

PROPOSAL FOR SHARED SERVICES PERFORMANCE MANAGEMENT MODEL APPLIED TO PORTUGUESE PUBLIC ADMINISTRATION

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Abstract

In order to improve the quality of the services and the relationship between the central public administration and citizens the Portuguese government launched an e-government initiative including both front and back-office processes. The implementation of shared services represents one of the transformation vectors having as major goal the gain of efficacy by reducing the organisational structures and the gain of efficiency through the rationalization of back-office processes. The main target was first the development and implementation of both financial and human resources shared services management solutions and afterwards the enlargement of this concept to other domains such as Information and Communication Technology (ICT). The shared services implementation target is the central public administration, which employs 550.000 workers. Depending on the success of this initiative it may be later extended to regional and local entities encompassing a total of 800.000 workers.

This shared services initiative catalyzes the need of having a global public administration structure in order to provide services with the required quality and to implement adequate and flexible process oriented business models. In 2007 GeRAP, a public enterprise owned by the Ministry of Finances and Public Administration, was created aiming a suitable implementation of this paradigm.

As an outcome of the financial and human resources shared services implementation experience, a Portuguese Governmental Open Cloud (GO-Cloud) project was launched with the aim of deploying an ICT public infrastructure able to integrate other private and public clouds and to offer quality infrastructure services at lower costs. The GO-Cloud overlays the double objective of establishing a technological platform that will leverage the shared services adoption spreading among public administration entities, concerning both the already deployed financial and budgetary management solution and the shared human resource management solution, and the provisioning of ICT resources and services in a more flexible and effective way.

A successful implementation of shared services in a public and wide environment such as the Portuguese public administration requires a suitable reference architecture, reliable and scalable infrastructures, automated procedures, adequate management processes, an agile organization and adequate relationship models, based on a set of core competences. Thus, this paper focuses the way shared services are being implemented and managed in the Portuguese public administration, considering both the scope of this activity and the differences between public and private contexts. It

also presents the adopted service oriented architecture (SOA) and both the business model and the shared services analysis model (SSAM) used to grant GeRAP internal and external alignment.

SSAM contributes with a formal analysis structure through the identification of main pillars that sustain the shared services implementation in Portuguese public administration. The defined pillars will be used as analysis vectors to create a performance model which will be able to evaluate the performance reached by shared services implementation and to anticipate some actions.

Keywords: e-government, case study methodology, Portuguese public administration shared services implementation, management shared services model

Introduction

Traditionally, both private and public sector organizations have performed back-office functions in each of their business units. Nowadays, organizations have realized that they no longer can afford the luxury to duplicate their support processes in each business unit. An increasing number of organizations, both in the private and in the public sector, use shared services to transform their back-office functions. Shared services is as its name implies, the combining or consolidating of services within a corporation. The reason for this is quite simple: it is one of the rare business concepts that offer both a decrease in costs and an increase in quality simultaneously. Shared services models bring with them much internal efficiency with high levels of duplication and rework that could be avoided through information sharing and shared services [1]. Despite apparently looks like centralization, shared services is just the opposite. In a centralized organization, corporate controls the resources and dictates policies, programs, and procedures to the field. «In a shared service organization, resources from the field are shared (which may look like centralization), but the control over the use of these resources resides with the field. Centralized services control the field; shared services are controlled by the field. Centralized resources determine policy for the field to follow; shared services facilitate learning as requested by the field. Centralized resources retain power at the top of the hierarchy; in shared resources, power and influence is dispersed to the field».

In 2005 the Portuguese council of ministers, created the public administration restructuring program (Programa de Reestruturação da Administração Central do Estado, in short PRACE) 0 with the following strategic objectives:

Modernize and rationalize the central public administration;

Improve the quality of the services provided to citizens;

Improve the relationship between the central public administration and citizens.

As an outcome of PRACE, the Portuguese government launched an e-government initiative including both front and back-office processes. The shared services initiative represents one of the transformation vectors, having as main target the reduction of structures and rationalization of back-office processes. The back-office integration can be seen as leading to the development of new back office services to improve support for front office operations.

In 2007, GeRAP, a public company owned by the Ministry of Finances and Public Administration (MFAP) was created aiming to provide shared services to the Portuguese public administration through contract. The main target was to develop and implement both financial and human resources shared services management solutions in a first stage, and later provide shared services in other domains such as Information and Communication Technology (ICT). In a first phase, the solutions must be deployed within the Ministry of Finances (16.000 employees and 14 entities) and, in a second phase, for the central public administration (550.000 employees and 450 public entities). Later GeRAP could also provide shared services in other domains such as Information and Communication Technology (ICT). All shared services must be provided through contract.

The financial shared services solution has been operating since January 2009, and nowadays works with an environment of around 40.000 employees and 65 public entities of different ministries as well as other public entities. Relating human resources shared services an integrated solution is already under development. From 2010 on, AMA (agency for the administrative modernization) and GeRAP have been working together in a new project: the Portuguese Governmental Open Cloud (GO-Cloud). The purpose of this initiative is to define, implement and manage an ICT public infrastructure able to integrate other private and public clouds and to offer quality infrastructure services at lower costs. The GO-Cloud overlays the double objective of, establishing a technological platform that will leverage the shared services adoption spreading among public administration entities, concerning both the already deployed financial and budgetary management solution and the shared human resource management solution, and the provisioning of ICT resources and services in a more flexible and effective way .

Such an approach is, in essence, a variant of outsourcing perhaps better defined as insourcing, as the specialized entity remains a public sector body, one with a set of responsibilities transferred from government agencies, which can focus on their own mission and achieve results in an effective and efficiency way, delivering non-core competencies to shared services centre (SSC). In return, this new entity works with individual public entities as 'clients', defining service level agreements in much the same manner as a public-private partnership. The difference driving the shared services movement today in many large public and private organizations, is the emphasis on both specialized solutions and shared benefits that can be developed through an entity with horizontal coverage for all operational units **Erro! A origem da referência não foi encontrada..** However, the centralization move could bring inefficiency instead of operational rationalization and improvement, and for this reason GeRAP has to improve its performance and benchmark with other providers – especially those in the private sector **Erro! A origem da referência não foi encontrada..**

This paper focuses on the main issues the Portuguese shared service centre (SSC) implementation faces in order to define an analytical model suitable to support SSC performance evaluation assuring the formal measurement and management.

Research Scope

According to GeRAP mission and following the Portuguese public administration shared services initiative implementation, the purpose of this research is to find a model to evaluate in each moment, defined by environment requirements and constraints, the strategy pursued and implemented in public shared services. This performance evaluation is supported by efficiency and effectiveness measures to different SSC's activity domains allowing: (i) performance level measuring; (ii) deviation analysis of the defined objectives; and (iii) evolution scenarios analysis through manipulation of main variables.

The implementation strategy of shared services was segmented in the following three domains:

D1: Ministry of Finances and Public Administration - MFAP – 16.000 workers (restricted scope);

D2: Central Public Administration – 550.000 workers (target scope);

D3: Public Administration (Central, Regional and Local entities) – 800.000 workers (enlarged scope).

The MFAP entities (D1 domain) are the earliest adopters in order to validate the methodology and make proof of the concept. After this step the solutions are progressively enlarged to other central public administration entities (D2 domain), after previous agreement between the Minister of Finances and each concerned Minister. The availability of these solutions to the entities from D3 domain will be delivered by request. Not all supplied services need to be provided to the different domains and ministries therefore the catalogue may vary accordingly.

The continuous shared services implementation throughout government agencies and organizations from central, local and regional public administration will face several challenges which should be anticipated in order to avoid service quality disruption. Therefore this paper aims to present a model to analyze shared services performance and support relating strategic decisions in order to assure an ongoing evolution with no disruption.

As politically defined, the strategic objectives of shared services are the improvement of quality, efficiency and transparency within central public administration entities, as presented in Figure 1.

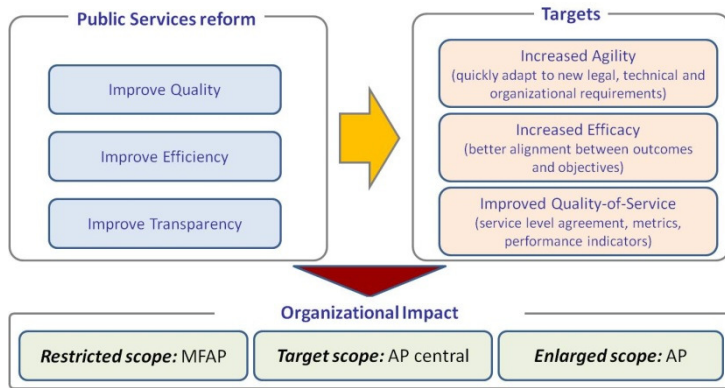


Figure 1 –Strategic and Organizational Shared Services context

The targets of GeRAP became therefore to increase agility and efficacy of central public administration as well as to improve the quality-of-service (QOS) of the provided outcomes. By increased agility is intended the reduction of the required time to adequately accommodate changes in legislation and both technical and organizational infrastructure. In order to steadily achieve efficacy and also assure a maximum degree of agility it was decided to develop process oriented solutions framed by service oriented architecture (SOA). To improve quality-of-service, which relates to the overall user perception of the provided services, service level agreements were established with each public entity, including the definition of a set of key performance indicators (KPI). However, the efficient design and implementation of financial, human resources and information and communication technology shared services strongly depends of the human resources capacity and knowledge. Is the quality of the solutions, including the provided services, that determines the success of the shared services initiative. Hence to achieve success in shared services implantation the creation and development of a knowledge and motivated team is a critical success factor.

Hence, the implementation drives was: The adoption of a service oriented architecture (SOA) explained next; the definition of an adequate business model, including service standards and frameworks for service level agreements and other aspects to be contractually considered (item 4.); and, the design and deployment of flexible solutions, adapted to the public entities needs and requirements, which also implies the adoption of a governance model (item 5.).

GeRALL Reference Architecture

In order to adequately provide financial or human resources shared services suitable platforms are required. The first effort was then to define a shared services program, named GeRALL, which includes the main projects to perform in order to implement an integrated financial and human resources management shared services solution. The development, deployment and management of shared resources and services within the Portuguese public administration proved to be a complex task. The diversity of regulations, the requirements and heterogeneity of public bodies, the expectations concerning shared services as well as time pressure imposed by narrow political

deadlines create the need to apply to an agile architecture for GeRALL. Figure 2 presents a high-level view of GeRALL components architecture.

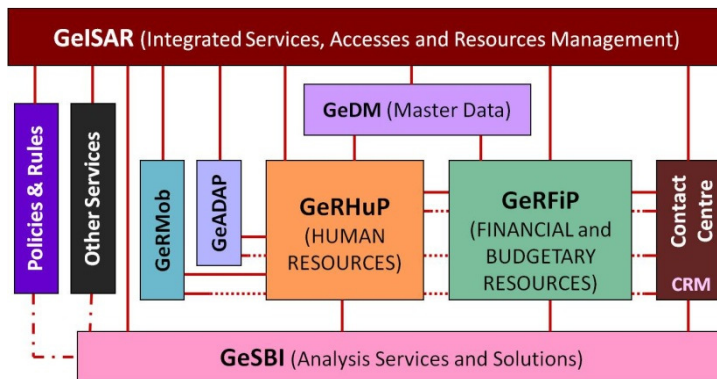


Figure 2 - High-level view of GeRALL components architecture

The GeISAR solution shown in figure 2 is a portal that integrates the six main components of GeRALL as well as some further services that will be considered and the contact centre, a customer relationship application that allows a better knowledge of the user needs. There is also a module concerning policies and rules through which some dynamic parameterizations may be enforced.

GeRALL solutions were designed and integrated according to the service oriented architecture presented in Figure 3, which also includes some middleware pieces.

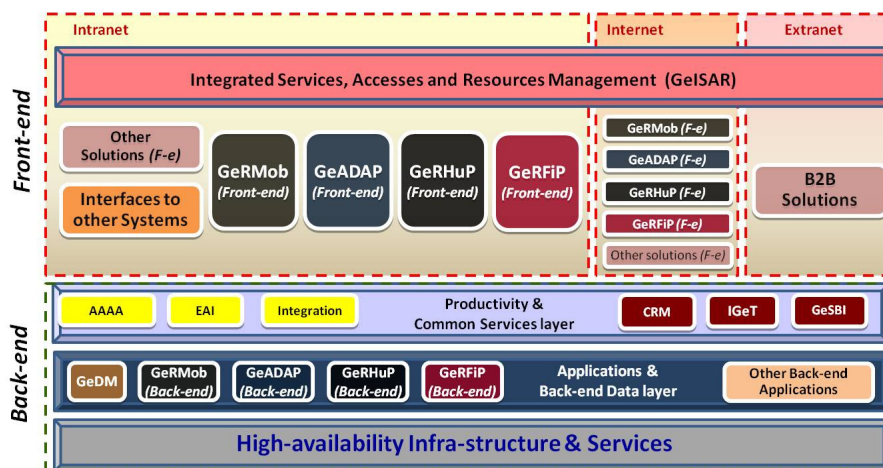


Figure 3 - GeRALL SOA architecture

In general terms, the back-end applications block holds data and technical rules related with budgetary, financial or human resource management. Front-end applications encompass the public entities structure and requirements through business processes. The mapping between the front-end business processes activities and the back-end technical rules is achieved by means of an enterprise application integration solution. Further the benefits of splitting the implementation of technical financial and human resources rules from business structure and requirements that are related with each

public entity, the choice of this SOA architecture also diminishes times and costs of maintenance, allowing changes in back-end components with none or minor impact in the front-end ones, and vice-versa. This is particularly interesting in this case because life-cycles of financial and human resources management applications are not in phase with the public entities organisation and structure. Furthermore and considering the high costs of ownership and rigidity of the ERP's, which are the basis of GeRFiP and GeRHuP back-end components, this SOA architecture solution not only makes the integration of different back-end solutions easier but also reduces the dependence of the solution from the ERP product helping for instance in the negotiation processes with software vendors.

The back-end block is composed by three layers. The bottom layer encapsulates the infrastructure services. Next year the services provided by this layer will benefit from the Portuguese Governmental Open Cloud (GO-Cloud) currently under development. The middle layer holds the already explained enterprise applications as well as the relevant data. The productivity and common services layer integrates both middleware and analytic solutions, including a customer relationship management (CRM) tool. The others are: (i) Common security tasks are carried out by the Authentication, Authorization, Accounting and Auditing (AAAA) solution; (ii) Enterprise Application Integration (EAI) integrates the enterprise back-end applications with the front-end business oriented components through web services; (iii) Integration component handles different formats and integrates different systems and subsystems such as accounting and payments; (iv) IGeT solution offers a set of pre-defined indicators for management and more public transparency purposes; (v) GeSBI is a very dynamic analytic solution that also offers to the users the possibility of performing their own developments. In the future GeSBI will perform cross analysis of both GeRFiP and GeRHuP data..

The front-end is split into three types of channels: Intranet, internet and extranet. Due to both security and technical reasons the internet channel offers a subset of the functionalities available through the intranet, according to a pre-defined create, read, update and delete (CRUD) matrix defined for each application. This allows the prevention of certain type of threats like those concerned with accesses made from less secure devices or networks. Extranets are now under construction in order to establish more direct and efficient channels to relate with suppliers. The availability of the online current account state as well as the implementation of just-in-time supply politics are two of the functionalities offered by the extranets.

Business Model

Both GeRFiP and GeRHuP solutions implement service design patterns through web services and business process modelling and are made available to the Portuguese public administration in two ways: Shared services (SS) and shared platform (SP). In both solutions GeRAP provides and manages the platforms. The difference between them is that in the shared platform the public entities are responsible for using it in a self-sufficient manner, whereas in the shared services GeRAP will also provide financial and human resource management services. For those public entities that

don't use GeRFiP yet, a shared data (SD) interface is provided in order to get the required financial data for consolidation. This model is shown in Figure 4.

The SP model applies to the entirety of the portfolio shared solutions. SS and SD models apply to GeRHuP and GeRFiP solutions. As previously explained, the shared data model is mainly used to get data for consolidation. SD is also valid to import or export data to other systems.

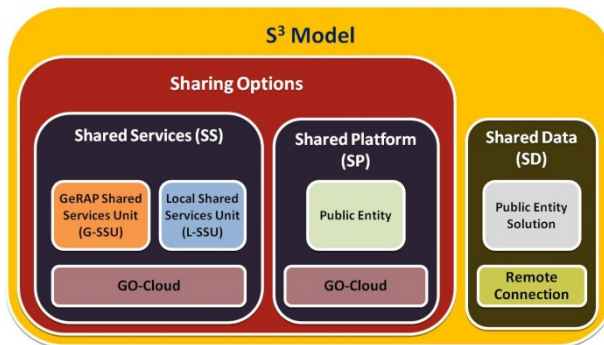


Figure 4 – S³ sharing model

This model was designed to offer flexible ways for public entities to adopt GeRFiP and GeRHuP solutions since in the public sector it is not suitable the employment of similar methods to those used by the private one due to: (i) the dimension of the Portuguese central public administration. In such a big environment it is not possible to expect an outcome of the type one solution fits all; (ii) due to the type of contractual relationship between employees and the public administration there is no possibility to dismiss people. Therefore a solution that is able to preserve human resources work and allows flexible and time related adjustments is crucial for both managers and the overall acceptance of shared services paradigm; and (iii) the management autonomy of the public entities allowed the creation and development of different solutions. Around these solutions there are persons, providers and different kinds of relationships that need to be redesigned or suppressed.

Thus GeRFiP and GeRHuP solutions were designed to allow public entities to reuse in a flexible way their human resources according to their own skills and needs, being possible for any public entity to move from a SP solution to a SS throughout the time.

Another flexible aspect considered by this model concerns the entity that provides shared services. They may be provided directly by the GeRAP Shared Services Unit (G-SSU) or through a local provider, the Local – Shared Services Unit (L-SSU), whenever justified (e.g., the case of a ministry or an organizations holding multiple companies that have sufficient internal competences). If the shared services are locally provided the local shared services unit must sign a franchising contract with GeRAP in order to assure the required alignment and compliance.

Model Conception

Settling the focus on the research aim: developing a performance analysis model for Portuguese public shared services implementation according to GeRAP business

evolution; the research main question is about: *“How to continuously achieve an efficient and effective shared services implementation?”*.

This continuous performance analysis implies a journey which drives to a more favourable future acting according present strengths and weaknesses, hence, the analysis model should reflect the most important challenges the SSC faces. Therefore, instead of choosing a single model, from the available standard models, to support this analysis which involves a complex reality, we decided to build a suitable model taking into account the main issues that SSC implementation faces and combining the appropriated available models to fit each dimension.

The case study research methodology proposed by Yin, was considered suitable in order to support studying a phenomenon in its real context. Following Yin’s insight allows us to apply the use case methodology as a quantitative research pursuing a positivist approach **Erro! A origem da referência não foi encontrada.** related to scientific method. Aware that scientific generalization it is not possible, the objective focuses on generalizing to theoretical propositions and not to populations or universes.

The model was built after identify the propositions which concern the main issues to assure shared services implementation efficiency and effectiveness:

Innovation and continuous adaptation to environment requirements. Design criteria: external alignment. When market behavior changes or a disruptive innovation emerges and redefines the basis of competition, previous strategies become worthless. “The concept is simple but powerful: individuals best adapted to their environments are more likely to survive” **Erro! A origem da referência não foi encontrada.** Internal alignment between business strategy, business implementation, and ICT in order to promote coordination and integration among different decisional organizational levels. Design criteria: Business-ICT alignment. The overall organizational performance depends not only on each component capacity but also on the way they work together as a team. As a matter of fact the role of each component is to contribute to the success of the system instead of maximizing its own outcomes. The apostle St. Paul had already understood what the system concept means (Corinthians12:14-21). Thus, the secret is to promote the cooperation between components towards the aim of the organization.

Network of autonomous and specialized (focused) business unities interconnected by loosely coupled contractual arrangements (e.g. partnership, outsourcing and other external agreements). Design criteria: scalability. Nowadays, the organizations should be focused on his core business activities, be flexible in the relationships with external entities which accomplish the remaining activities non-core, and be agile in order to be competitive and assure a sudden adjustment to internal and external demand. Therefore the enterprise should be like a molecular structure, where a three-dimensional arrangement of the atoms (business unities) that constitute a molecule (organization) determines several properties about the business execution. Like in nature, an atom is aggregated to a molecula in a particular time, but the environment changing could lead to molecula desintegration and then another molecula composition takes place. Progressive shared services implementation in diversity and widespread among government agencies will require a flexible structure to allow service delivering without disruption.

Reaching economies of scale assuring quality levels of service as agreed. Design criteria: quality/price relation. Unlike the private sector, the public sector has neither an external market nor internal mechanisms informed by a pricing system which can send appropriate signals to decisionmakers about user demands and choice. However efficiency and quality in the public sector are not only basic requirements for overall economic competitiveness but are also policy objectives in their own right **Erro! A origem da referência não foi encontrada..**

According the propositions suggested by Yin **Erro! A origem da referência não foi encontrada.** and design criteria presented in the engineering process **Erro! A origem da referência não foi encontrada.** it is important, before model construction, to prepare preliminary designs before model construction which include models and frameworks research and evaluation. Therefore a Shared Services Analysis Model (SSAM) was developed to manage and enhance the shared services initiative. The main goal is to evaluate in an efficient and effective way “the direction and scope of an organization over the long-term, which achieves advantage for the organization through its configuration of resources within a changing environment to the needs of markets and fulfil stakeholder expectations” **Erro! A origem da referência não foi encontrada..**

The SSAM model will evaluate the shared services scope and performance throughout the time according to the following two perspectives: (i) corporate-level (see 0), concerned with the overall purpose and scope of delivered products and services and business unit strategy, concerned primarily with how to compete within global market, dealing with issues such as industry analysis, market positioning and value creation for customers; and (ii) operational strategy (see **Erro! A origem da referência não foi encontrada.**), concerned with the way each part of the business is organised in order to deliver the corporate and business-unit level strategic directives, and deals with how to implement the business unit strategy with regards to resources, processes and people **Erro! A origem da referência não foi encontrada..** In each layer four analysis vectors are identified by a matrix that crosses two perspectives: (i) the organisational focus: efficiency and effectiveness; and (ii) the target orientation: internal and external. The four main analysis vectors of each layer, also referred as pillars, are centrally controlled by each layer and vertically linked (see also 0).

Corporate and Business Unit Strategy Layer

At the corporate and business layer the framework presents four pillars resulting from crossing organizational efficiency and effectiveness with internal and external orientation (see 0).

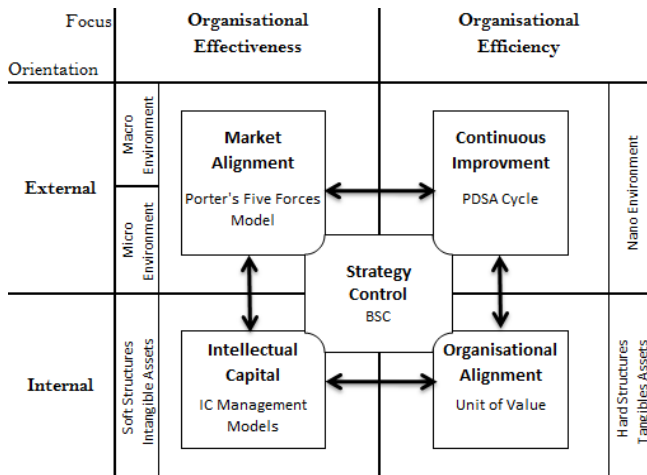


Figure 1. Corporate and Business Unit Strategy Layer

The market alignment contributes to the disruptive innovation process and involves the competitive factors resulting from the analysis of macro and micro environment behaviour by employing the Porter's Five Forces Model. Three main issues will be reached at this stage: (i) enterprise positioning identification; (ii) value creation proposal; and (iii) strategy analysis and formulation.

The continuous improvement focuses on increasing customer satisfaction through incremental improvements of processes and products by removing unnecessary activities and variations. Deming argues that in the continuous improvement only the method is important to reach performance goals, therefore the Plan-Do-Study-Act (PDSA also known as PDCA (Plan-Do-Check-Act)) cycle is proposed as the tool to analyse and define the continuous improvement process. Product and processes improvement process, rules and internal normative and templates creation process are examples of issues covered by this pillar. The rules, standards and templates creation allow the inclusion of best practices and organizational wisdom and drives to a higher organizational level of maturity as a reaction of the Deming's chain activation.

The organisational alignment pillar is focused on internal efficiency, concerning tangible assets that compose the organizational hard structure. The organizational alignment is reached by re-bundling a set of partial defined strategies driven by an unbundling and focused process, based on the unit of value model. The concept of 'unbundling the corporation' is very similar to the deconstruction approach, which rethinks the traditional organization and unbundles its core businesses as a result of falling transaction costs made possible by the emergency of the new technologies. The 'unbundling' concept recognizes that a corporation consists of three core businesses: (i) customer relationship management; (ii) product innovation; and (iii) infrastructure management. These business areas are sustained inside the enterprise besides the conflicts concerning economic, cultural and competitive imperatives. Actually, firms need to make trade-offs to integrate and optimize simultaneously scope, speed and scale of each area to the detriment of the

best performance and specialization of each one. The specialization is a way to avoid the need of making trade-offs between business areas wasting resources and competencies. For that reason the organization needs to evaluate its critical success factors **Erro! A origem da referência não foi encontrada.** to establish its main competencies and focus on them, relying remain ones on specialized partners. The aim is to build an integrated growth strategy: (i) organic growth; (ii) leverage growth; and (iii) mergers and acquisitions, depending on the competencies and flexibility required **Erro! A origem da referência não foi encontrada..**

The intellectual capital, also known as intangibles assets or soft structure, refers to soft skills needed to be developed and deployed by organisation employees to reach organization goals. This pillar is responsible for defining the management strategy of intangible assets: (i) relational capital, the relations with external subjects such as suppliers, partners, clients, government agencies, politic power and research centres; (ii) human capital, useful knowledge of a company employees, partners and customers with more emphasis on the employees knowledge and competences; and (iii) organisational capital, collective know-how, beyond the capabilities of individual employees, e.g. information systems, policies, leadership and intellectual property **Erro! A origem da referência não foi encontrada..**

These four pillars represent different perspectives to analyse the corporation and business unit strategy layer, resulting in several key performance indicators (KPI's). The balanced scorecard is the tool that will ensure the strategy control and alignment between both layers: strategy definition and strategy implementation [14].

Operational Strategy Layer

The operational strategy layer is responsible for the implementation of the defined strategy. As previously enounced, at this layer we can also find four pillars: two of them, with external orientation (functional alignment and quality control) related with the strategy implementation; and the other two (intelligent capital management and business-ICT alignment) related with strategy support, with an internal perspective (see **Erro! A origem da referência não foi encontrada.**).

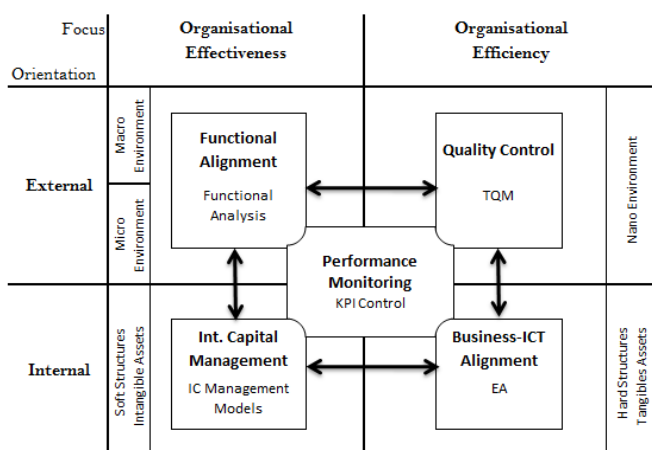


Figure 2. Operational Strategy Layer

The functional alignment is focused on effectiveness and is oriented to external requirements. This pillar describes the way the enterprise organizes itself by creating expertise areas in specific knowledge domains, performing the activities required to accomplish stakeholders' needs according to the defined strategy. These knowledge areas, known as enterprise functions, aggregate a set of several competencies. The functional analysis is responsible for specifying the competencies to develop as well as the employees profile and foresees the relating amount of resources needed to support the organisation activity level.

The quality control represents a procedure or set of procedures intended to ensure that organisation outputs (products or services) adhere to a defined set of quality criteria or meets the clients or customer requirements. This aim matches the proposal of Total Quality Management (TQM) approach, which assures that customers will get what they want right first time, each time and every time **Erro! A origem da referência não foi encontrada..** TQM is about applying Total Quality concepts to all aspects of management (e.g. marketing, design, research, production/operations, finance, human resources and administration) and satisfying the needs and priorities of customers. TQM implementation activates Deming's chain reaction, assuring the business success through the quality improvement that brings more efficiency and allows capturing the market through better quality and lower prices **Erro! A origem da referência não foi encontrada..**

What is missing in most organizations is a mechanism that can align or “bridge the gap” between the concerns of corporate strategists and IT project managers strategies in a systematic way in order to assure that IT efforts support company goals **Erro! A origem da referência não foi encontrada..** The Business-ICT alignment pillar addresses this issue. The enterprise architecture is a way to link these two different realities and make business optimization and coordination possible. The aim is to achieve the capability of adapting ICT to the business needs and to configure business according to the potentialities offered by the technological evolutions, incorporating added-value to business. Accordingly the added-value is not only related with the ICT selection but mainly with the ICT deployment in the business context. Thus alignment is also about business transformation in order to reach the best process design and take advantage of technologies potentialities.

The intellectual capital management pillar deals with the implementation of intellectual capital strategies. This is an intangible subject nevertheless it is important the employees' awareness around it. The management commitment with these issues is very important to their success too. Factors such fairness and treatment uniformity are key factors to reach the right motivation, where leadership performs the most important role. “What we need is cooperation and transformation to a new style of management. The economists argue that competition will solve our problems. Actually, competition, we see now is destructive. It would be better if everyone would work together as a system, with the aim for everybody to win.” **Erro! A origem da referência não foi encontrada..** A system is a network of interdependent components that work together to try to accomplish the aim of the system. Then the management of a system requires knowledge of both the interrelationships between all components within the system and the people that work in it. The secret is to promote the cooperation between

components towards the aim of the organization. If the components are left to themselves, they become selfish, competitive, independent profit centres, and thus they destroy the system.

The feedback about the strategy implementation is responsibility of the performance monitoring component that controls KPI's values and shares the evolution analysis with the corporate and business strategy layer, which is in charge of the strategy definition.

Relational Approach

As depicted in 0, a SSAM Model overview, it is possible to identify main activities, which represent grouped layers pillars, inside dotted line boxes, representing each layer. On the left side, we found the activities which group layer pillars with external focus whereas at right side are exhibit the activities centred in internal issues.

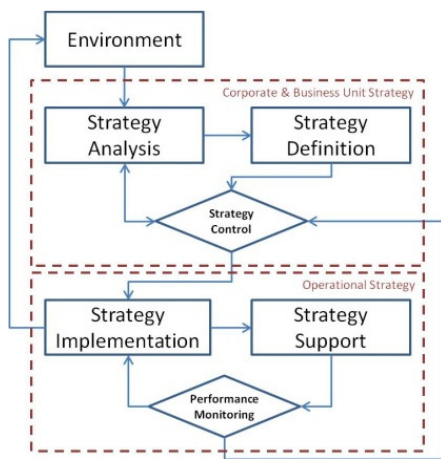


Figure 3. Shared Services Analysis Model (SSAM)

As referred before, the main goal of the corporate and business unit strategy layer is to accomplish the strategy definition having as background the environment behaviour addressed by the strategy analysis. On the other hand, the operational strategy layer is mainly focused on the strategy implementation to reach both market needs and company strategic guidelines. The connexion between both layers is performed by a central node related to performance strategy and control. The strategy control is defined at the corporate and business unit strategy layer and the performance monitoring takes place at the operational strategy layer. Whilst the strategy control influence the strategy implementation, the performance monitoring control the real activity and provide this information to the strategy definition layer through the strategy control.

The framework is presented following a top-down approach with some preoccupation in showing the interdependences between some elements. Nevertheless, we should think of it as a web in which each pillar from each layer is connected to the other. The goal of this model representation is to make easier to bridge the tension between the breadth and the depth of analysis.

Corporate and Business Strategy Layer Pillars fits BSC Perspectives

Kaplan and Norton [17] have introduced the balanced scorecard at the enterprise level. Their basic idea is that the evaluation of an organization should not be restricted to a traditional financial evaluation but should be complemented with performance indicators concerning customer satisfaction, internal processes and the ability to innovate. These additional measures, focused on different business dimension, should assure future financial results and drive the organization towards its strategic goals while keeping all four perspectives in balance. Hence, in order to connect the measures to strategic goals, Kaplan and Norton propose analyse each perspective following a three-layered structure: mission, objectives and measures or KPI's.

To put the BSC to work, organizations should translate each of the perspectives into corresponding KPI's which allow assess the current situation. These assessments have to be repeated periodically and have to be confronted with the goals set beforehand. Therefore, the balanced scorecard provides a framework that includes a set of predefined perspectives to measure and manage performance of an organization. Besides, the BSC conception also includes the identification of causal relationships between the identified objectives and therefore between the KPI's. This feature enables a pro-active performance management approach. In essence, the balanced scorecard covers all business dimensions and its relationships which enable to drive performance rather than reacting to it.

However, the standard BSC perspectives do not reflect entirely the challenging issues of a shared resources organization. The financial, customers, internal processes and growth & learn perspectives of the BSC are much too broad to fulfil its needs. However, as argued before, the corporate and business strategy layer introduces the main pillars to assess a shared resources organization. Thus, considering the four pillars presented in the corporate and business layer model as the main issues which drives the company over a performance journey, we propose to consider a revised BSC framework (see figure 4.), which presents the layer pillars as BSC perspectives in order to fit a shared resource center's needs.

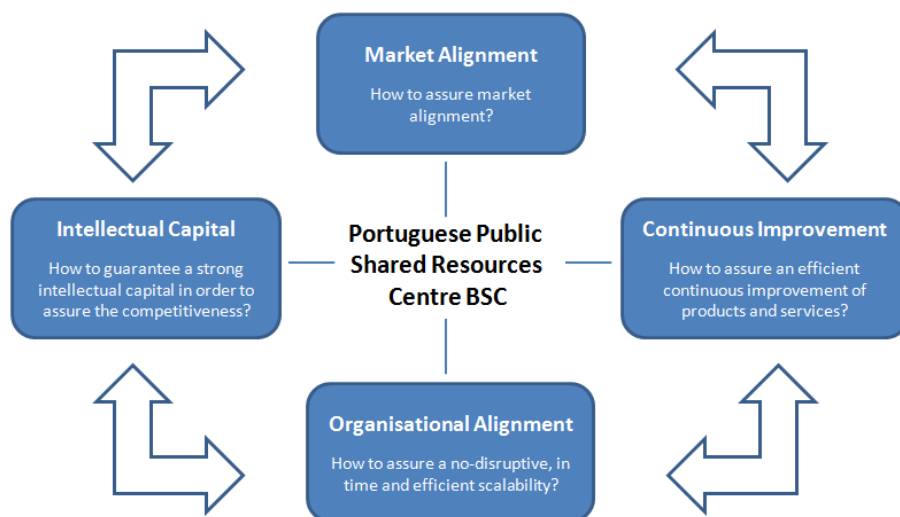


Figure 4. Revised BSC

Conclusions and Future Work

The proposed management model aims to be a foundation to support the development of the shared services performance model.

Our future research includes establishing the performance management model through the application of the management model to Portuguese shared services initiative in an AS-IS context. This step allows us to assess management model capabilities and limitations, and provide a way to promote its improvement. Once the shared services KPI are acquired a decision support system will be developed and shared with other public entities for their own exploitation.

References

Portuguese Council of Ministers. "Programa de Reestruturação da Administração Central do Estado", Mars 2006. See [http://www.planotecnologico.pt/document/Modelo PRACE MAR06.pdf](http://www.planotecnologico.pt/document/Modelo_PRACE_MAR06.pdf)

Portuguese Government. "D.-L. 25/2007", 7th of February 2007. See [http://www.dgap.gov.pt/upload/Legis/2007 dl 25 07 02.pdf](http://www.dgap.gov.pt/upload/Legis/2007_dl_25_07_02.pdf)

Marijn Janssen, Anton Joha. "Connecting Cloud Infrastructures with Shared Services". Proceedings of the 11th Annual International Digital Government Research Conference on Public Administration Online: Challenges and Opportunities, Pueblo, Mexico. 2010.

Dave Ulrich. "Shared Services: from vogue to value" *in* Human Resource Planning. September, 1995.

Marijn Janssen, Anton Joha. "Motives for establishing shared service centers in public administrations" *in* International Journal of Information Management 26, pp. 102-115. 2006.

Mechling Jerry, Schwarz Gary. "Shared Service Center". RAR-103, Harvard University. January, 2007.

René W. Wagenaar. "Governance of Shared Service Centers in Public Administration: Dilemma's and Trade-offs". ICEC '06 Proceedings of the 8th International Conference on Electronic Commerce. 2006.

Michael E. Porter. "Competitive Strategy: Techniques for Analyzing Industries and Competitors", New York Free Press. 1980.

Michael E. Porter. "The Five Competitive Forces That Shape Strategy" *in* Harvard Business Review. January, 2008.

W. Edwards Deming. "The new economics". MIT Press edition, Second Edition. 2000.

Luisa Domingues. "Modelo Integrado de Análise do Negócio Electrónico". ISCTE – INDEG. 2004.

R. Coaser. "The Nature of Firm" *in* *Economia* pp. 386-405. 4th of November 1937.

John Hagel III. "Out Of the Box – Strategies for Achieving Profits Today and Growth Tomorrow through Web Services". Harvard Business Scholl Press. Boston, Massachusetts. September, 2002.

D. Ronald Daniel. "Management Information Crisis" *in* Harvard Business Review. September -October, 1961.

John Hagel III. "Out Of the Box – Strategies for Achieving Profits Today and Growth Tomorrow through Web Services". Harvard Business Scholl Press. Boston, Massachusetts. September, 2002.

Patrick H. Sullivan. "Value-driven Intellectual Capital". Wiley. 2000.

Robert S. Kaplan, David P. Norton. "The Balanced Scorecard - Measures that Drive Performance" *in* Harvard Business Review. February, 1992.

W. Edwards Deming. "The new economics". MIT Press edition, Second Edition. 2000.

Samuel K Ho. "TQM, an integrated approach implementing Total Quality through Japanese 5-S and ISO 9000". Kogan Page. 1995.

Richard D. Buchanan, Richard Mark Soley. "Aligning Enterprise Architecture and IT Investments with Corporate Goals". OMG's Model Driven Architecture. 2002. See <http://www.omg.org/mda>

Gerry Johnson, Kevan Scholes. "Exploring Corporate Strategy". Prentice Hall, 5th Edition. 1998.

Tawfik Jelassi, Albrecht Enders. "Strategies for e-business – creating value through electronic and mobile commerce". Prentice Hall. 2005.