to achieve research, and consequently, business objectives and to argue upon the utility of the proposed artifact (Hevner, March, Park, & Ram, 2004).

## **Evaluation**

To validate artifact's efficiency there is the need for its practical application or its presentation to the stakeholders (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007) which should be proven by a clear definition of evaluation methods appropriated to that specific problem and based on requirements previously defined by the business. The alignment with business requirements is important because most of the claims on final solution is related with its performance problems (Hevner, March, Park, & Ram, 2004).

One of the ways to evaluate how the solution fits the initial problem is to compare what has been defined at the starting point of this master's thesis and what could be observed in its practical application (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007).

Although it is important to make clear that the main objective is to "determine how well an artifact works" and "not to theorize about or prove anything about why the artifact works" (Hevner, March, Park, & Ram, 2004).

At the end of this stage it is supposed to be evaluated if the artifact is ready to be communicated to the world or if it should be invested more time on it, to make it more effective/more aligned with the initial problems (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007).

## **Communication**

Communicating the final artifact to the world is one step in the direction of success, it is important to let people know how differentiate and effective the artifact is regarding the identified problems (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007). During this communication it is important to clarify how the artifact was build and which was the evaluation process behind its validation (Hevner, March, Park, & Ram, 2004).

It should be communicated to techno and management audiences to collect some feedback to improve the solution, also in business and technological points of view for future implementations (Hevner, March, Park, & Ram, 2004).

One way to communicate the artifact is with the application of a case study to evaluate the effectiveness of the proposed artifact because it allows “Study artifact in depth in business environment” (Hevner, March, Park, & Ram, 2004).

### 3.2. IMPLEMENTATION STRATEGY OF INVESTIGATION

In this section it will be explained how all the phases described above will be used during this study and what will also be the tasks inside each of them. It is possible to count with a help of the following model to explain it:

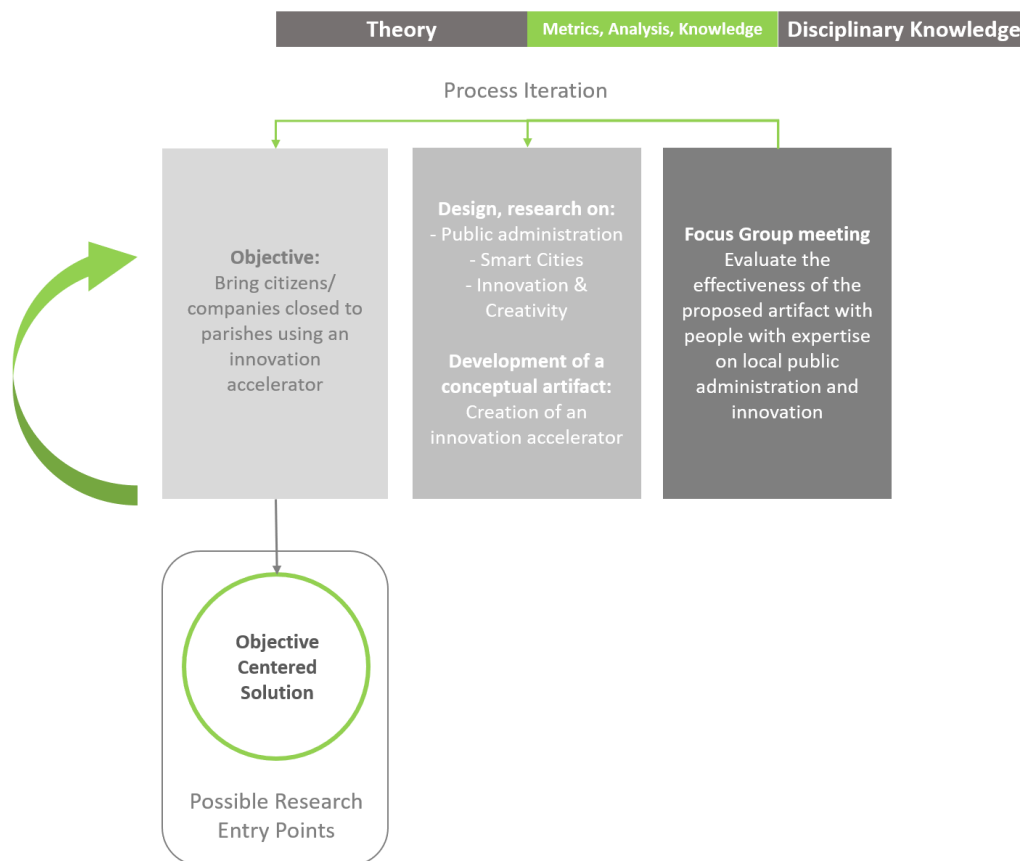


Figure 6 - DSR implementation strategy

As explained above, this study started at design objectives and solution stages because it was driven by an objective centered solution which is to bring citizens/companies closer to parishes using an innovation accelerator.

So, to start, there was the need to **define objectives and a solution** around the main problem identified in the previous paragraph, to get to know which areas the basis of this study should have according to requirements that fitted the solution's goal.

**Design and development** stages involved research around three main themes: public administration, its current technological state and what were the main responsibilities of a parish council in Portugal, smart cities, main concepts and initiatives that were already being done and innovation/creativity and existing methods to boost it.

This stage was split into two tasks, the first one explained above and the second one that involved the creation of an innovation accelerator according to what was researched and set as requirement by defining what is essential to get smartness inside parishes.

Last stage, inside the scope of this thesis, but one of the most important ones, **evaluation** of the output artifact that was done with the help of a focus group meeting to get feedback from participants about what were their impressions about the proposed artifact and how they saw the possibility to implement it based on the context they have on parish council's reality.

The moderator was Dr. Emanuel Costa member of executive committee from the Lisbon Metropolitan Area.

Participants were three Dr<sup>ª</sup>. Fernanda Marques - director of economical and local development department, Dr. Bruno Martinho – municipal director of economy, innovation and communication and last but not the least José Ricardo Dias Martins – president of Costa de Caparica parish council.

**Communication** stage was left out of this master's thesis scope due to a lack of time, but it was proposed for the future an implementation of parishes council innovation accelerator inside a Portuguese parish council, in a real live environment to understand how effective it is and how it could be improved.

Also, to show the effectiveness of the artifact it may be published in a paper and divulgated by social media.

### **3.3. FOCUS GROUP**

Focus group is known as a way to collect costumers/stakeholders' perceptions without resorting to a survey (Devault, 2018).

With the help of focus groups, people are led to discuss around all alternatives which may lead them to change their final decision by hearing other people's opinions, because many people answered surveys without questioning a lot of what they were really answering (Prasad, 2017).

So, the main reason why it was decided to use a focus group instead of a survey was because "a survey would be a good way to learn that 5% of the population prefers Program A. However, a" focus group discussion "is a good way to learn why 54% of the population prefers Program A" (Prasad, 2017).

And also because this study fits the context of a qualitative study so, it made sense to consider an evaluation method that generates qualitative data (Gill, Stewart, Treasure, & Chadwick, 2008), because of these two premises, it was chosen focus groups as the evaluation method used at DSR methodology to evaluate stakeholder's reaction to the proposed output artifact.

About organizing a focus group discussion, recommendations from experts were found about an average duration of a discussion, to be successful and without losing anyone's attention should not take less than 60 neither more than 90 minutes (Prasad, 2017). Always having in mind that it is fundamental to give time to each participant to explain their thoughts about the topic, without interrupting them as soon as they stop talking and without letting one member dominate all discussion (Gill, Stewart, Treasure, & Chadwick, 2008).

Usually, focus group discussions should have 6 to 8 people involved, not more, to be easier to get everyone's inputs without missing some of them (Gill, Stewart, Treasure, & Chadwick, 2008). Ideally, people should have some similarity (Morgan, 2019) that can be used to be categorized as a sample of a specific group.

The success of a focus group discussion only will be possible if all participants feel comfortable enough to interact openly, which can be achieved by defining an effective questioning route (Devault, 2018).

So, 10 is also the number of the maximum allowed pre-set questions that will guide a focus group discussion (Prasad, 2017), those questions must be from three types: the ones to introduce participants by presenting the main topic and letting them comfortable to share their thoughts during the discussion, typical and pre-set open-ended questions to generate discussion of ideas/perceptions between participants (Thebridge, 2003) requiring some explanations from participants, as in interviews, without staying by a yes/no answer (Gill, Stewart, Treasure, & Chadwick, 2008) and last but not least questions to ensure that anything was not let away (Thebridge, 2003).

In general, questions must go "from general to more specific" (Thebridge, 2003).

The aim of a focus group discussion never will be to get a consensus between all participants, neither to get as output an idea of what to do about something, is more like a discussion of ideas/perceptions to get valuable inputs that can or cannot be used in future (Devault, 2018).

Which can be achieved with a focus group discussion and a well-prepared moderator (Devault, 2018).

Moderator's role is one of the most important when talking about focus group discussions, it should be the one who encourages discussion about a specific theme, generating as more discussion as possible having in mind a pre-defined time (Prasad, 2017) the moderator should guide focus group discussions rather than participate in them (Gill, Stewart, Treasure, & Chadwick, 2008).

Customer's understanding about the advantages of what is being presented should be allowed as well as to make constructive feedback upon it (Devault, 2018).

In the context of this master's thesis, focus group participants were chosen based on their similar characteristic which is the relationship with parishes councils, as well as their relationship with local government and their expertise on public administration subjects.

## **4. FRAMEWORK FOR AN ACCELERATOR TO MAKE PARISHES SMARTER**

### **4.1. SMART PARISH CONCEPT**

After studying Portuguese public administration, in more detail, how parishes work today, smart cities and what are innovation accelerators and how they work, it was possible to have a clear notion on what must be included in the definition of the main concept behind this master's thesis: a smart parish.

In fact, it was understood that a smart parish is the one who wants to improve the relationship between citizens and parishes by promoting the dialogue between them.

Including more citizens in the initiatives that happen inside their parish, by listening to their opinions and making them feel like their opinion counts.

Also, a smart parish is the one who gives training to parishes council's employees, for them to be more focused on providing a citizen centered service; the focus are the citizens and not only the process and the bureaucracy involved, making citizens closer to parishes.

Giving IT training to citizens to take advantage of information technologies and promoting digital inclusion is also part of smart parishes' mission.

In general, a smart parish must improve the way people live in it by involving who lives and/or works there.

### **4.2. ASSUMPTIONS**

Based on what was studied in the literature review, about public administration, smart cities and innovation, it was defined that an innovation accelerator for parishes to become smarter should:

- Have processes oriented to citizens' needs by the understanding of their involvement with public administration and e-government services and trying to improve it to reduce costs and to be more focused on citizens (Mateus, 2008);
- Promote dialogue/communication between citizens and public administration (Rodrigues C. , 2011) by different channels (Cardoso, 2014) as well as the communication with stakeholders to improve medium/ long-term initiatives survival (Nóbrega, 2017);
- Improve transparency and promote citizenship, for example, by letting citizens see their information and has a way to report if something was wrong with it, improving information society (Mateus, 2008);
- Use knowledge networks (teams, communities and collaborative alliances) as well as collaborative and interdepartmental technologies (Mateus, 2008) to develop a knowledge base repository to gather, join and process all collected data (Albino, Berardi, & Dangelico, 2015);
- Promote digital inclusion and the use of e-government services as it has already become available, giving some agility to public administration (Mateus, 2008), not only for young

- people but also for elderly people by letting them interact with each other (Azevedo, 2013);
- Give training to their employees to improve their skills and make them enablers of organizational changes (Cardoso, 2014);
  - Include parish council's employees in all phases of public administration modernization initiatives to help in the success of its implementation and let them give their ideas that may have never been shared but could be a solution for known problems (Nóbrega, 2017);
  - Have available opinion pools to make citizens and businesses feel that their opinions count (Helbing & Baliatti, 2011);
  - Invest in an improvement on a better relationship between municipalities and the Portuguese government (Rodrigues C. , 2011);
  - Ensure that parish employees are prepared to answer citizens in a real time basis, when citizens really start using e-services as it is supposed (EUROCITIES, 2017);
  - Use interaction channels, business intelligence, mobile technologies, automated reporting and alerting, workflows (Mateus, 2008) to ensure people's quality of life by combining people, community and technologies (Albino, Berardi, & Dangelico, 2015);
  - Make use of CRM systems to better know their citizens (Cardoso, 2014);
  - Invest in *juntar a junta* application to get closer to citizens and know their pains (Calheiros, 2017);
  - Invest in website modernization to make it relevant and indispensable (by changing people's mindsets finding a way for people to prefer the website to personal contact (Ferreira, Ferreira, Marques, Ilander, & Çipi, 2015)) for citizens, which should decrease the level of bureaucracy and should be easy to use (Santos & Amaral, 2008);
  - Cover and improve the main topics identified by citizens inside parishes: danger associated with the possibility of trees to fall, cleaning woods, garbage collection and abandoned vehicles (Calheiros, 2017) and find other ones that are concerns for their citizens;
  - Find a way to put together "companies, cluster, universities, R&D centers, municipalities and other economic and social players" (INTELI, 2014) to generate ideas to improve citizens quality of life inside a parish;
  - Share data about their parish to be compared in a broader way with all parishes inside Portugal to improve the whole local public administration and not only each parish as individuals (Neto, Rego, Neves, & Cartaxo, 2017);
  - Improve parish website for helping front office parish competencies the ones that may help improve the relationship between citizens and parish council, let them be closer to each other. Parish competencies to be considered in website improvement were a), f), g), k), m), o), q), s), t), u), v), x), y), z), aa), bb), cc), ee), ff), hh), ii), kk), rr), tt) and licensing of activities like lotteries sales, car upholstery and noisy activities of a temporary nature that respect popular festivals, pilgrimages, fairs, camp and dances.

Each initiative planned to be done at the scope of the innovation accelerator for parishes, should always consider that they must end up with a cost reduction for citizens, an improvement in the way they live or an improvement of the way public entities deliver their services (Ferreira,

Ferreira, Marques, Ilander, & Çipi, 2015) as those are defined as what people were expecting to happen after an implementation of a smart initiative.

After studying innovation accelerators a bit deeper, and how they were being used during the last decades, it was concluded that an innovation accelerator for parishes must:

- Include crowdsourced creativity and software communities (Larry, 2014);
- Let people share their own ideas online for them to succeed in reaching the knowledge of various stakeholders (Trotter, 2013);
- Promote networking between people with different backgrounds and ways of thought to generate disruptive ideas (Barsh, Capozzi, & Davidson, 2008);
- Include brainstorming sessions; networking events and expert teams meeting are also needed to help stimulate innovation (ESADE Knowledge, 2018);
- Include different ways to fund innovation like: government grants, debt or equity funding, business angels, crowdfunding (Queensland Governemnt, 2016), academic partners (Innov8rs team, 2018). When talking about get funding from business angels is important to have a prototype of the proposed idea to increase the chances for them to invent on an idea (The Innovation Policy Platform, 2018);
- Include coworking spaces available 24/7, for people to mature and work on their ideas having the possibility to network or listen seminars from people who have know-how about different areas what may help to improve an idea and make it more robust (Harris, 2017);
- Include innovation labs organized by the parish council where people that do not know each other will work together to mature ideas using lean startup and then the adoption of agile methodology to implement it (Glaveski, 2017), as ideas came from ideas contest it does not make sense to include design thinking in this first design of the innovation accelerator, so the process will start as presented in figure 3 at lean startup iteration;
- Include recruitment process and training for the people who will participate in the implementation of the proposed ideas. A final team that will work at the innovation accelerator must include people from different generations and backgrounds (Larry, 2014) as well as people with technical background (Fernandes, 2016) that will be committed with accelerator's main goal, generate innovation for their parish;
- Include educational program to make people more familiar with the innovation methodology that will be followed as a key point to accelerator's success (Pirenne, 2015) and also with the local public administration (Fernandes, 2016) reality letting people know what was already being done;
- Include networking event, usually called demo day in the context of accelerators, where participants will present their final innovations (Fernandes, 2016);
- Include a jury composed by experts on local public administrations and stakeholders like universities and companies (Jennifer Auer & D'Ippolito, 2014) that will evaluate the final result of the innovation process based on criteria that all participants were previously aware of (Pirenne, 2015), as well as investors that may want to help to implement a certain innovation (Fernandes, 2016).

The innovation accelerator for parishes may also include some initiatives, normally used in other accelerators, like mentoring, resources and industry connections (Jennifer Auer & D'Ippolito, 2014);

In terms of duration it may vary from weeks to months (EY; Cisco, 2016).

So, the main goal behind the implementation of an innovation accelerator for parishes must be attempting to lead parishes to something like smart city 3.0, the one related with citizens co-creation where citizens were involved in the initiatives. (Cohen, 2015).

### 4.3. INNOVATION ACCELERATOR FOR PARISHES

Trying to build an accelerator that may fit all smart parish realities, is proposing an innovation accelerator with more than one possible path, a mandatory one and another with optional processes as it may not be possible to implement it in all parishes depending on each one's reality.

#### 4.3.1. Framework

At the scope of this study, an innovation accelerator for parishes was proposed, for them to become smart parishes, according to the assumptions described above it was proposed the following conceptual framework.

The main goal of the conceptual framework proposed is giving citizens a better quality of life by improving all communication channels between them and parish councils, to get them closer, also by letting them have a voice inside the parish by sharing their concerns, thoughts, giving ideas to improve their daily lives. Who better than the people who work/live inside a parish to have an idea on what is good or bad in it?

In figure 7 it is possible to see all the main concepts of the framework and who are the participants of each one.

Based on this, it was considered that for a parish to become smarter changes needed to start from inside the parish council. By giving attention to their employees, listening to their ideas, re-

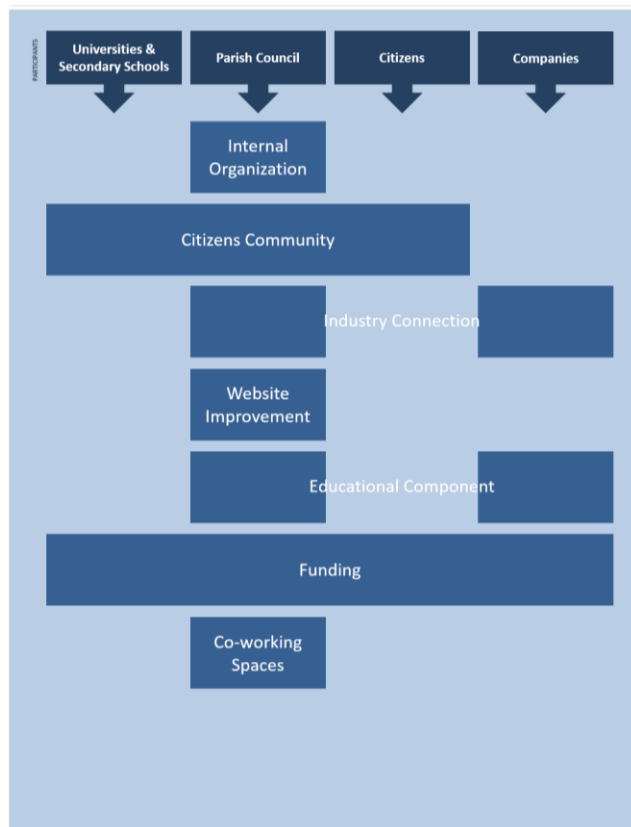


Figure 7 - Framework Components

organizing processes to be able to respond to citizens in a more effective and efficient way, also involving them in the modernization of services given to citizens by training them on innovation to increase the chances for innovation initiatives to succeed and be accepted inside the parish.

Also, citizens needed to feel they belong to a parish which listens to their thoughts and that improves their way of living and this is only possible by letting citizens network and brainstorm with each other to create new and disruptive ideas that have real pains behind with a help of mentors from specific areas and from the parish council itself.

Industry connections are also needed components in the proposed accelerator as they will catch connections from companies and parish council to find some fund, mentorship and/or physical space to help implementing and guiding innovations.

An improvement of parish council's website was considered a mandatory component as, after studied parish councils' competencies, were found that the front-office ones, that directly influence the relationship between citizens and parishes, had a lot to do with providing information to citizens and forms for them to fill in. Also, a website improvement is needed in order to be possible to have a page in which people could submit their ideas and later require funding for them.

Because of this, a funding component was also needed at this parish accelerator where citizens (business angels), companies or even the parish council with help from government would help take some innovations to a next level.

Considering this wave of innovations, concerns came up, people from parish council needed training to know how to deal with innovation and citizens needed training on how to make use of the e-services they have at their disposal, how to implement their ideas, how to convince people to invest on their ideas taking them to a next level and training to promote digital inclusion.

Based on that, education was also considered a mandatory component inside this framework.

Co-working spaces had already been implemented inside the context of smart cities and had been a success for people who want a place to work or study without being at home or paying a very high income. Also, as one of the outputs of this framework is to generate ideas, people need a place to do it and to meet with other citizens or even with some investor. So, co-working spaces where a need in the context of the proposed framework.

#### **4.3.2. Guidelines for an implementation of innovation accelerator for parishes**

It was considered that the implementation of the proposed framework should start from inside the parish councils to the citizens. So, in general terms, first the parish council will need to rethink and re-organize the way they do things and the services they provide, and only then improve communication channels between citizens and parish council giving voice to citizens and, if possible in the context of the parish, promote an innovation lab where ideas will become reality with help from mentors, funding and training always having in mind the question: how to improve the quality of life of your parish, in the near future?

In the next figures innovation accelerator's implementation flow to achieve the goal of making parishes smarter will be presented.

It was considered important to set as steps of this implementation an internal organization of the parish council. Where, generally speaking, they will start by considering investing in a new

application to be used by their citizens and parish council's employees, then giving voice to internal parish council people listening to their ideas and thoughts as well as to let them participate in website improvement to encourage them to become enablers of innovation.

Explaining why it was considered important waiting 1 month after communicating the new application existence to citizens, it was due to the fact that it was considered that only after this time will it be possible to evaluate their success not only inside the parish but also as an help for citizens.

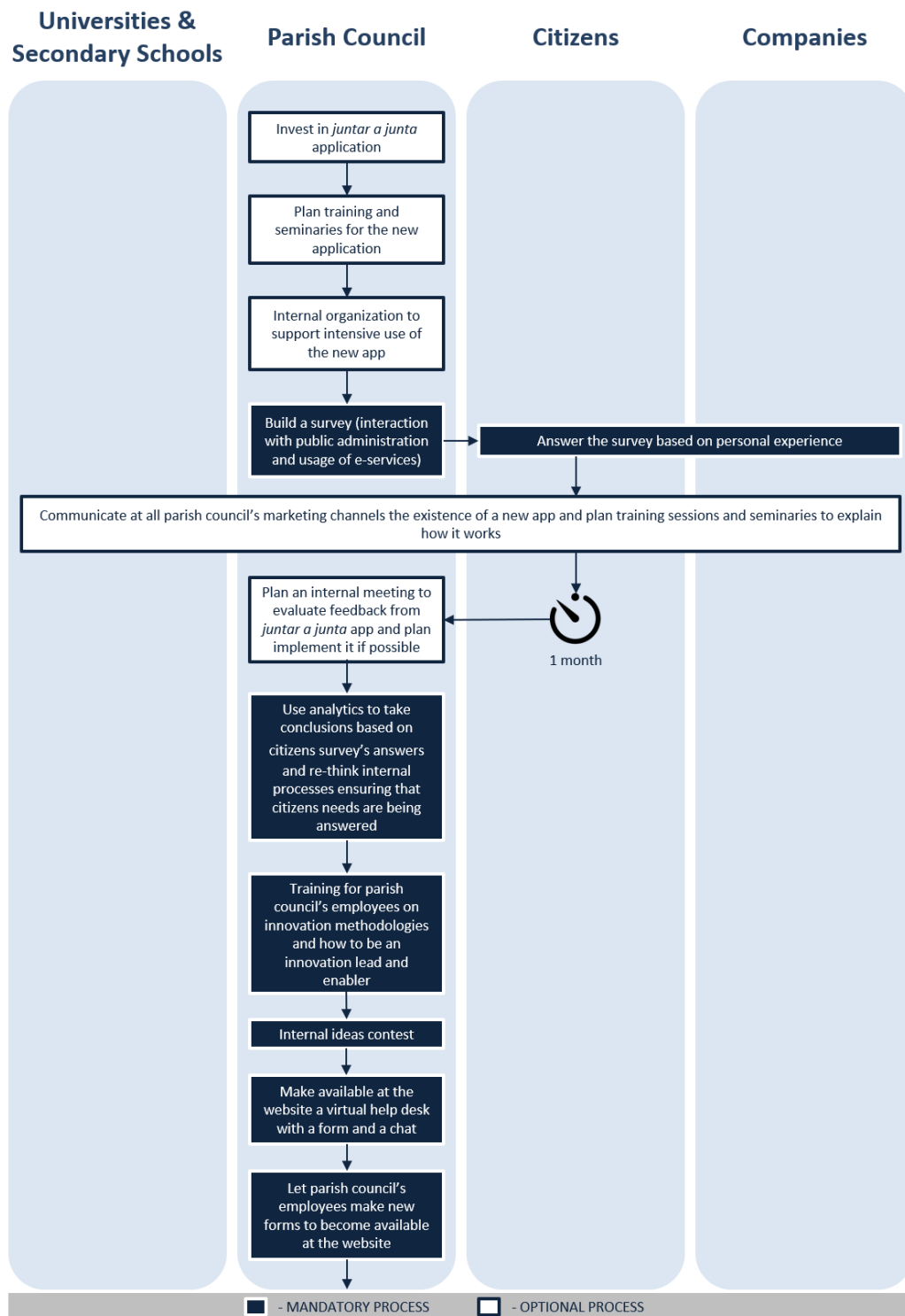


Figure 8 - Framework Implementation Phase 1

After improving things internally, it was considered that the second phase of implementation of the proposed framework should include an investment and improvement not only in technology but also in the way people use it. So an improvement of parish council's website aligned with their competencies was mandatory as well as an educational component that included citizens and the way they use electronic services made it available by public administration, local and central one.

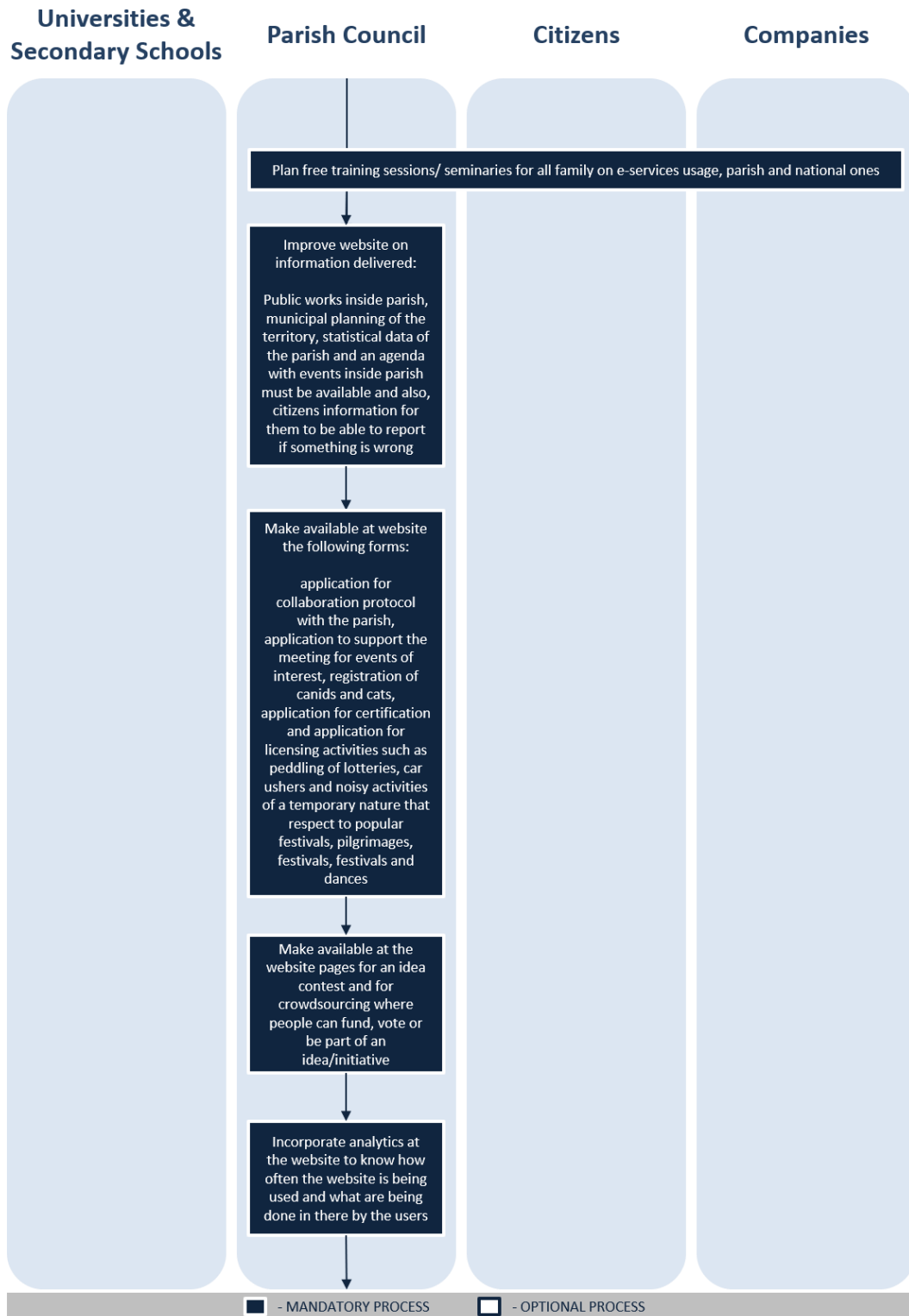


Figure 9 - Framework Implementation Phase 2

At a third phase of implementation it was considered that it was the stage where parish council was already prepared to involve citizens. It starting by explaining how they should use parish council's website and take advantage from it, as well as investing in a customer relationship management system to improve the knowledge about citizens.

Also at this phase, it was considered important to give citizens a place to study, work, meet or simply join together to exchange some thoughts, as well as letting them have a voice proposing ideas, voting in others ideas or simply by volunteering themselves to join its implementation.

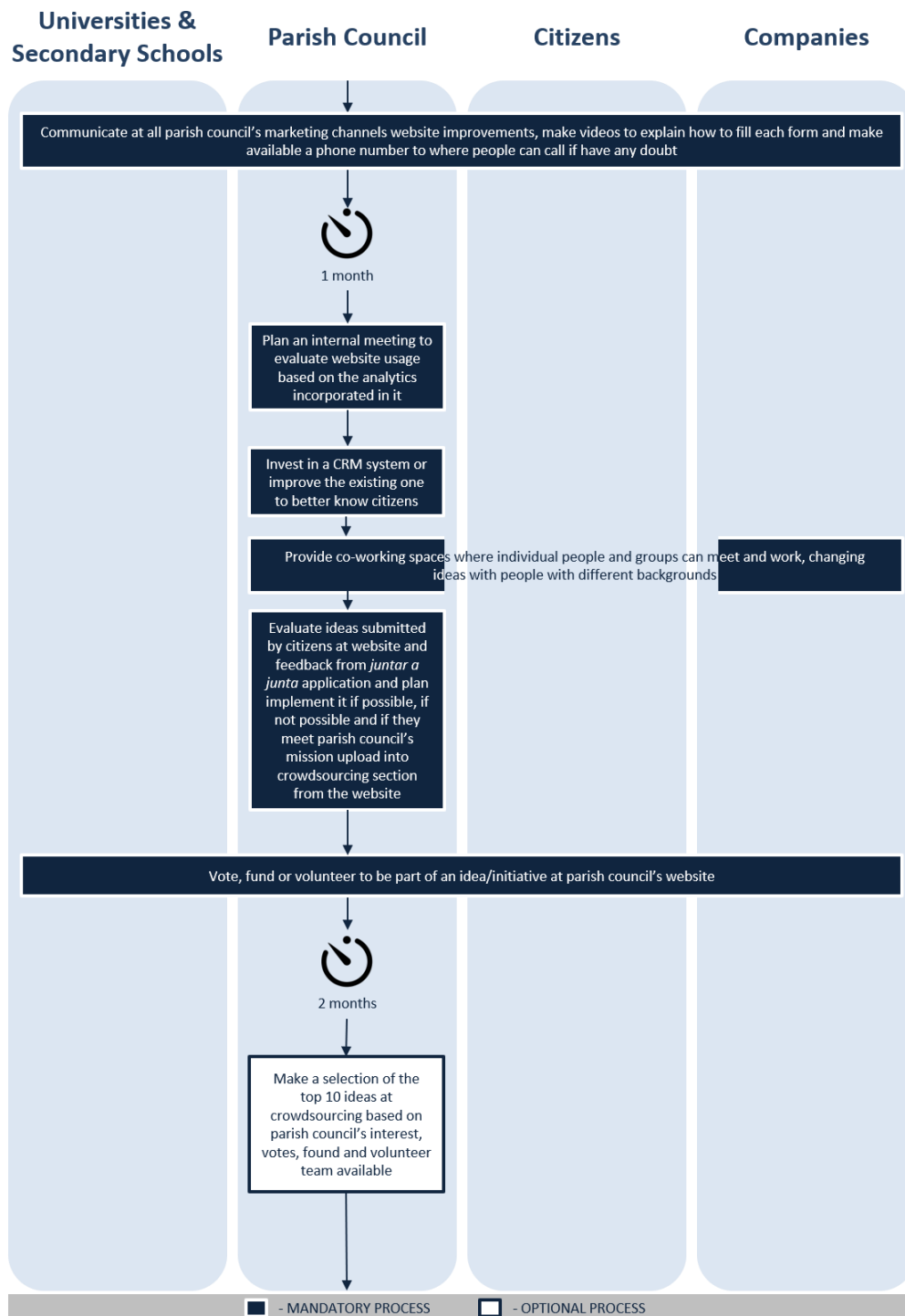


Figure 10 - Framework Implementation Phase 3

As final and optional phase, there was a need to incorporate something similar to an innovation lab to pick citizens and parish council's employees ideas and make them happen with an help of companies and universities to implement it.

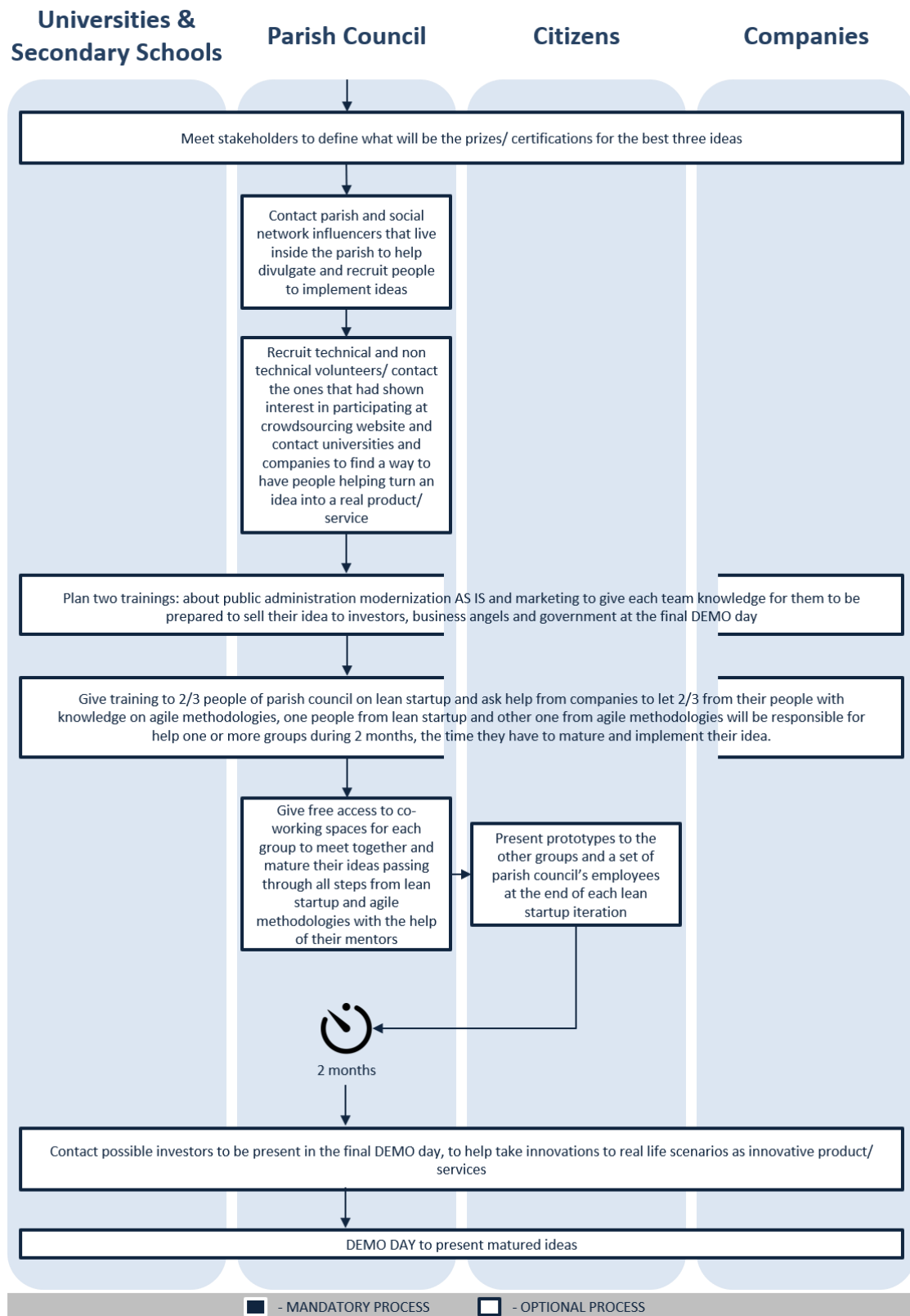


Figure 11 - Framework Implementation Phase 4

At the end of the first iteration of the innovation accelerator for parishes, when some ideas had already been implemented, it was suggested evaluating the possibility to create a parish delivery center to help implement future ideas and mature the existing ones, as people had already knowledge about the parish council's reality, public administration and innovation methodologies.

It is suggested recruiting someone to manage social networks of parish council in order to get closer to citizens, getting their attention on what is being done, as well as influence external opinions with the help of parish influencers.

#### 4.4. VALIDATION

Validation was carried out by holding a focus group meeting three participants mentioned at methodology chapter. They were Dr<sup>a</sup>. Fernanda Marques (FM) - director of economical and local development department, Dr. Bruno Martinho (BM) – municipal director of economy, innovation and communication and last but not the least José Ricardo Dias Martins (JR) – president of Costa de Caparica parish council.

With an important role on this meeting and as moderator of the meeting was Dr. Emanuel Costa (EC) member of executive committee from Lisbon Metropolitan Area.

For this focus group meeting a presentation was prepared with an introduction explaining what was considered a smart parish and the proposed smart parish accelerator.

After presenting what was described above, three questions were made to the participants, for them to answer according to their knowledge and backgrounds on local public administration as well as their personal thoughts about what was presented.

The three questions made were:

Q1	Utility of the presented innovation accelerator for parishes.
Q2	Observations to what was proposed (viability of it).
Q3	Criticism and suggestions for improvement.

As the focus group meeting was very rich, it was only included a synthesis of the answers of each participant to the three questions in the content of this section. Although it was considered important to incorporate the all transcription of the meeting inside this study, so it is possible to find it in annex 1, written in Portuguese.

#### So, Concerning Q1, the answers were:

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**JR:** As for the services of the parish council, unfortunately we know that 80% of the time they are not used.

Another thing is that, when talking about competences, we have nothing of what is described here, we do not have them yet. But we have other things, the kennels and the catteries, yes, we

make the registrations online and so on and that's peaceful. We make it available online, but the usage fee is very low.

Even yesterday we talked about it, in another context, because of the citizens' space. Citizen space is supposed to be a facilitator of using such technologies where we can do certain things online. We all know parishes reality, Costa de Caparica in this aspect, of aging, is a little younger because we have a percentage of a different layer comparing to the rest of the county, but even so, the citizen space on the Costa de Caparica is having a huge use. What do I mean by this, if I have a water bill to pay for example, I know I have a SMAS pay station 100 meter away, people know they can do it online. But they do not do it, they do not.

For many reasons. Or by contact, elderly people is because of contact, either because they do not know or because they want to have contact with those who are there, sometimes also to talk... here are some different situations. Although, it is necessary to take a course in this direction.

Regarding training of our employees, in this aspect it has been practically null, the people who manage the site, which is now being refurbished, such as which platforms we have, the apps of the holes and the other in which they report what with they are confronted all day long, we have an employee who does this, only one who does this, who responds in a timely manner. I also cannot ask the operatives to do it ... we have applications in the vans for them to report to here, but it is more internally, or through the population that writes, very residual, or send an email or write there in the application saying " look there are things there to raise " and in that aspect they read and do. But we have very few users that have this application ... Not as many as we would like to achieve.

However, this service works well, however I cannot ask people who have a very low level of education to do it. Other types of training? Yes, they do, but it is real that they do not even know how to do it, it's true. I have employees there who do not even know how to look at a mobile phone.

We have made some publicity, an attempt to divulge. At the social networking level, it works well, our Facebook page until it reaches levels that I sometimes get a bit of an open mouth to realize how we got there. 20 thousand, 20 something... is a big thing. Large when talking about an institutional page without any kind of advertising attention. In fact, it has some impact.

However, at the applications level, people are not adapting. I think this has also to do with the mentality of people. The youngest ones, yes! Youngest ones do it, but the youngest ones do not care either if they saw a lot of trash on the street, they just go ahead and continue, they do not get too involved and that's a society gap. Portugal has had a very fast pace, it is a young democracy, it is normal for this to happen and we must be doing this course.

Then we have another problem that is the people of my generation and the older ones, some of them yes have adapted to new technologies reality and then there are others that have not adapted. And those who have adapted to the reality of new technologies are also lazy to the point of going to the app and putting anything there, they prefer to send a message in

Messenger or send an email or make a phone call. There still has not been the leap to overcome this wall.

The application, in fact, is extremely easy, well it also depends on where we have access to the application. But it is extremely easy.

It is obvious that we, parish councils, will have to play this role and perhaps here in a marriage closer to the schools, because I think it is very important to involve schools. We, in our parish, only have the first and second cycle, we have no secondary school, we have been looking for one for some years.

In other words, this leap has to be given. However, this is not immediate. Because talking to an elementary school student, or even if it is an eleven-year-old fifth or sixth grader who already knows how to use all technological things since he grew up with it, right? But he does not. Firstly, because he does not want to, this is the first, then because he really is not going to waste time teaching his father or his uncle or whatever it is on how they should do it. So, there is a path here that needs to be done and this is a gap that we have in the county and perhaps all over Portugal.

Regarding the study that refers that people know about parish websites, although they do not feel the need to use it, I agree with that, but here it has to be added another thing, which is that people can not differentiate who does what, if it is the city council, if it is the central bank, if it is the parish council. They end up mixing everything and putting everything in the same package. This is reality. We answer to everything obviously, but often the answer is "this service is not ours and we will report it to the city council", and the person says "so, if I ask the same question once or twice and the answer is the same and nothing happens", they end up losing the connection to parish council.

I can clearly tell you where we have more interactions, it is very clear, it is in the garbage part. I do not have any kind of reluctance to say this. Because it is a concern that moves everyday with people and is clearly not ours, it is the city council. But it is objective and crystal clear.

However, it is obviously useful, here is some course that has to be done obviously, for all these reasons that I have been talking about and some more.

But if you ask me if it is useful? Yes! Should it be implemented? Yes!

We have to figure out how we're going to do it, right? Because we do not really do much of the things that have been said here, we do not have or we do not fulfill or we have not got there yet ... or we will not arrive, I do not know ... In this package some things we really do. Obviously, there is a gap here, in my point of view, in the interaction with society. Not here, but in the way we do it.

There is also, from society, some disconnection from what parishes dynamics are, and this is a serious problem. We could confirm it at assemblies, people do not go, do not participate, do not want to know.

This accelerator could really serve as a binder. That is, people can participate more yes. So, I think it could be considered as a great asset.

However, there is a long way to go. But yes, if the answer is yes or no, it is indeed interesting and, I think, it should be indispensable.

There are parishes in Lisbon that have these models already more developed. Several in fact. Because they were confronted, earlier, with what was decentralization of power, they have other areas where they can work and so on. Things we do not have yet.

At a communication level, ours is very residual. In addition to the website, then we have the Facebook page and we do not have more than that. We have the apps, but we do not do much more than that.

Do we have to go further? Yes, of course. But that is not my business either, because I do not dominate this area, but I can clearly see that there really is a big gap in here. Not only in mine, but in the parishes that I know and as I work in the national ANAFRE I know the reality and there are some even worse than ours.

In fact, it could be a tool with this or that nuance, adapting to the parish and what is the stratum of the parish, when I speak of stratum I speak of social stratum, the stratum of the parish. Because our parish is different, even within one parish there are completely different strata.

I think it is useful, it is quite useful.

**BM:** The adoption of such a process will always have the benefit with, although it may or may not result in the scope of the process, public participation. Once the levels of realization of the organization increase, the public will benefit in other processes or even in the day-to-day administrative process. It will force parishes or public service internally to raise their level of service and the public will then surely benefit.

Because we know well that the levels of participation of the population are very low. When talking about the participation in the public discussions of territorial management instruments, participations are borderline, nothing. And I am not even talking about qualified or less qualified ones, because some of them are participation at the grade zero level.

So, our expectations sometimes for audience participation have to be moderated, because the public sometimes is not there yet ... Now if this accelerator forces the public service itself to do upgrades/ level ups on some components it is already very positive, if we get closer to what is the state of the art then 5 stars. Because, in the future, everything will need to operate in apps and online.

At least, they are already there. Because the public is going to come there. It may not be in this process, but in the next one, they will come.

Yesterday, we talked about it because of the new citizens' points, where we ask to a guy "Do you not know that there is now a citizens' point near your house?" and the guy answered us, "Yes, but I like coming here to the center of Almada".

The senior population is dominant in a council like Almada, mainly in the period of the day when the active population goes to Lisbon. Almada is very vibrant at mid-day, the seniors and juniors are all there, it's amazing. But the truth is that the senior population says "No, I do not mind coming here. Is this service online? I do not want to know! I come to take a walk and I use to do what I need to do in that time.", is like a social circuit, so we can never make a completely phase out.

On the other hand, their presence is also a way of ensuring that communication and that calling them to these participatory events is guaranteed.

A very good thing about this accelerator, independently of the conclusion at the end of the day, whatever the level of citizen participation, is that it forces parishes to upgrade and modernize. Afterwards the public, everything depends on other things, but the assumption that parishes have to prepare, is a progress that is already very important.

Because then you will benefit from it, even in future processes, day-to-day administrative processes...They acquire skills they did not have before.

**FM:** As for the question of utility, I would say that according to our model of communication, these types of channels are fundamental, but that we, even from what has already been said, we must always have models in which all channels are used.

Therefore, the face-to-face channel, the telephone channel, and the digital channel in this case, must continue to be important offers from the point of view of public administration for all these reasons that have already been said. Because it depends on what scope of communication we are doing, what audience we are working on and what is our capacity to respond to what is generated by these channels, because then the risk is to generate frustrations. Whether on the user's side or on the side of those within the organization managing these tools.

I have had experiences, 15 years ago, in the implementation and modification of the city council website and in the availability of online services associated with Portugal digital and all the initiatives that were at that time related to the operational program of information society, in which we mobilized a bunch of resources to here and in fact these risks are real.

So, the development of these applications and these solutions will eventually result in the cause-and-effect relationship, which will then be done in the evaluation part, generate here some frustrations that have to be managed and not think that they will be completely replaced and integrated by these offers.

**Regarding Q2, the answers were:**

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**JR:** What was presented here, some part we are trying to streamline. We realized that in these was a big gap, we did not have it.

We had a completely obsolete website, which we changed because it was a monster to manage and because we could not manage it without help. We have tried to create a website of our own and have really been requalifying and creating tools so that we can be closer. And now we are.

However, obviously the accelerator presented here goes further than what we have at the moment and that we may do in the future. This might be a model, not perfect, but already very advanced for what are at present the designs of the parishes, Costa de Caparica and others.

We are not at the level of what has been presented here. We already did some course, maybe a little further ahead than other parishes, but we are not at this level, not even close. Yet...

And, the investment, is very important, if the city council can do it and can requalify because it has a budget that can really make available, very good. We do not have that capacity, we have to do a lot with much less and sometimes we have difficulties.

Even if I want to hire, it may not be a guru, but someone who suits well, who moves well. They asked for an order bigger than the one that the president wins. I have proposals completely, for a parish council, completely out of context and I am talking about management only.

Just to give another example about training, I am always on the lookout and the employees have formations at various levels. Because, when I came in here, I had no one to do accounting or treasury. And who does our accounting today, is my head of accounting, who answered calls and nothing else, ok ...? And I had to be able to adapt the staff to requirements and I am only talking about accounting, I could be talking about other things.

In Portuguese parish councils we have to give answers to several things at the same time and we had a time when we really had to sustain the parish council at a functional level. By adapting us to so many different things. Also, it had to do with the skills obviously and to adapt everything that was services to the new realities. Some of them with resources of very low schooling.

And I have not finished making that adaptation and I am already going to start another one. We are still adapting everything service to several completely different things and then we will now take with the skills that we will have to adapt again. In the midst of it all the interactions with the populations have been left behind, why? Because we are confronted every day with completely different things.

However, I think it is fundamental to apply these types of applications and also extend them. We can even work with the city councils and share city council's competences with the ones from parish councils. Because sometimes we even share things from the same territory and different skills that sometimes even end up interconnecting with each other.

Yes, these applications are crucial. Nevertheless, there is a long way to go. Also, in the city council, but they are already much further ahead.

**BM:** The great nuance for the implementation is an entry point for the materialization of the methodology, from parish to parish. Because in fact it depends on the level of sophistication of the population and of the parish itself and it also depends on the dynamics, and José Ricardo noted well. In Lisbon, they had to adopt and accept competences before so, as consequence parish council also became more relevant to citizens. Citizens had to interact more quickly with parish council and went looking for it for other reasons.

Here and in any other parish that does not already have these characteristics of Lisbon, in which each parish looks like a city council, in fact it is bigger than many of country's parish councils, they have an internal sophistication and a population also with a different level of sophistication with regard to the use of these tools.

In all other 99% of parish councils, there is need for an understanding of what the gap is until it is prepared to the entry of the methodology. Because to apply this, sometimes we will have to train them so they are able to adopt, even the staff from parish council.

And first up, even a few having website, is a very minimal one, some have the generic ones that were given to them in the past.

There are parishes that are on zero grade. So, it is more than necessary, it makes more than sense and while we are talking about, parish councils are accepting more and more skills and people still unduly continue to look for the information on our side when they should start looking at the parish council side.

Even yesterday, we were also talking about this, we now open five citizens' points, to replace our citizens' shop, a little microcephalus and not decentralized, in the center of Almada, we opened one in each of the parishes. People did not know, had no way of knowing and we made a great effort of communication and in some years, there will be many people who still do not know that they have opened.

So even with good levels of information there is always a gap that only time will help to supply. But there are two gaps of sophistication that are completely blatant, one of them is to look at the service itself, and there are several parishes that are far more advanced technologically, at human resources level and human resources training than others to put this to roll.

And, also important, there is the sophistication of the population itself that afterwards is not even homogeneous but looking across Costa de Caparica parish, is probably not bad. Compared to other rural parishes, still less sophisticated and still with less access to digital media.

Then, there is a third level of sophistication that varies a lot from parish to parish, which is the level of participation, because this requires participation, requires dynamics and then in some rural parishes there is more willingness to participate in this type of assemblies and come. Here it is also case by case, it is parish to parish and even within the same municipality, there are parishes that behave differently.

Although, it is a very important course to do because parish councils will increasingly accept more skills and people need to know that they need to go to parish council instead of city council, they have to be informed in parish councils in the right way, in the simplest and fastest way.

So, we completely agree and this accelerator fits into what we, on a different scale, are doing in city council.

However, if it is important to bring these types of procedures to a smaller scale? Completely! Because city council cannot guarantee everything and they exist in a too macro plan, too big and

for that reason the decentralization movement of the central administration of the municipalities and later in the parishes happens.

Parish Councils need to be able to give the same level of responsiveness and people need to have parish council's app. Some parish councils in Lisbon, Estrela, Olivais, are now on a different level. But there it is, critical mass, cash and then human resources as well, there were people that came from city council, already with their level of sophistication.

Alvalade, for example, is cash, is human resources and is a more involved population. In this perspective Santa Clara for, example, that is already up there, has an older population, picks up people with a high level of schooling as well as one of the more impoverished areas inside Lisboa. So, it already has a much larger route, and it is not an urban network so dense comparing to others, it is more dispersed. It already has some more scattered characteristics, so, it is possible to find out the GAP within the 26 parishes.

To conclude, it is case by case and to implement this is needed a previous diagnosis to know at which point the parish is. Is it at grade zero? So, then route, route, route. And sometimes start with communication with the population.

First, you have to call the population, they need to be trained, fortunately Almada has something very good, senior university which includes public that is, usually, more distant from this type of initiative. In Almada there are some of them and IT is one of the capacities that are given to this type of population.

So, it is possible to reach them easily because they are all concentrated, act together, so it is a good exercise. In Almada we find good ways to reach this public, it is a relevant public and it is usually a little apart. Although they are the ones that are back there, theoretically, but they are there, used, aggregated, do things together and also disperse and transmit information.

City council has to be able to lead and forward to the parishes saying "the information is there" and then, above all, the parish has to be responsive.

There must be mixed and progressive models of total dematerialization. One solution could be these kinds of mixed solutions that is to do online here, instead of doing online at home, do it online here and we will try to guide you, it is the same as the help in supermarkets. They have the machine to register products automatically, but they will also give you a little help if needed.

But it is ok for us. At the same time, and there it is in our control, to make good publicity campaigns, for example an app, that is saying to go to the app, pull the app and like we did on the city council website and Facebook. When we have nothing to communicate, it is time to say "take Almada closer to you, download the app". In Lisbon it works extraordinarily well, it's like those 4/11 telephone lines, in Lisbon it's geo-referenced, ours is making some progress on it.

But it is very important to give people access to lots of information on it. Like, if I want to complain I go here, I want to talk to the board I go here, let the app be important.

Now, I find it more difficult sometimes in the public services themselves to get there, than in the population. Because the population is there, even my grandmother has a touch screen.

But sometimes a good upstream staff does not upload things for them to happen, or else we hit the wall which is the hypothesis of having forms. And forms fall into a black pool, you put everything in there.

This was a problem that we had in Lisbon and that, however, was solved with *na minha rua* app, initially it was all in there and then everything went into a well. We received it but people were in the expectation of an answer, but it was a well from where we could not withdraw information. There was no effective response, this was even worse, it was better not to be receiving anything at least there were no expectations.

However, it is to be hoped that when parish councils have more budget, more people, it is expected that the people who will be recruited in the future also have more skills of this order and can achieve it more easily, ideally.

Parish council needs thinking heads to do things, because suddenly a parish council that goes from 10 human resources to 50, the complexity associated with processing human resources in the most ordinary thing in the world that is payroll, grows exponentially.

If it is possible that this accelerator contributes to define a matrix of procedure of relation with the citizen is great. Because then new skills come in and they just have to fall into its pipeline.

**FM:** Our strategy to mobilize people for these tools has to be thought of because we may be able to use it in a more effective way with a certain type of audience, just for a particular type of purpose, right?! Where it may really be a mobilizer. Also, the issues, for example of the younger ones and how to motivate them to citizenship through tools that in principle they have more facility in joining, can be a way to also do something.

And there is sometimes the effect of urgency in responding to these channels that are not achieved in others and that end up being the invigorators of situations that sometimes we cannot respond, and it is also important to take advantage of.

#### **Last, but not the least, about Q3 the answers were:**

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**JR:** There are a few things here that clearly, only on the ground and with the application we will be able to test and measure. But here were presented things that are really fundamental in this description, there are things that are really fundamental. Even for now how parish councils work, even in this model yet. And that may be a key in a short-term model.

There, may be relevant diplomas of new skills, if the city council is really to transfer, I am talking about the management of everything that is advertising, that is, everything that is done online now in the city council and that will move to the parish councils.

But the strategy presented here is good.

**BM:** This is on the ground, this is only on the ground ... this is later with the hands down.

**FM:** With tests...

## 4.5. DISCUSSION

In this section, three analysis will be made, regarding utility, viability of implementation and improvements based on the answers from validation phase. Then a general evaluation to the proposed framework will be done based on the previous analysis.

So, with respect to the proposed conceptual framework and with regard to the **utility** of it, the three participants of the focus group meeting agreed that the proposed accelerator is very useful.

It was considered, by the participants, as indispensable and seen as a way to agglutinate citizens and public administration letting citizens participate more and be more involved, although they express their concerns regarding the need of adapting the process to each parish's reality enforcing the idea that one size does not fits all, it depends on the parish itself and on its stratum.

Also, and still regarding the utility of the proposed accelerator it was a shared idea that this could be amazing, specially, as a way to force public service itself to be upgraded and its skills in some subjects.

With the adoption of this framework, is was considered that it is important to get parishes closer to what is considered the state of the art.

Internal parish improvement is a progress that is already very important, independent on the improvement on citizens participation, as it was considered easier to get citizens involved.

The utility of the proposed accelerator was also evaluated in a way that the type of communication channels included in it are fundamental nowadays, so it was a positive point regarding the utility of the accelerator.

When talking about **observations** on what was proposed and an evaluation on how **viable** it is, things were discussed like the need to get help from city council on communication phases as a premise for frameworks implementation as it was proposed to be one of the starting points of the framework near citizens, the need to have a solid network between city council and parish council and to clarify with citizens what were the competences of city councils and the ones from parish councils as today they do not know yet to whom they should ask things on specific subjects.

As a way to get a more sophisticated framework, it was proposed that it is really fundamental to look into public service levels, analyze also the sophistication of the population itself and last but not the least evaluate the levels of participation from citizens. Those three gaps need to be evaluated and improved even before starting frameworks implementation as those will influence the success of it.

Although and besides all the previous observations, the framework was considered not as the perfect model for parishes but as a very advanced one following the needs of parish councils today, as the one who perfectly fits what is being done at city council's level.

Also, as a positive point to the possibility of implementing this framework it has the ability of parish councils to adapt, as they are constantly changing and adapting to new competences that city council delegates on them.

Another observation made about the proposed framework was that it was considered mandatory involving people from all ages in it and using different communication channels. By combining this two, it is possible to get mixed and progressive models of dematerialization.

To conclude, it was considered viable the proposed framework as it would contribute to define a procedures matrix of citizens relationship.

As **criticism and suggestions** for improvement, all participants agree that it would only be possible to evaluate with a practical application of the proposed framework and tests around it.

In general, the proposed framework fulfills the needs of parishes in bringing parishes closer to citizens by letting them have an active voice and also in improving public administration services and skills.

So, the process included in this framework is fundamental not only for today's reality of parish councils but also to guide them to the future.

It is understood that it has utility, although it needs some adaptations to different parishes realities, a more detailed communication phase where city councils must be an intervenient and the possibility to have a way to evaluate the three gaps of sophistication mentioned above as a way to adapt the framework to each parish reality.

## **5. CONCLUSIONS**

To conclude this work, it is important to start by mentioning that the previously defined objectives were achieved. By the application of the proposed framework and according to what was the feedback collected at validation phase, parishes will become smarter by the implementation of the proposed innovation accelerator.

### **5.1. SYNTHESIS OF THE DEVELOPMENT WORK**

During this work subjects like public administration (national and international), smart cities and innovation & creativity were studied as a starting point to be able to design a framework that later on was validated by a focus group meeting by people with knowledge on public administration, especially on local public administration subjects.

### **5.2. LIMITATIONS**

Unfortunately, it is important to mention that, the main limitation of this work was the fact that the validation of the proposed framework only involved people from one parish, although there was an attempt to avoid this gap by including two participants from city council who have more context on different parishes realities.

Another limitation of this work was the fact that communication phase, which was scheduled in DSR methodology, could not be implemented in the scope of this master's thesis due to the short period of time spent to carry out this master's thesis. Because of this fact, it was not possible to incorporate a practical application of this framework in the scope of this master's thesis.

### **5.3. FUTURE WORK**

Unfortunately, and as it was explained in the previous section it was not possible to cover all the subjects considered relevant to this master's thesis in useful time to be included in the proposed framework.

Saying this and in line with what was concluded after the focus group meeting, it was considered important to study different generations of people to better know how to motivate them and how this knowledge could be used to improve communication phase of the proposed framework, as it was considered important to improve the ways of communication considered in the proposed framework.

Also, it was considered as fundamental, after validating the framework, that some processes must include as intervenient the city council as it has the resources to help take parishes to the next level.

As one of the limitations was the fact that it was not possible to validate this framework by practical application, it was considered that it should be done in the future in order to improve it based on a practical application in a real-life scenario.

Also based on inputs from the validation of the proposed framework, it was relevant to distinguish the proposed innovation accelerator by parish type. As it may help to incorporate some kind of prerequisites that must be fulfilled before starting framework's implementation.

As last consideration for future work on this subject of smartness inside parish, it is considered important to evaluate the option to improve the proposed framework extending ideas contest and innovation lab to several parishes instead of implementing it in only one parish at a time.

## BIBLIOGRAPHY

- Abdurazzakov, O. (2015). Role of technology transfer mechanisms in stimulating innovation. *Oeconomia*, 9-10.
- Accel. (2018, November 27). *About Us*. Retrieved from Accel: <https://www.accel.com/>
- Albino, V., Berardi, U., & Dangelico, R. M. (2015). Smart Cities: Definitions, Dimensions, Performance, and Initiatives. *Journal of Urban Technology*, 3-21.
- Anje. (2015, April 16). *Anje dá asas aos empreendedores*. Retrieved from Anje: <http://www.anje.pt/portal/anje-startup-accelerator>
- Azevedo, C. (2013). *Tecnologias e pessoas mais velhas: Importância do uso e apropriação das novas tecnologias de informação e comunicação para as relações sociais de pessoas mais velhas em Portugal*. Faculdade de Ciências sociais e humanas - Universidade NOVA de Lisboa.
- Barbosa, M. d. (2015, August 19). *Startup Pirates: O seu próximo negócio pode começar aqui*. Retrieved from Dinheiro Vivo: <https://www.dinheirovivo.pt/fazedores/startup-pirates-o-seu-proximo-negocio-pode-comecar-aqui/>
- Barsh, J., Capozzi, M. M., & Davidson, J. (2008). Leadership and Innovation. *McKinsey Quarterly*.
- Baskerville, R. L., Kaul, M., & Storey, V. C. (2015). Genres of Inquiry in Design-Science Research: Justification and Evaluation of Knowledge Production. *MIS Quarterly Vol. 39 No. 3*.
- Cabrita-Mendes, A. (2017, March 30). *Almeida Henriques: "Smart cities" precisam de apoios*. Retrieved from Jornal de Negócios: <http://www.jornaldenegocios.pt/negocios-iniciativas/cidades-inteligentes/detalhe/almeida-henriques-smart-cities-precisam-de-apoios>
- Calheiros, S. (2017, October 30). *Nova app faz ligação direta às juntas de freguesias*. Retrieved from Visão: <http://visao.sapo.pt/actualidade/sociedade/2017-10-30-Nova-app-faz-ligacao-direta-as-juntas-de-freguesias>
- Cardoso, J. (2014). *Sistemas de informação para a modernização administrativa*. BAD - Bibliotecários, arquivistas e documentistas.
- Cohen, B. (2015, October 8). *The 3 Generations Of Smart Cities*. Retrieved from Fast Company: <https://www.fastcompany.com/3047795/the-3-generations-of-smart-cities>
- Cox, M. (2016, January 18). *The role of design thinking in innovation*. Retrieved from Medium: <https://medium.com/pancentric-people/the-role-of-design-thinking-in-innovation-ba68a3d91683>

- Deloitte. (2018, August 18). *Smart City for 650 year*. Retrieved from Deloitte: <https://www2.deloitte.com/content/dam/Deloitte/pt/Documents/public-sector/FutureofmoilitySmartCities/SmartCities.pdf>
- Devault, G. (2018, March 12). *What Is a Market Research Focus Group?* Retrieved from The balance small business: <https://www.thebalancesmb.com/what-is-a-market-research-focus-group-2296907>
- Dias, G. P., & Gomes, H. (2014). Evolution of local e-government maturity in Portugal. *9th Iberian Conference on Information Systems and Technologies (CISTI)*. Barcelona, Spain: IEEE.
- Direção-geral da administração e do emprego. (2017, October 25). *Governo*. Retrieved from dgaep: <https://www.dgaep.gov.pt/index.cfm?OBJID=39B30E5C-46B2-4C4A-84A9-A02E6EB8016B&MEN=i>
- Direção-geral da administração e do emprego. (2018, February 2). *Organização da administração do estado*. Retrieved from dgaep: <https://www.dgaep.gov.pt/index.cfm?OBJID=a5de6f93-bfb3-4bfc-87a2-4a7292719839&men=i#>
- ESADE Knowledge. (2018, January). *5 mechanisms to promote innovation*. Retrieved from ESADE Knowledge: <http://www.esadeknowledge.com/view/5-mechanisms-to-promote-innovation-174880>
- EUROCITIES. (2017). *Smart city baseline report Lisbon*. EUROCITIES.
- EY; Cisco. (2016). Open Innovation Accelerators. *Harnessing the value created through collaboration*.
- Fábrica de startups. (2018, November 27). *Aceleração*. Retrieved from Fábrica de startups: <http://www.fabricadestartups.com/acelerardesc/>
- Fernandes, S. (2016). Innovation Accelerators As Entrepreneurial And Interdisciplinary Engines: The Portuguese Case. *Journal of Spatial and Organizational Dynamics*, 213-228.
- Ferreira, N. C., Ferreira, F. A., Marques, C. S., Ilander, G. O.-B., & Çipi, A. (2015). Challenges in the implementation of public electronic services: lessons from a regional-based study. *Journal of Business Economics and Management* , 962-979.
- Gaspar, J. (2013, Abril). Formação BLITZ Autárquicas. *ÓRGÃOS das AUTARQUIAS*.
- Giles, S. (2018, May 9). *How VUCA Is Reshaping The Business Environment, And What It Means For Innovation*. Retrieved from Forbes: <https://www.forbes.com/sites/sunniegiles/2018/05/09/how-vuca-is-reshaping-the-business-environment-and-what-it-means-for-innovation/#4104f314eb8d>
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal*, 291–295.

- Glaveski, S. (2017, November 28). *The Difference Between Design Thinking, Lean Startup, and Agile*. Retrieved from Medium: <https://medium.com/@SteveGlaveski/the-difference-between-design-thinking-lean-startup-and-agile-5cf07b117562>
- Gregor, S., & Hevner, A. R. (2013). Positioning and Presenting Design Science Research for Maximum Impact. *MIS Quarterly Vol. 37 No. 2*, 337-355.
- Grimmelikhuijsen, S., & Meijer, A. (2017). Open data for democracy: Developing a theoretical framework for open data use. *Government Information Quarterly*, 45-52.
- Grupo técnico para a definição de critérios para a avaliação da reorganização do território das freguesias. (2016). *Avaliação da reorganização do território das freguesias*. Lisboa: República Portuguesa.
- Gryszkiewicz, L., Toivonen, T., & Lykourentzou, J. (2016, November 3). *Innovation Labs: 10 Defining Features*. Retrieved from Stanford Social Innovation Review - Informing and inspiring leader of social change: [https://ssir.org/articles/entry/innovation\\_labs\\_10\\_defining\\_features](https://ssir.org/articles/entry/innovation_labs_10_defining_features)
- Haines, J. K. (2014, November 12). Iterating an Innovation Model: Challenges and Opportunities in Adapting Accelerator Practices in Evolving Ecosystems. *Emerging Practices & Methods*, pp. 287-288.
- Harmelen, F., Kampis, G., Börner, K., van den Besselaar, P., Schultes, E., Goble, C., . . . Helbing, D. (2012). Theoretical and technological building blocks for an innovation accelerator. *The european physical journal - special topics*.
- Harris, A. (2017, April 4). *Coworking Space vs. Startup Incubator vs. Accelerator: Which is Best?* Retrieved from Rocket Space: <https://www.rocketpace.com/tech-startups/coworking-space-vs.-startup-incubator-vs.-accelerator-which-is-best>
- Helbing, D., & Balietti, S. (2011). How to create an innovation accelerator. *The european physical journal - special topics*.
- Hevner, A. R., March, S. T., Park, J., & Ram, S. (2004). Design Science in Information System Research. *MIS Quarterly Vol. 28 No. 1*, 75-105.
- Hinchliffe, T. (2018, January 10). *Portugal among top innovators in the world: CTA International Innovation Scorecard*. Retrieved from Portugal Startups: <https://portugalstartups.com/2018/01/portugal-innovation-cta/>
- IDC. (2017). *Preparing for the Digital Transformation Economy: The Tools Needed to Build a Digitally Native Enterprise*. IDC.
- INE. (2017, March 10). *População residente (N.º) por Local de residência (NUTS - 2013) e Tipologia de áreas urbanas; Decenal (1)*. Retrieved from Instituto Nacional de Estatística - Statistics Portugal: [https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_indicadores&indOcorrCod=0009091&contexto=bd&selTab=tab2](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0009091&contexto=bd&selTab=tab2)

- INE. (2018, July 23). *Densidade populacional (N.º/ km<sup>2</sup>) por Local de residência (NUTS - 2013) e Tipologia de áreas urbanas; Anual (1)*. Retrieved from Instituto Nacional de Estatística - Statistics Portugal:  
[https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_indicadores&indOcorrCod=0008858&contexto=bd&selTab=tab2](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0008858&contexto=bd&selTab=tab2)
- INE. (2018, May 17). *Divisão administrativa*. Retrieved from Instituto Nacional de Estatística - Statistics Portugal:  
[https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_cont\\_inst&INST=6251013&lang=pt](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_cont_inst&INST=6251013&lang=pt)
- Innov8rs team. (2018, September 2). *Top 10 Sources Of Innovation: Why Your Accelerator Barely Makes The List*. Retrieved from innov8rs: <https://innov8rs.co/news/top-10-sources-of-innovation-why-your-accelerator-barely-makes-the-list/>
- INTELI. (2012). *Índice de Cidades Inteligentes - Portugal*. INTELI – Inteligência em Inovação, Centro de Inovação.
- INTELI. (2014). *Smart cities Portugal roadmap In brief*. Lisbon: INTELI.
- Jennifer Auer, C., & D'Ippolito, M. (2014). *Innovation Accelerators: Defining Characteristics among startup assistance organizations*. College Park, Maryland: Small Business Administration - Office of Advocacy.
- Keeling, J., & Bassett, N. (2017, December 12). *Funding innovation, the impact of equity crowdfunding and grant finance*. Retrieved from Crowdcube:  
<https://www.crowdcube.com/explore/entrepreneur-articles/funding-innovation-the-impact-of-equity-crowdfunding-and-grant-finance>
- Khatoun, R., & Zeadally, S. (2016). Smart cities: concepts, architectures, research opportunities. *Communications of the ACM*, 46-57.
- Kuhlmann, S., & Wollmann, H. (2014). Models and traditions of public administration in Europe: country profiles. In S. Kuhlmann, & H. Wollmann, *Introduction to Comparative Public Administration: Administrative Systems and Reforms in Europe* (pp. 56-110). Cheltenham: Edward Elgar Publishing Limitedes.
- Larry. (2014, September 1). *It's a fast, VUCA world: the trends and forces shaping innovation*. Retrieved from Inovo: <https://www.theinovogroup.com/its-a-fast-vuca-world/>
- Lopes, I. M., & Oliveira, P. (2017). Can a small city be considered a smart city? *Procedia Computer Science*, 617-624.
- Mateus, J. C. (2008). O governo eletrónico, a sua aposta em Portugal e a importância das tecnologias de comunicação para a sua estratégia. *Revista de Estudos Politécnicos*.
- Ministério Público. (2013, September 12). *Regime Jurídico das autarquias locais*. Retrieved from Procuradoria-Geral Distrital de Lisboa:  
[http://www.pgdlisboa.pt/leis/lei\\_mostra\\_articulado.php?nid=1990&tabela=leis](http://www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=1990&tabela=leis)

- Morgan, C. A. (2019, February 18). *Using the Focus Group in Market Research*. Retrieved from B2B market research company: <https://www.b2binternational.com/publications/market-research-focus-group/>
- Neto, M. d., Rego, J. S., Neves, F. T., & Cartaxo, T. M. (2017). Smart & open cities: Portuguese municipalities open data policies evaluation. *12th Iberian Conference on Information Systems and Technologies (CISTI)*. Lisbon, Portugal: IEEE.
- Nóbrega, J. (2017, May 5). *Primeiro desafio para "smart cities" é de back-office*. Retrieved from Computerworld: <https://www.computerworld.com.pt/2017/05/05/primeiro-desafio-para-smart-cities-e-de-back-office/>
- Panagiotopoulos, P., Al-Debei, M., Fitzgerald, G., & Elliman, T. (2012). A business model perspective for ICTs in public engagement. *Government Information Quarterly*, 192-202.
- Peffer, K., Tuunanen, T., Rothenberger, M. A., & Chatterjee, S. (2007). A Design Science Research Methodology for Information Systems Research. *Journal of Management Information Systems*, 45-78.
- Perkins, S. (2018, November 24). *Agile & Design Thinking: competing or completing?* Retrieved from The Design Gym: <http://www.thedesigngym.com/agile-design-thinking-competing-completing/>
- Pirenne, V. (2015, October 1). *How to design your own innovation accelerator: a checklist*. Retrieved from Board of innovation: <https://www.boardofinnovation.com/blog/2015/10/01/a-checklist-for-designing-your-own-innovation-accelerator/>
- PORDATA. (2018, February 15). *Freguesias - Onde há mais e menos freguesias*. Retrieved from PORDATA - Base de Dados Portugal Contemporâneo: <https://www.pordata.pt/Municipios/Freguesias-54>
- pplware. (2014, September 29). *ASSOFT: 750 freguesias portuguesas estão com software ilegal*. Retrieved from pplware: <https://pplware.sapo.pt/informacao/assoft-750-freguesias-portuguesas-estao-com-software-ilegal/>
- Prasad, M. (2017, September 11). *How to Conduct a Successful Focus Group Discussion*. Retrieved from Socialcops: <https://blog.socialcops.com/academy/resources/conduct-successful-focus-group-discussion/>
- Queensland Governemnt. (2016, August 8). *Sources of innovation funding*. Retrieved from Queensland Governemnt: <https://www.business.qld.gov.au/running-business/growing-business/becoming-innovative/funding/sources>
- República Portuguesa. (2018, January 26). *Governo quer freguesias com mais meios e mais competências*. Retrieved from XXI Governo - República Portuguesa: <https://www.portugal.gov.pt/pt/gc21/comunicacao/noticia?i=governo-quer-freguesias-com-mais-meios-e-mais-competencias>

- Restartup. (2018, November 27). ASA. Retrieved from Restartup: <http://www.restartup.pt/ASA/>
- Rodousakis, N., & Mendes dos Santos, A. (2008). The development of inclusive e-Government in Austria and Portugal: a comparison of two success stories. *Innovation: The European Journal of Social Science Research*, 283-316.
- Rodrigues, C. (2011). *Governança de organizações públicas em Portugal: A emergência de modelos diferenciados*. Edições Pedago, LDA.
- Rodrigues, M. V. (2017, April 17). *Big Smart Cities. Cascais é a primeira “cidade experimental” para startups*. Retrieved from Observador: <https://observador.pt/2017/04/17/big-smart-cities-cascais-e-a-primeira-cidade-experimental-para-startups/>
- Royo, S., & Yetano, A. (2015). “Crowdsourcing” as a tool for e-participation: two experiences regarding CO2 emissions at municipal level. *Electronic Commerce Research*, 323–348.
- Santos, L. D., & Amaral, L. (2008). *Presença na Internet das juntas de freguesia portuguesas em 2006: Estudo sobre Local eGovernment em Portugal*. Guimarães: Universidade do Minho. Gávea - Laboratório de Estudo e Desenvolvimento da Sociedade da Informação.
- Santos, V., Amaral, L., Mamede, H., & Gonçalves, R. (2015). Creativity in the Information Systems Planning Process. In A. Molnar, & J. T. Martins, *Handbook of Research on Innovations in Information Retrieval, Analysis, and Management* (pp. 243-261). Lisboa: IGI Global.
- Silva, C., Lamas, M., Castro, R., Silva, S., & Rocha, Á. (2018, December 12). Governo Electrónico nas Juntas de Freguesia: Situação na Região do Minho.
- Startp weekend. (2018, November 27). *Startup Weekend + Coca-Cola*. Retrieved from Startp weekend: <http://register.startupweekend.org/coca-cola/>
- The Innovation Policy Platform. (2018, December 7). *Business angels*. Retrieved from The Innovation Policy Platform: <https://www.innovationpolicyplatform.org/content/business-angels>
- The Innovation Policy Platform. (2018, December 7). *Financing Innovation*. Retrieved from The Innovation Policy Platform: <https://www.innovationpolicyplatform.org/content/financing-innovation>
- Thebridge, S. (2003). Evaluating electronic information services: a toolkit for practitioners. *Library and Information Research*, 38-46.
- Thijs, N., Hammerschmid, G., & Palaric, E. (2017). *A comparative overview of public administration characteristics and performance in EU28*. Brussels: European Commission.
- Trotter, A. (2013, August). *Six Lessons for Corporations Building Innovation Accelerators*. Retrieved from Innosight Strategy and Innovation at Huron:

<https://www.innosight.com/insight/six-lessons-for-corporations-building-innovation-accelerators/>

Vidigal, L. (2013). A reforma da administração pública à luz dos sistemas de informação. *13ª Conferência - Associação Portuguesa de Sistemas de Informação*. Universidade de Évora.

Walters, D. (2011). Smart cities, smart places, smart democracy: Form-based codes, electronic governance and the role of place in making smart cities. *Intelligent Buildings International* , 198-218.

ycombinator. (2014, June). *About Y Combinator*. Retrieved from ycombinator:  
<https://www.ycombinator.com/about/>

## ANNEXES

### Annex I – Focus group meeting transcription (PT)

Participants	
Drª. Fernanda Marques (FM)	Director of economical and local development department
Dr. Bruno Martinho (BM)	Municipal director of economy, innovation and communication
José Ricardo Dias Martins (JR)	President of Costa de Caparica parish council
Dr. Emanuel Costa (EC)	Member of executive committee from Lisbon Metropolitan Area and moderator in this meeting

(relativamente à aplicação juntar a junta) PJFCC: Há um caminho nesse sentido também com a câmara municipal, o Jorge, não sei se o Bruno sabe, o Jorge Barroso, estava a tentar que o juntar a junta fosse mais alargado, ou seja também à câmara municipal. Para haver um diálogo mais direto entre as juntas de freguesia, e estamos a falar a nível apenas de operacionalização, para que as coisas... Falou-se a sério a determinada altura, e não sei depois ... e esse já é o pelouro do Bruno, não sei se isso foi depois ou não estipulado para a concretização, que era criar alguma ferramenta onde as pessoas pudessem reportar, onde as pessoas pudessem perceber em detalhe, uma coisa simples, uma app que realmente vai reportar grande parte... nós temos uma que está obsoleta que estamos agora a tratar de, a nível de site, que é o tal que é baseado nisso do juntar as freguesias, isso foi a ANAFRE que propôs às freguesias fazerem vários patamares, a app é sempre.. pronto há um diálogo mais direto.

Moderador: (Juntar a junta) é só um exemplo, existem várias.

(relativamente ao questionário sobre a utilização dos serviços públicos eletrónicos) PJFCC: (riso) Ainda ontem falámos disso

(relativamente a seminários e formações para toda a família promovendo a inclusão digital) PJFCC: 80% das vezes não são utilizados (os serviços eletrónicos nacionais e da junta de freguesia)

(relativamente a melhoria do website na disponibilização de formulários) PJFCC: competências que pertencem à câmara municipal.

Moderador: Não há delegação?

PJFCC: Não há ainda. Há outras também... nós temos de alguma forma, obviamente, e acrescento aqui para quem não conhece a realidade do concelho, ou que não conheça a realidade das freguesias do concelho. Nós a nível de competências não temos nada do que aqui está descrito, ainda não temos. Agora, temos outras coisas, os canis e os gatis sim, nós disponibilizamos online as inscrições e por aí fora e isso é pacífico. Temos outras coisas, algo mais complicado, que tem a ver com os atestados de residência, que são uma competência própria das juntas de freguesia e que tem dado, no meu caso, um sarrabulho mais por causa dos emigrantes e de algumas más práticas que aqui se fazem, tive agora uma inspeção do SEF,

enfim... Nós disponibilizamos tudo isso online, só que a taxa de utilização é muito baixa. E isso Inês tem a ver, ainda ontem falámos nisso noutra contexto, por causa do espaço do cidadão.

Vamos lá ver uma coisa, o espaço do cidadão supostamente seria um facilitador de utilização das tais tecnologias onde nós possamos fazer certas e determinadas coisas online. Por este ou por aquele motivo, e não me vou alongar muito sobre isto porque acho que não vale a pena, todos nós conhecemos a realidade das freguesias, a Costa nesse aspeto, de envelhecimento, está um pouco menos envelhecida até porque temos digamos uma percentagem de uma camada diferente do que é o resto do concelho, talvez por sermos outro tipo de freguesia, mas mesmo assim, e só para dar um exemplo e isso foi lá falado, o espaço do cidadão na Costa de Caparica está a ter uma utilização enorme. O que é que eu quero dizer com isto, se eu tiver uma fatura da água para pagar por exemplo, que nós também temos a 100 metros um posto de pagamento do SMAS, a pessoa pode fazê-lo online..., mas não faz... não faz.

Por vários motivos, ou pelo contacto, os mais idosos é pelo contacto, ou por não saberem ou porque querem ter contacto com quem está do lado de lá, às vezes também para conversarem, enfim... há aqui uma data de situações diferenciadas. Agora sim, é preciso fazer um percurso nesse sentido...

Em relação à formação, e eu já estou aqui a reportar um bocadinho daquilo que foi aqui posto e daquilo que faz parte da junta de freguesia, em relação à formação dos nossos funcionários, neste aspeto nós não temos praticamente, tem sido praticamente nula, as pessoas que fazem a gestão, digamos assim, do site que está agora a ser remodelado, espero que no final do mês já o tenha de novo, como daquilo que são as plataformas que temos, das apps dos buracos e disto e daquilo com que são confrontados durante todo o dia, nós temos uma funcionária que faz isso, apenas uma, que faz isso, que dá resposta em tempo útil. Também não posso pedir aos operacionais que o façam... nós temos aplicações nas carrinhas para eles reportarem...

Moderador: Quantos funcionários é quem tem a junta...?

PJFCC: 26... nós temos que reportar às vezes algumas coisas com que eles são reportados no dia a dia, reportam para aqui mas é mais internamente, ou então através da população que escreve, muito residual, ou envia um email ou escreve lá na aplicação a dizer “olhe há monos ali para levantar” ou não sei quê não que que mais, e nesse aspeto eles leem e fazem.

Moderador: Esse serviço funciona bem?

PJFCC: Isso funciona, agora eu não posso pedir a pessoas que, enfim, têm um nível de escolaridade baixíssima, que realmente não é, que eles não... outros tipos de formação? Sim vão, agora que realmente nem sequer sabem... eu tenho aí funcionários que nem sequer sabem olhar para um telemóvel...

Moderador: Por isso é que é importante a formação... tem noção de quantos utilizadores é que têm essa aplicação?

PJFCC: Muito poucos, muito poucos... Não tantos quantos nós gostávamos de atingir.

Moderador: E o que é que a junta faz para as pessoas terem conhecimento dessa aplicação?

PJFCC: Agora neste momento não fazemos nada, porque temos o site em baixo e enfim... (risos) Temos feito alguma divulgação, tentativa de divulgação. A nível de redes sociais, funciona bem, a nossa página de Facebook e não sei quê funciona, até atinge patamares que eu às vezes fico um bocado de boca aberta a perceber como é que conseguimos lá chegar. 20 mil, 20 e tal mil, é uma coisa grande, grande como uma página institucional, sem qualquer tipo de publicidade atenção. Tem algum impacto.

Agora, a nível de apps, as pessoas não se adaptam... Eu penso que isto tem também a ver um pouco com a mentalidade das pessoas. A malta mais nova sim! Malta mais nova fá-lo, mas a malta mais nova também não se preocupa se viu um bocado de lixo na rua, passa à frente e siga... A malta mais nova faz, mas a malta mais nova também não se envolve muito e isso é uma lacuna da sociedade, enfim, Portugal...teve um percurso muito acelerado, é uma democracia jovem... é normal que isso aconteça e temos de ser nós a fazer esse percurso.

Depois, temos um outro problema que é as pessoas da minha geração e os mais velhos, alguns deles sim adaptaram-se à realidade das novas tecnologias e depois há uns outro que não se adaptaram. E aqueles que se adaptaram à realidade das novas tecnologias também eles são preguiçosos ao ponto de ir à app lá colocar qualquer coisa, preferem mandar uma mensagem no Messenger ou mandar um mail ou telefonar. Ou seja, não há, ainda não houve o salto para ultrapassar este muro.

É óbvio que nós, juntas de freguesia, temos de fazer, teremos de fazer esse papel, e talvez aqui num casamento mais chegado com as escolas, porque acho que é importantíssimo envolver as escolas. Nós aqui na nossa freguesia só temos do primeiro ciclo e segundo, não temos secundárias, andamos à procura de uma há alguns anos, ainda eu estava na oposição.

Moderador: Aqui a secundária onde é que é?

PJFCC: Ou é no Monte da Caparica ou é em Almada, pertence ao nosso agrupamento, mas não... Ou seja, esse salto tem de ser dado. Agora, isto não é imediato, isto não é imediato. Porque nós estarmos a falar para um aluno do primeiro ciclo, mesmo que seja do segundo ciclo já com 11 anos que ele sabe usar perfeitamente e melhor que eu tudo aquilo que é tecnologia, porque cresceu com ela, não é? Mas não com segue depois... não o faz. Primeiro porque não quer, essa é a primeira, depois porque realmente não está para estar a perder tempo a ensinar o pai ou o tio ou o que quer que seja como é que o deve fazer, ou então também não há questão por parte da... Ou seja, há aqui um percurso que é preciso fazer e isso é uma lacuna que nós temos no concelho enfim... e se calhar abrangente e todo o Portugal.

A aplicação, no entanto, é extremamente fácil, não é preciso... aquilo é muito fácil, bem também depende de onde nós temos acesso à aplicação. Mas aquilo é extremamente fácil.

(relativamente ao estudo que refere que as pessoas sabem da existência dos sites da freguesia, mas não sentem necessidade em utilizá-lo) PJFCC: Inês eu concordo com isso, mas tem de acrescentar aqui outra coisa, é que as pessoas não conseguem diferenciar quem faz o quê... se é a câmara municipal, se é o banco central, se é a freguesia... As pessoas não conseguem diferenciar isto, não conseguem perceber quais são as competências de uma freguesia, quais as da câmara municipal... e às duas por três misturam tudo e colocam tudo no mesmo pacote. Isto

é a realidade. Nós respondemos a tudo obviamente, mas muitas vezes a resposta é “esse serviço não é nosso e iremos reportar à câmara municipal” e a pessoa diz assim “então, mas se eu faço uma ou duas vezes a mesma pergunta e a resposta é a mesma...”. Depois a câmara, obviamente que responde. “...e a resposta é a mesma, perdem a ligação à junta”

E eu posso dizer onde é que nós temos mais interações, é muito claro, é na parte do lixo. Isso não tenho qualquer tipo de reticências em dizer isto. Nem é tanto nas calçadas, é muito mais no lixo... na recolha... porque é uma preocupação que mexe todos os dias com as pessoas e claramente não é nossa, é da câmara municipal. Mas é claro, é objetivo e é claro, e muito acima do que é... eu estou a falar das reclamações apenas. Depois há outras coisas que eles pedem, isso são outras situações diferenciando aqui um bocado...

(relativamente aos espaços de *co-working*) PJFCC: Isso é o meu maior problema... espaços... (risos)

Moderador: Utilidade do acelerador apresentado na vossa opinião e face ao contexto que conhecem?

PJFCC: É obviamente útil, há aqui algum percurso que tem de ser feito obviamente, por todas estas razões que eu fui falando ao longo da apresentação e outras mais. Agora, ele é útil, sim. Devia ser implementado? Sim.

Temos de perceber como é que o vamos fazer, não é? Porque realmente nós não cumprimos grande parte das coisas que foram aqui faladas, não temos ou não cumprimos ou não chegámos lá ainda... ou não vamos chegar, não sei... Nesse pacote algumas coisas nós realmente fazemos, não agora neste momento, como eu disse o nosso site está a ser remodelado e estamos à procura de novas soluções e novas propostas. Obviamente que há aqui uma lacuna, no meu ponto de vista, na interação com a sociedade. Não aqui, mas na maneira como nós o fazemos.

Há também por parte da sociedade algum desligar daquilo que é as dinâmicas das freguesias, e isso é grave. É grave em todos os sentidos e até na parte política obviamente, não é? Não há modelos de discussão e há um desligamento... e é visível... nós vimos nas assembleias, as pessoas não vão, não participam, não querem saber.

Este acelerador, poderia vir a servir realmente de aglutinador. Ou seja, das pessoas poderem participar mais sim. Aí acho que era uma grande mais valia.

Agora, há aqui um percurso longo para fazer. Mas sim, se a resposta é sim ou não, é de facto interessante e, penso que, devia ser digamos imprescindível.

Há freguesias em Lisboa que têm estes modelos já mais desenvolvidos. Várias até, até porque foram confrontados muito mais cedo com aquilo que foi a descentralização, têm outras áreas onde podem trabalhar e por aí fora. Coisa que nós não temos.

A nível de comunicação a nossa é muito residual. Para além do site, depois temos a página do Facebook e não temos mais que isso... temos as apps, mas não fazemos muito mais que isso.

É preciso ir mais além? Sim é claro que sim. Mas isso também não me compete a mim porque não domino essa área, muito sinceramente a minha área é jornalismo de facto, mas não domino

essa área. Dentro do jornalismo mais do conteúdo do que da forma, digamos assim. Não domino essa área, mas consigo perceber claramente que realmente há aí uma lacuna grande. Não só na minha, mas nas freguesias que eu conheço. E como trabalho na ANAFRE nacional conheço a realidade e há realidade ainda piores que as nossas aqui.

É de facto, poderia vir a ser uma ferramenta com esta ou com aquela nuance, adaptando à freguesia e aquilo que é o estrato da freguesia, quando falo de estrato falo de estrato social, o estrato da freguesia. Porque a nossa freguesia é diferente, até dentro da freguesia há estratos completamente diferentes.

Acho que sim é que é útil, é bastante útil até.

BM: A grande nuance para a implementação é um ponto de entrada da materialização da metodologia, de freguesia para freguesia. Porque de facto depende do nível de sofisticação da população e da própria freguesia e que depende também da dinâmica, e o José Ricardo notou bem, em Lisboa como tiveram de adotar e aceitar competências antes, a junta também se tornou mais relevante para o cidadão e o cidadão teve de interagir mais depressa com e foi à procura por outros motivos da freguesia.

Aqui e em qualquer outra freguesia que não tenha já essas características de Lisboa, em que cada freguesia parece uma câmara, aliás é maior que muitas das câmaras pelo país fora, ou seja têm uma sofisticação interna e têm uma população também com um diferente nível de sofisticação no que toca à utilização destas ferramentas, em todas as outras tipo 99%, é perceber qual é que é o GAP até à entrada da metodologia. Porque para aplicar isto, às vezes em alguns casos vamos ter de formar para eles adotarem e até mesmo o pessoal da freguesia. E aí disseste bem, primeiro até, até algumas tendo site, é um site muito minimal, algumas têm aqueles sites ainda que foram dados o, autarquias ponto qualquer coisa, aqueles genéricos.

Moderador: Porque há juntas que não têm?

BM: Grau zero, grau zero, ou seja, é mais do que necessário, faz mais do que todo o sentido e enquanto estamos a falar ele (aponta para o PJFCC) está a aceitar mais e mais competências e as pessoas ainda indevidamente continuam à procura da informação do nosso lado quando têm de começar a procurar do lado da junta. E mesmo assim houve algumas a melhorar. E vê bem, ainda ontem estivemos também a falar disso, abrimos agora cinco pontos do cidadão, para substituir a nossa loja do cidadão, um bocadinho microcéfala e não descentralizada, aliás no centro de Almada abrimos uma em cada uma das freguesias. As pessoas não sabiam, não tinham como saber e nós fizemos um esforço grande de comunicação e daqui a x anos haverá muitas que nem souberam que já abriu o ponto do cidadão. Portanto mesmo com bons níveis de informação há sempre um GAP que só o tempo vai ajudar a suprir. Mas há um que é nestes casos completamente gritante, que é primeiro dentro do próprio serviço, são os dois GAPS de sofisticação que eu estava a dizer, um dele é olhar para o próprio serviço e há várias freguesias que estão muito mais avançadas em termos tecnológicos e de recursos humanos e de capacitação dos recursos humanos para pôr isto a rolar e depois há a sofisticação da própria população que depois nem sequer é homogénea, mas olhando assim de forma transversal a costa se calhar nem está mal comparada com outras freguesias rurais, ainda menos sofisticadas e ainda com menos acessos aos meios digitais. E depois há um terceiro nível que varia muito de

freguesia para freguesia que é o nível de participação, porque isto exige participação, exige dinâmica e aí sim em algumas freguesias rurais haja mais disponibilidade para participar neste tipo de assembleias e virem. Aqui também é caso a caso, é junta a junta e até mesmo dentro da mesmo município, há freguesias que se comportam diferentemente.

Quanto ao mais, é um percurso importantíssimo de fazer porque as juntas cada vez vão aceitar mais competências e as pessoas têm de se dirigir às juntas, têm de estar informadas nas juntas...

PJFCC: Eles dirigir dirigem-se Bruno.

BM: ...da forma correta, da forma mais simples e mais céleres. Portanto estamos completamente de acordo e isso encaixa naquilo que nós, noutra escala, estamos a fazer na câmara.

Agora, se é importante trazer para uma escala mais pequena este tipo de procedimentos, completamente! Porque as câmaras não podem assegurar tudo e às existem num plano demasiado macro, demasiado grande e por isso mesmo é que o movimento de descentralização da administração central das autarquias e depois nas freguesias acontece. É o princípio da subsidiariedade levado a... quanto mais próximo melhor, quanto mais perto melhor. É vale para estas coisas também, agora as juntas têm de ser capazes de dar o mesmo nível de capacidade de resposta e as pessoas precisam de ter a app da junta e algumas delas em Lisboa, a Estrela, os Olivais, agora estão num nível... mas lá está massa crítica e cash... e depois pessoal também, houve meios humanos que vieram da câmara já eles próprios com o seu nível de sofisticação e depois, utilizando o exemplo da Estrela, estrato social aqui em cima portanto é olhar para o que temos na mesa e dizer estamos neste...

PJFCC: Mas há outras...

BM: Pronto a da Estrela é uma das que me lembro bem, mas sim Alvalade, pronto é cash, é recursos humanos e é uma população um bocadinho mais evoluída... nesta ótica Santa Clara por exemplo que já está lá para cima, tem uma população mais envelhecida, apanha a alta de Lisboa e umas zonas mais empobrecidas já tem um percurso muito maior, e não é uma malha urbana tão densa, já é mais dispersa... é aquela zona que fica para detrás do aeroporto, já tem ali umas características um bocadinho dispersas, aí nota-se logo um GAP dentro das 26 freguesias.

PJCC: Olivais e Marvila também estão um bocado a...

BM: Portanto é caso a caso e para implementar pronto isso é o diagnóstico prévio, é saber em que ponto é que estamos... grau zero? Bolas, então percurso, percurso, percurso. E começar às vezes com a comunicação junto da população. Agora, que é necessário e que depois isso às vezes...

PJCC: Não estamos no grau zero, mas estamos quase no grau zero...

BM: Pronto, ou seja, primeiro tem de se chamar a população tem de se capacitar, felizmente Almada tem uma coisa muito boa, as universidades seniores que são aquele público que

normalmente está mais afastado disto, em Almada há a rodos e a parte de informática é uma das capacitações que são desde logo dadas logo a esse tipo de população.

É possível atingi-los de forma fácil pois estão todos concentrados, agem em conjunto, portanto é um bom exercício.

Moderador: É em todas as juntas de freguesias? Como é que funcionam as universidades?

PJCC: Nós temos uma, nós temos uma aqui na Costa

FM: Há uma cobertura territorial relativamente significativa embora não haja uma por freguesia, mas eles trabalham de uma forma... e as juntas interagem com elas e as próprias escolas... há uma rede no fundo...

BM: Pronto, em Almada nós encontramos aí boas formas de chegar a esse público, é um público relevante e que costuma estar um bocadinho afastado.

PJFCC: Mas é mais fácil chegar a esse público...

BM: Sem dúvida... Apesar de serem aquele que está mais lá atrás, teoricamente, mas estão ali, são utilizados, agregam-se, fazem coisas em conjunto e também dispersam e transmitem a informação...

PJFCC: Exatamente, muito mais fácil...

BM: Agora, quando o GAP tem esta dimensão, um a própria autarquia tem de ser ela própria a informar que vão à procura, quando se dirigem à autarquia, a autarquia tem de ser capaz de conduzir e encaminhar para as freguesias e dizer “a informação está ali” e depois acima de tudo a freguesia tem de ter capacidade de resposta.

PJFCC: O que se passa com os passos do cidadão... ou seja, ontem a discussão foi nesse sentido, a informação está lá ... a informação quer dizer, podes fazer as coisas sem te deslocares ao espaço do cidadão mas o que é certo é que a pessoa continua a lá ir.

BM: É verdade!

PJFCC: E depois quem lá está se calhar também não tem a disponibilidade de dizer à pessoa “não, mas você tem o que quer que está à procura, pode fazê-lo em casa, descansado, não sei quê, não sei quê”

Moderador: Se calhar até pode dizer, pode fazer aqui ao pé de mim

BM: Pode fazer aqui com o computador, têm de haver modelos mistos e progressivos de desmaterialização total.

PJFCC: Mas esse é o problema que ontem estávamos a falar, Almada por exemplo depois não conseguem dar resposta ao resto.

BM: Sim, é verdade! Uma solução poderá ser este tipo de soluções mistas que é faça online aqui, em vez de fazer online em casa, faça online aqui e nós vamos tentando guiar, é o mesmo que a

ajuda nos supermercados. Têm a máquina para passar automaticamente, mas eu dou a ajudinha a passar.

PJFCC: E aí sim, aí é preciso sermos nós, nós entidade públicas, a levar isso quase ao colo.

BM: Mas tudo bem. E depois ao mesmo tempo, e aí está no nosso controlo, fazer boas campanhas de divulgação, por exemplo uma app, é dizer vá à app, puxe a app e como nós no site da câmara e no Facebook quando não temos nada para comunicar, pumba toma lá o Almada mais perto para a malta ir puxar a app. Em Lisboa funciona extraordinariamente bem, é tipo aquelas linhas telefónicas de 4/11 é só, não é emergência, é só telefonar e bla, em Lisboa é georreferenciada, o nosso está a fazer agora alguns progressos.

Mas carradas de informação para cima da malta, quero reclamar vou aqui, quero falar com a junta vou aqui. Portanto nós, só aqui num ligeiro apontamento, eu a Fernanda aqui há dias com o secretário de estado da economia e com o pessoal ali MADAN parque, o nosso parque tecnológico, fomos ver uns protótipos de uma empresa que está ali a funcionar, que começou na FCT, em que fazem exames... imunológicos, ADN e tudo e mais alguma coisa, *state of the art*, absolutamente extraordinário, num laboratório deste tamanho (exemplificando com as mãos o quão pequeno era o dito protótipo) para que fosse para o terceiro mundo, portátil, mas tudo feito através do telemóvel. Porque para ele “isto para ir para todo o lado e para ser absolutamente acessível é no telemóvel”. Por maioria de razão se fazemos os testes de ADN, se controlamos a doença de *lyme* e por aí fora, isso era tudo feito através de um telemóvel para se conseguir pôr nos países de maior incidência ou no terceiro mundo ou no meio do nada, por maioria de razão as apps das juntas ou de qualquer serviço público têm de estar acessíveis através daqui (aponta para o telemóvel).

Agora, vejo mais dificuldades às vezes nos próprios serviços públicos em chegar lá, do que na população.

PJFCC: E é verdade!

BM: Porque a população está lá, isso... até a minha avó tem um *touch screen*.

Mas às vezes um bom pessoal a montante não carrega as coisas para eles acontecerem, ou então batemos na parede que é termos os formulários. E os formulários caem dentro de uma *black pool*, mete-se lá tudo para dentro.

Isso foi um problema que tivemos em Lisboa e que entretanto se resolveu com o na minha rua, inicialmente era tudo lá para dentro e depois entrava tudo num poço... nós recebíamos só que a malta depois ficava na expectativa de uma resposta mas era um poço de onde não conseguíamos retirar a informação.

PJFCC: E não há resposta efetiva...

BM: Nada, isso depois ainda era pior, valia mais não estarmos a receber nada ao menos não se gerava expectativas.

PJFCC: Isso é o que nós temos... ou seja, aquilo é, nós respondemos porque há pouca interação e há coisas muito definidas

FM: Pois... se aumentar se calhar não há capacidade de resposta

PJFCC: Por isso é que nós estamos a remodelar agora

BM: Agora é de esperar que, quando as juntas tiverem mais orçamento, mais pessoas, espera-se que as pessoas que venham a ser recrutadas no futuro também tenham mais competências desta ordem e venham conseguir mais facilmente, idealisticamente.

PJFCC: Mas ó Bruno, a parte da comunicação... a parte da comunicação as juntas de freguesia, para nós freguesias do conselho é uma coisa recente.

BM: Sim, é verdade! E não tens muito recursos próprios...

PJFCC: Muito recente... e não temos recursos próprios

BM: Não tens outdoors porque custam-te caro para o teu orçamento, não podes desperdiçar nisso.

Moderador: Qual é o orçamento da junta?

PJFCC: O meu?! 900 e qualquer coisa mil. Agora! Quando eu entrei aqui eram 534 mil

BM: E para aí 40% devem de ir em recursos humanos.

PJFCC: A... 38 qualquer coisa... neste ano de 2019 por causa da entrada do pré pav, que eu estava muito abaixo, estava muito abaixo...

BM: Mas, respondendo à pergunta e fechando o círculo...

PJFCC: Mas ó Bruno, só para terminar, eu tenho 438 mil euros, neste orçamento em que realmente os uso em várias vertentes..., mas uso 438 mil, ou seja, é mais ou é equiparado a 50% do orçamento.

BM: Sim, sim...

PJFCC: Disponibilidade para fazer outro género de coisas, tirando a parte corrente... isso é muito fácil de ver a conta dos orçamentos, as classificações económicas... ou seja, na classificação económica da cultura, desporto e aquelas coisas sociais, relacionadas com ações sociais, eu tenho 438 mil e qualquer coisa euros só para a classificação social e porquê? Porque a estratégia é o desporto, a cultura...

FM: São as atividades...

BM: Agora para comunicares de facto não tens montantes, mas também não tens rede... porque a câmara tem, a câmara tem uma rede de outdoors, tem veículos, tem um departamento...

PJFCC: Eu vou mais abaixo, tenho alguma dificuldade com o orçamento que tenho, contratar duas ou três pessoas, dois gurus digamos assim. Duas ou três pessoas que façam claramente...

BM: Sim é verdade, levavam-te logo dezenas de milhares de euros... sim, na escala de 900 mil...

PJFCC: Tenho essa dificuldade, ou seja, não consigo chegar a pessoas... ou tenho aquele mediano, não é?! Que realmente vai fazendo as coisas porque...

FM: Que vai fazendo alguma coisa pontual...

Moderador: E não há aqui a relação com a câmara, nesse aspeto?

PJFCC: Não há... não há...

BM: Pode, devia ser melhor, podia ser melhor... a câmara como tem meios, tem recursos e a comunicação das freguesias é dirigida ao cidadão, faz sentido que nós puséssemos nos braços...

PJFCC: Nunca houve uma habituação... nunca houve essa relação... pelo menos comigo... nunca houve essa relação também é uma, digamos que é uma vertente que as juntas não ligam muito, ou seja, não têm ligado.

BM: É... nós comunicamos nas juntas coisas do interesse local daquela circunscrição territorial, mas não necessariamente aquilo que a junta está a fazer. Comunicamos as coisas municipais que acontecem naquela...

PJFCC: Também não há se calhar divulgação da junta para a câmara do que está a fazer...

BM: Sim, é verdade... é uma questão de coordenação. É uma questão de melhorar a coordenação.

PJFCC: Eu pelo menos não comunico nada daquilo que estou a fazer ...

BM: É uma questão de articular, porque as pessoas da junta que nós quiséssemos levar para isto (apontando para o acelerador apresentado) vão mais facilmente ao Facebook da câmara, do que se calhar a qualquer outro. Portanto, temos de ser nós a levá-los para lá.

PJFCC: O site da junta é o Facebook...

Moderador: Neste momento não tem protocolo a descentralização de competências da câmara para a junta?

PJFCC: Neste momento não temos?

Moderador: Sim

PJFCC: Não, neste momento, o que a Francisca veio aqui fazer foi precisamente começarmos a trabalhar num novo...

BM: Mas tem havido...

FM: Há um conjunto de competências que já estão, não é?! Mercados, espaços públicos, etc. Há um conjunto que resultam dos acordos que houve anteriormente.

PJFCC: Vamos lá ver uma coisa, se nós dividirmos o diploma 38 da lei 50, que é o que está agora aprovado. Nós conseguimos dividi-lo em duas coisas diferentes. Uma, trabalho, outra receita e outro digamos trabalho também, mas à procura da receita. E o que nós temos neste momento

é uma quantificação de um trabalho que realmente a câmara distribuiu nas juntas de freguesia, estamos a falar da componente da descentralização... em várias coisas. Ou seja, espaços verdes e enquadramento, calçadas, escolas, muros e muretes... algumas delas mal quantificadas, eu pelo menos não consigo perceber como é que lá chegámos.

Moderador: Os espaços verdes aqui na junta quem é que... aqui na freguesia?

PJFCC: Alguns. Há aqui várias... olhando para o território, e para vocês perceberem, olhando para o território há aqui diferenciações que não fazem qualquer tipo de sentido. Ou seja, se eu tenho digamos uma descentralização, e fui eu na altura que exigi à câmara municipal que os espaços verdes viessem para nós. Mas não tão resumidos como eles são, e foi isso que eu estive agora a falar com a Francisca. Vamos lá ver, para que é que eu quero ter um espaço verde e enquadramento, alguns deles, onde a minha interação nos espaços verdes e enquadramento é perceber se as regras estão boas ou más e se não estiverem boas, pedir os materiais à câmara, fazer o corte dos verdes porque não tenho qualquer poder de decisão do que é que lá vamos colocar...

FM: Do que é que lá está... pois... é instrumental, não é?! É uma coisa muito instrumental...

PJFCC: O que é isto? Isto é receber dinheiro da câmara municipal, contratei uma empresa e... ou seja, sou um empreiteiro. Não tenho qualquer tipo de poder de decisão. Não é?! E quando estou a falar dos espaços verdes, falo de tudo o resto... Eu não tenho qualquer tipo de decisão.

Ou seja, a câmara continua a ser, não dono da junta que isso nunca irá ser enquanto eu estiver aqui seja que partido lá estiver, isso é digamos que é apenas um pensamento, mas nós continuamos a ser o parente pobre do estado. Não é?! De facto, a descentralização serve obviamente também para pagar alguns ordenados que estão adjudicados aqueles serviços. Não é?! Mas não serve mais que isto, nós não temos poder de decisão.

Eu se quiser fazer uma calçada inteira como estou agora a fazer, e quando falo em calçadas inteiras estou a fazer 150 metros quadrados de calçada porque o meu protocolo diz que é 1 metro quadrado, tapa buracos de 1 metro quadrado, quer dizer...

Moderador: Pois, só perguntei isto para às vezes para se recordar em manter estas coisas... normalmente estas coisas toda a gente esquece... e estamos habituados a descentralizar as questões dos espaços verdes, da calçada, dos arranjos das escolas... lembre-se de outras coisas na negociação com a câmara.

PJFCC: Emanuel, esse tem sido a minha grande batalha e a minha grande luta...

Moderador: E estas coisas às vezes do ponto de vista da comunicação, mercados...

PJFCC: Sim, mas eu já... eu comecei por dizer que tinha com o Barroso, na altura ainda o Bruno era chefe de gabinete, na altura com o Barroso tentámos arranjar uma plataforma digital, alargada em que realmente eu escusasse de agarrar no telefone e estar sempre a dizer para o Barroso “olha Barroso passa-se isto...”, “olha toma lá a fotografia...”, ou seja, arranjar aqui uma maneira de a câmara gerir uma app, o que quer que fosse e onde as freguesias pudessem interagir, não é?!...

BM: Que está a trabalhar nisso

PJFCC: De maneira a que realmente nós conseguíssemos ter respostas efetivas daquilo que é os serviços da câmara... funcionar em rede. Neste momento as freguesias funcionam por elas próprias.

A câmara funciona por ela própria e as freguesias funcionam por elas próprias, não temos qualquer tipo de rede em relação à câmara, nestas coisas e noutras... Isto porquê?

Moderador: Vale muito o relacionamento que existe entre os eleitos, que é uma coisa que não deve acontecer...

PJFCC: Nunca houve aqui um pensamento de... eu gosto de falar de independência, é isso mesmo... um pensamento de independência das juntas de freguesia em relação à câmara. Nunca houve. Houve sim um pensamento de servir a câmara municipal, ou seja, a câmara municipal ditava e as juntas de freguesia tinham de fazer. E este era o pensamento. E dai termos chegado a isto, a não haver rede, não haver... haver negociações entre os presidentes da câmara e os presidentes de junta era o normal, não é?! Agora, não havia mais nada que isto.

Lá está, é isso que tu estás a dizer, não havia aqui uma interligação porque a câmara, o pensamento da câmara municipal, aquilo que eu entendi e já estou cá há 20 anos. Na oposição, no poder estou à 5, mas na oposição estive aqui “n” anos. Ou seja, nunca houve, por aquilo que eu entendi, uma ligação mais estreita, fosse que partido fosse, entre câmaras municipais e juntas de freguesia, na altura e agora uniões e juntas de freguesia não houve, aquela relação... o Judas tentou fazer aqui digamos, dar aqui alguma roupagem nova a esta ligação, mas também não conseguiu. Também não o conseguiu... Ou seja, este é um percurso que tem de ser mais efetivo, se em Lisboa isso existe, há muito tempo, no conselho de Almada isso nunca existiu e ainda hoje não existe.

Há coisas que vão melhorando, sim, mas há outras coisas que vão ficando para trás. E a comunicação e de facto uma das coisas que realmente... a interligação, a comunicação, o trabalho partilhado, para teres uma ideia, o trabalho partilhado quando a competência não era nossa e nós, eu vou-te dar um exemplo. O SMAS partia para aí uma coisa qualquer, que é os godzilas como nós dizíamos porque faziam buracos em tudo quanto era sítio, e depois não tinha ninguém... e estavam buracos abertos 2, 3 meses para tapar a calçada. Então o que é que eles faziam? Pediam às juntas de freguesia, não ressarciam as juntas de freguesia por isso, e pediam às juntas de freguesia para o fazer. Eu por acaso estive sempre disponível, e quando falo do SMAS falo também dos espaços verdes que era igual. Arrancavam uma árvore num sítio qualquer e nós íamos lá tapar o buraco. E nunca recebi mais por isso... e fazia-o porque obviamente o meu dever aqui é servir a população, mas até essa partilha em rede, eu fazia-o como disse, mas havia outras freguesias que eram do partido da câmara que não o faziam...

Portanto havia de tudo aqui no conselho de Almada e continua a haver. Também ainda este executivo não tem dois anos, há de fazer dois anos. Portanto há aqui um percurso e obviamente que ...o basear deste executivo foi primeiro pôr as coisas a funcionar e agora há aqui todo um percurso que tem de ser feito.

E isto que estamos a falar é realmente uma lacuna imensa, a câmara funciona, sim. Não tão bem como eu gostava, mas funciona...

BM e FM: Nem isso...

PJFCC: Tem vindo a melhorar, é um facto, tem vindo a melhorar. Tem uma estrutura pesadíssima, a câmara sempre teve uma estrutura pesadíssima a nível de comunicação. Com uma coisa completamente difusa, que não se percebia muito bem quem é que fazia o quê e... não era muito claro. Tem estado a melhorar? Sim. Mas a câmara tem condições para ir muito mais além.

A junta já são só o reverso da medalha, ou seja, já são o contrário daquilo que eu estou a dizer. Porque as juntas não têm a capacidade de comunicar que a câmara tem, tanto no aspeto financeiro, que depois arrasta todo o outro. Não é?! Mas também se calhar não tem interesse. Não é?! Porque as dinâmicas... se na Costa de Caparica é de uma maneira e as pessoas até se envolvem, mais do que nas outras freguesias. E eu vejo pelas pessoas que assistem às assembleias e às reuniões de executivo público. Eu tenho mais pessoas a assistir às assembleias de freguesia que a assembleia municipal tem, só para perceberes. E a minha freguesia não é de facto uma freguesia exemplo nisto. Poderíamos ir muito mais longe... Isso tem a ver com o estrato das pessoas... estrato social, estrato de pensamento... enfim. Se calhar também não há vontade para o fazer...

Se eu tento fazê-lo, com os poucos meios que tenho, tento sempre enfim, chegar mais à frente, se calhar nas outras freguesias também está tudo bem... eu até ganho as eleições... está tudo bem...

Moderador: Eu não queria dizer isso, mas o pensamento é esse... Mas isso é nas juntas e é na câmara. Eu costumo dizer isto de uma perspetiva, e agora estamos a fugir um pouco ao tema, tem a ver com a participação dos cidadãos... e nós vemos isso por exemplo relativamente à abstenção nas eleições. Quem ganha normalmente é quem tem condições para poder fazer alguma coisa para cativar a participação dos cidadãos. Eu costumo dizer que é transformá-los de indivíduos para cidadãos. Mas porque é que ninguém faz? Não há nenhum município, eu tentei fazer isso no meu município, eu acho que ainda ficou em programa eleitoral, não tenho a certeza, que se criasse uma estratégia de combate à abstenção. Mas porque é que ninguém faz isso? Porque quem ganha eleições o que é que pensa? E isto é transversal naturalmente a todos os partidos, quem ganha eleições...pronto...

BM: Ganha com aqueles. Mas ser imobilista é um risco...

PJFCC: Emanuel e esse pensamento está completamente errado. É um risco, e no conselho de Almada é um risco enorme. O conselho de Almada eu gosto de alargar à área metropolitana de Lisboa, e porquê? Porque... eu vou dar o exemplo da minha freguesia, eu tenho 700 novos eleitores, 700 e tal novos eleitores, em dois meses ou três que realmente não percebo o que é que eles... daí estar a dizer que é um risco, não é?!... não perceber do que é que... de que faixa é que eles são, o que é que vieram, de onde é que vieram, o que é que fizeram e o que é que são. E quando eu digo que a área metropolitana é um risco nós sermos imobilistas e estarmos sentados à espera que ganhem as eleições pela percentagem de abstenção, aliás, se nós

olharmos como é que o PS ganhou as eleições em Almada, foi precisamente porque reduziu a percentagem de abstenção e que cada vez mais, esperemos nós, e vamos ver agora... nas europeias não dá para perceber... mas cada vez mais eu acho que vai haver se não mais pessoas a votar, pessoas diferentes. Ou seja, até por aí as juntas de freguesia e quem está a gerir os destinos de uma junta de freguesia devia estar preocupado. De não conseguir interagir ou cooptar, digamos assim, as ideias da população e chegar.

BM: É bom que digas isso que assim digo duas coisas para ajudar a fechar aqui o círculo e para voltarmos a responder às perguntas e tem a ver com as duas coisas.

A freguesia de marinha das ondas, fica no limite do distrito de Leiria para o distrito de Coimbra e pertence ao conselho da figueira da foz, e tem três unidades fabris enormes. Uma delas é a Lusiaves, que é o maior produtor nacional de produtos agrícolas e depois tem na Leirosa, que é a praia da marinha das ondas, estão as fábricas grande de papel da Celulose Beira Industrial (Celbi) e da Navigator. A Lusiaves foi agora contratar e contruiu casas, para mais de 300 emigrantes nepaleses que estavam em especial no Alentejo. A Lusiaves é um empregador espetacular nesse concreto, leva-os ao colo, regulariza-os. Esses 300 se se mobilizarem ganham umas eleições sozinhos... mudam completamente o quadro.

A junta trabalha muito com eles, alias a minha sogra está a dar-lhes aulas de português aos fins de semana para eles se orientarem.

PJFCC: Mas foi preciso ires para a figueira da foz? Tens aqui mais perto o Montijo... Uma freguesia nossa...

BM: Não, lembrei-me, porque eles construíram as casas ali ao pé de nós. Mas com 300 tu mudas a agulha completamente. Até podes ter um candidato luso-nepalês que mobiliza toda aquela comunidade que é completamente nova. E alias acho lindamente, que aquilo também precisa de um abanão, para dinamizar. Mas estes 700 para ti, realmente sabes lá quem são esses 700...

PJFCC: Ó Bruno deixa-me só fazer aqui duas referências... não era preciso tu ires para a figueira da foz, temos aqui uma freguesia no montijo, que é nossa. Em que realmente o presidente de junta está a dar a capacidade, conjuntamente com os agricultores, e estou a falar na agricultura

FM: Com a agroalimentar ali... Isso acontece também no litoral também há situações dessas, das estufas...

PJFCC: Exatamente. Mas agora vou-te dar a minha referência, eu tenho na minha freguesia círculos, para não dizer outra coisa, de paquistaneses, portugueses, que já estão recenseados cá, que podem decidir eleições.

BM: E que se mobilizam... Se tu vires, em santa maria maior, o Miguel Coelho tem lá o apoio do professor Rana, que é o grande, que é o líder informal da comunidade Bengali e que os trás, e que os junta, trabalha especificamente para eles, a junta trabalha com eles e o professor Rana até faz parte da lista e tudo. É integração completa. E a junta se calhar até de forma mais ativa... a verdade é que é uma população que está mais disponível e que fica contente por ver a junta, porque vêm de um país onde os serviços públicos não têm esse nível de funcionamento, e quando veem a junta a querer dar-lhes alguma coisa, saber como estão os filhos, levá-los à

escola, essa malta está totalmente integrada com a junta e são capazes de aceder mais rapidamente a este tipo de coisas (apontando para o acelerador proposto) do que os nativos que já estão um bocadinho dormentes.

FM: Só voltando à questão da utilidade, diria que de acordo com o nosso modelo de comunicação, este tipo de canais é fundamental, mas que nós, até pelo que já foi dito, temos que sempre ter modelos em que todos os canais são utilizados. Portanto o canal presencial, o canal telefónico, o canal digital neste caso, têm de continuar a ser ofertar importantes na ótica da administração pública por todas estas razões que já foram ditas. Porque depende daquilo que é o âmbito da comunicação que estamos a fazer, qual é o público que estamos a trabalhar e qual é a nossa capacidade de responder aquilo que é gerado por estes canais porque depois digamos que o risco e que é o que acontece aqui é gerar frustrações. Quer do lado do utilizador, quer do lado de quem está dentro da organização a gerir estas ferramentas. E nós temos experiências... eu tenho assim pronto... há 15 anos na implementação e alteração do site da câmara e na disponibilização de serviços online associado ao Portugal digital e a todas as iniciativas que houve na altura ligadas ao programa operacional da sociedade de informação, em que nós mobilizamos uma série de recursos para aqui e de facto esses riscos são reais. E pronto, às tantas o desenvolvimento destas aplicações e destas soluções acabam por... na relação causa-benefício, que se vai depois fazer na parte da avaliação gerar aqui algumas frustrações que têm de ser...

BM: Temos de ser cuidadosos com o *phase out* dos outros modelos mais tradicionais...

FM: Exatamente... e não pensar que eles vão ser substituídos na totalidade e na integra por estas ofertas, agora são absolutamente...

BM: Ontem por acaso falávamos disso por causa do ponto do cidadão, em que dizíamos “então, mas você não sabe que agora tem um ponto do cidadão ao pé de casa?” “Ah, mas eu gosto de vir aqui a Almada”

FM: Exatamente!

BM: A população sénior, que é dominante num conselho como Almada no período do dia em que a população ativa, não tanto quanto se julga mas uma parte significativa da população ativa vai para Lisboa, mas Almada é muito vibrante a meio do dia, muita malta nova e muito... os seniores e os juniores estão cá todos, o centro de Almada é muito vibrante, é surpreendente. Mas a verdade é que a população sénior diz “Não, eu não me importo de vir aqui” “Ah está online?! Não quero saber! Eu venho dar o passeio e...”, é o circuito social, portanto nunca podemos fazer um *phase out*...

FM: ...completo dos outros canais.

BM: Agora, por outro lado, a presença deles também é uma forma de garantir que a comunicação e que o chamá-los para estes eventos participativos é garantida, é puma vai buscar, estás aqui e toma leva com ela na testa.

FM: Mas também a nossa estratégia, digamos para mobilizar as pessoas para estas ferramentas tem de ser pensada porque se calhar podemos utilizá-la numa forma mais eficaz com

determinado tipo de público, só para um determinado tipo de propósitos, não é?! Que possa ser de facto mobilizador. Pronto e as questões, por exemplo dos mais jovens e de como motivá-los para a cidadania através de ferramentas que em princípio eles têm mais facilidade em aderir, pode ser uma forma também de... pronto de fazer algum caminho.

BM: Uma coisa muito boa disto, independentemente no fim do dia, qualquer que seja o nível de participação do cidadão, é que obriga a junta a fazer um upgrade e a modernizar-se. Depois o público, tudo depende de um conjunto de, mas o pressuposto de que a junta tem de se prepara é um progresso que já é muito importante.

Moderador: Daí termos considerado que um dos elementos principais era a organização interna

BM: Sem dúvida! Sem dúvida! Porque depois vai beneficiar nem que seja em processos futuros, nos processos do dia a dia, administrativos... adquirem competências que não tinham antes, os próprios. Se não colou neste tipo de participação, mas vai produzir efeito...

FM: E há às vezes o efeito de urgência na resposta a estes canais que não são conseguimos noutros e que acabam por ser dinamizadores de situações que às vezes não conseguimos responder e isso também é importante tirar partido.

Moderador: Sim, os cidadãos em muitos casos estão um passo à frente da administração...

FM: Exatamente!

PJFCC: E não é nalguns casos, estão quase sempre!

Q2: Observações ao que foi proposto.

BM: Acho que adiantámos aqui, a nossa resposta antecipou logo isso. Mas de todo o modo, é sempre... a adoção de um processo destes terá sempre o benefício que, ainda que possa ou não resultar no âmbito no processo, em concreto, participação do público, a partir do momento em que eleve os níveis de realização da própria organização, o público vai beneficiar noutros processos ou mesmo no processo administrativo do dia-a-dia. Vai forçar uma junta ou serviço público internamente a subir o nível e o público depois vai beneficiar da correnteza. Porque nós sabemos bem que os níveis de participação da população são baixíssimos... os níveis de participação da população nas discussões públicas dos instrumentos de gestão territorial são *border line*, nada. E já nem estou a falar de participações qualificadas ou menos qualificadas, porque algumas delas são assim uns bitaites ao nível do grau zero...

FM: Sim, sim, sim...

BM: Mas são dúzias ou menos e algumas delas são meras..., portanto são muito, muito baixas. Portanto, as nossas expectativas às vezes para a participação do público têm de ser moderadas porque o público às vezes está mesmo noutra... Agora, se isso (o acelerador proposto) forçar o próprio serviço público a fazer upgrades, *level ups* em algumas componentes... porque no futuro há de operar em apps e há de operar tudo online... se isso obrigar uma junta a fazer um bocadinho de *update* e ficar mais perto do que é o estado da arte, então 5 estrelas.

Pelo menos eles já lá estão. Porque o público há de vir cá ter... pode não ser neste processo, mas noutra a seguir ou no mesmo, vocês vêm cá.

PJFCC: Eles acabam por... sim, sim, sim. É um processo mais lento, mais moroso, mas acaba por... as pessoas acabam por ter de o fazer.

Moderador: Mas tem de se começar por algum lado...

PJFCC: Aquilo que me foi aqui apresentado, digamos, alguma parte nós estamos a tentar agilizar... pronto, conseguimos perceber que nos falta aqui uma grande... nestes meios, digamos assim, faltava-nos aqui e era uma grande lacuna, não tínhamos.

Tínhamos um site completamente obsoleto, o tal que o Bruno disse o e-freguesia ou o que é que é aquela coisa...

BM: Sim... ou freguesia.pt

PJFCC: Nós mudámos logo no meu primeiro ou segundo ano, porque aquilo era um monstro para gerir e porque não conseguíamos gerir e depois tínhamos de estar a telefonar lá para não sei para onde... aquilo era uma coisa...

Nós tentámos criar um site próprio que realmente temos vindo a requalificar e criar ferramentas que possamos estar mais perto... e agora estamos... baseados inclusive numa junta de freguesia de Lisboa porque o sujeito que nos está a propor certas e determinadas coisas trabalhou para uma junta de freguesia de Lisboa por isso é que há pouco falei dos Olivais e de Marvila. Nós estamos a tentar adaptar-nos digamos assim, aquilo que é... agora, obviamente que isto (o acelerador apresentado) vai mais longe do que aquilo que nós temos neste momento e que podemos vir a fazer no futuro. Isto se calhar seria um modelo, não perfeito, mas já muito avançado para aquilo que são neste momento os desígnios das freguesias, da Costa e das outras.

Não é?! Porque nós não estamos nem a este nível ainda, este nível disto que foi aqui apresentado.

BM: Sim, sim...

PJFCC: Fizemos algum percurso, se calhar um pouco mais à frente daquilo que são as outras freguesias, mas não estamos a este nível, nem de perto nem de longe ainda... ainda. E lá está, o tal investimento que o Bruno á pouco falou, se a câmara consegue fazê-lo e consegue requalificar porque tem um orçamento em que realmente pode disponibilizar... não faço ideia quanto é que será, mas posso ir ver, quanto é que serão os gastos da câmara em comunicação. Antes era uma coisa assim...

BM: São consideráveis.

PJFCC: Antes era uma coisa assim... até fora daquilo que é, e que eu considerava, estratosférico. Antes... agora não sei.

BM: São importantes são...

PJFCC: Nós não temos essa capacidade, nós temos de fazer muito com muito menos e às vezes temos dificuldades.

Mesmo que eu queira contratar, pode não ser um guru, mas, alguém que se adapte bem, que se mexa bem e não sei quê... Se calhar pedem-se coisas que eu... se calhar um ordenado maior que aquele que o presidente ganha. Eu tenho aí propostas completamente, para a junta de freguesia, completamente fora de contexto e estou a falar de gestão apenas. Apenas de gestão, não estamos a falar sequer de construção, apenas gestão de várias aplicações. E eu não consigo lá chegar... Vêm ganhar mais que eu para aqui, já lhes disse a eles “você vêm para presidente de junta e eu vou para outro sítio qualquer”.

Q3: Críticas e sugestões

BM: Isso é no terreno, isso é no terreno... isso é depois com as mãos à obra.

PJFCC: Há aqui algumas coisas, por aquilo que... depois claro, só no terreno e com a aplicação é que nós conseguimos medir...

FM: Com testes...

PJFCC: ... testar e medir e não sei quê... há aqui coisas que são realmente fundamentais nesta descrição, há coisas que são realmente fundamentais. Mesmo para agora como as juntas funcionam... mesmo neste modelo ainda. E que poderão vir a ser fundamentais num modelo a curto prazo. E aí não é displicente aquilo que o Emanuel disse dos diplomas das novas competências, se realmente a câmara estiver para transferir, estou a falar da gestão de tudo aquilo que é publicidade, ou seja, tudo aquilo que é feito online agora na câmara municipal e que irão passar para as juntas de freguesia.

BM: Sim, os licenciamentos e as publicidades... o formulário automático e análise e isso, em princípio, vai passar para este nível e introduz uma complexidade e administrativa também importantes.

Moderador: E depois a melhoria do website fará ainda mais sentido.

BM: Porque depois é a ocupação dos espaços públicos, georreferenciação... ainda por cima esta é uma junta interessante na ótica da prestação de serviços porque é uma junta num território eminentemente turístico por isso tem também uma apetência para diariamente e com frequência...

PJFCC: E somos confrontados com coisas completamente diferentes...

BM: ...ser *outbound* de informação por isso tem de...

FM: Muito dispares...

BM: ...se sofisticar rapidamente e tem de conseguir responder a isso porque é uma área com muita ocupação de espaço público...

PJFCC: Mas não é fácil...

BM: ...e agora se tiveres de licenciar tudo, aparece-te aí a malta toda em fila à porta, *tudo old school...*

PJFCC: Há coisas que realmente disseste aí Bruno e bem, há coisas realmente... a parte do licenciamento que muito dele na câmara municipal é feito online, nós aqui não fazemos online...

FM: Não conseguem fazer pois...

PJFCC: Não conseguimos fazê-lo online...

FM: Pois... e a questão dos serviços online é critica aqui neste modelo...

BM: Passamos para baixo, mas temos de passar meios, entretanto há ali um GAP entre o passar e eles se adaptarem que é doloroso, não é?! Há ali umas dores de crescimento ou de passagem...

Moderador: Mais uma vez falamos em organização interna e a preparação das pessoas para algo novo.

PJFCC: Eu compreendo isso tudo e eu tenho uma data de pessoas para gerir... eu compreendo isso tudo e mais compreendo ainda, e eu agora vou dar outro exemplo que pode não ter haver mas que tem haver com a formação, eu estou sempre atento e os funcionários têm formações em vários níveis porque quando eu entrei aqui eu não tinha ninguém que fizesse contabilidade nem ninguém que fizesse tesouraria...

E quem faz hoje contabilidade que é a minha chefe de contabilidade, atendia telefonemas e nada mais, ok...? E tive de conseguir adaptar os funcionários a requisitos... e estou a falar da contabilidade como posso estar a falar de outras coisas.

BM: O modelo de passagem de competências devia ser “toma lá o dinheiro, prepara-te, faz”, mas agora é, “toma lá o dinheiro, faz enquanto te preparas”, portanto, a ordem não é...

PJFCC: Exatamente! Ou seja, as coisas nas juntas de Portugal nós não temos só isto para tratar, nós temos de dar resposta, aliás nota-se não se nota? (apontando para vários montes de papel que se encontravam em cima da mesa) nós temos de dar respostas a várias coisas ao mesmo tempo e normalmente, eu falo aqui da minha junta porque não gosto muito de falar das outras, conheço algumas realidades mas falo da minha realidade, nós tivemos uma altura em que realmente tivemos de sustentar, digamos assim, a junta de freguesia a nível de funcionalismo, fomo-nos adaptando a tudo aquilo que era a diferenciação como tínhamos de funcionar. Em coisas muito diferenciadas. Também teve a ver com as competências obviamente, em 2014, e adaptar tudo aquilo que era serviços e alguns com os recursos de escolaridade muito baixa, adaptar às novas realidades.

E eu não acabei de fazer essa adaptação e já vou começar outra, alias já começou uma outra que a mim faz-me, enfim eu tive uma formação na ANAFRE, que é a tal do SNCAP – uniformização do sistema de contabilístico, que nos vai dar aqui um “farrobadó” imenso. Que andamos todos aqui a apanhar bonés do ar, é o termo concreto, que temos formação nesse sentido. Quer dizer, estamos ainda a adaptar tudo aquilo que é serviços a diversas coisas completamente diferentes e depois a seguir vamos levar já com as competências que vamos ter de adaptar de novo. Não é? O que é que ficou para trás no meio dito tudo? É realmente aquilo

que nós pensamos que tem menos interesse, não é que tenha menos interesse, nós é que pensamos que tem menos interesse, e realmente não nos focamos naquilo que é essencial. Na parte da política, naquilo que é a interação com as populações, porquê? Porque somos confrontados todos os dias, quem se interessa... também tenho presidentes que não se interessam é verdade que sim, com coisas completamente diferentes. E também temos às vezes de dar umas respostas à câmara, mas isso é outros níveis.

Portanto, se nós conseguíssemos implementar um sistema que realmente nós através da resposta conseguíssemos, nós estou a falar de junta de freguesia, depois agilizar aquilo que é o trabalho no terreno e tivéssemos a interação ou digamos o background do lado de lá a dizer “sim senhora, vocês não sei quê”, isso seria o ideal. Mas para isso é preciso primeiro os melões, depois é preciso onde se compram os melões e depois é preciso tudo o resto...

Agora, eu acho fundamental este tipo de aplicações, podem ser alargadas e pode colocar-se outras coisas, daí pode-se inclusive nas freguesias, diferenciar e é para isso que serve... e depois pode-se trabalhar a rede com as câmaras municipais e partilhar aquilo que são as competências da câmara municipal e as competências da junta. Porque às vezes até partilhamos coisas do mesmo território e competências diferentes que às vezes até acabam por interligar umas com as outras.

Sim, é fundamental estas aplicações agora, há um percurso longo para fazer. Também na câmara, mas a câmara está muito mais à frente.

BM: Sim, nós estamos a preparar a aceitação das competências para a gestão das praias. Nós reunimos ali numa sala, doze ou treze pessoas altamente qualificadas prontas e mesmo assim adamos um bocadinho desorientadas. Passar licenciamento de publicidades, esplanadas e tudo mais para a junta de freguesia com a quantidade de pessoas que a junta tem, para o nível... e em Lisboa vimos isso porque as juntas de freguesia essencialmente eram um apoio social, naquelas juntas da baixa, Madalena, Santo Estevão e por aí fora, a presidente da junta ia a casa das pessoas fazer a ação social.

PJFCC: Eu estou bastante preocupado com isso.

BM: Portanto, e enquanto não conseguirmos passar técnicos superiores andaram completamente a apanhar do ar...

FM: E foi um processo preparado...

BM: E foi muito preparado, sim nós tivemos quase 2 anos a preparar tudo, foi desenhado, foi feito de forma muito acompanhada.

PJFCC: Por isso é que disse à Francisca que não sie se vou aceitar as competências porque eu não tenho competência para aceitar as competências.

BM: Precisas de cabeças pensantes para fazer as coisas, porque de repente uma junta passa de 10 recursos humanos para 50, a complexidade associada a processar recursos humanos na coisa mais corriqueira do mundo que é *payroll*, cresce exponencialmente.

PJFCC: Eu preciso de coisas mais básicas ainda que isso, não só de pessoas qualificadas para o fazer, mas de coisas mais básicas. Eu agora vou receber, por exemplo, o espaço público, como disseste a publicidade e assim, ter regulamentos... e como é que vamos fazê-lo? Fiscalização... e a fiscalização dá resposta depois?

BM: Se se conseguir que isto (apontando para o acelerador) contribua para definir uma matriz de procedimento de relação com o munícipe é ótimo. Porque depois vão entrando novas competências e só têm de cair na pipeline dele.

Moderador: A ideia desta matriz, antes da matriz é a estratégia...

BM: E depois adapta a qualquer que seja a realidade e a ter o pipeline certo para o relacionamento...

PJFCC: A estratégia é boa...

BM: A ideia é habituar os serviços a trabalhar e habituar o cidadão a trabalhar com.