Applying the Viable System Model to an Organization with CSR Goals: The Case of a Charity Organization

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Abstract

Designing and adapting organizations to secure viability and increase performance is a challenge. Research models often fail to integrate corporate social responsibility (CSR) aspects in the concept development and its implementation. Therefore, the aim of this study is to propose a holistic approach how organizations can be designed, changed and managed considering its implications to service management under a CSR approach. Hereby the Viable System Model was applied. Its structure can be applied to any kind of structured organization and for its management with goals to be achieved in modern society; however focus of the research is the cluster of charity organizations. Goal of the developed model is to be able to react to all potential organizational environments by taking decisions correctly and in the right moment based on the needed information reducing service lead times and manpower allocation as well as increasing the service level. To ensure this, service management tasks were assigned and standardized communication channels were defined. In conclusion this proposed approach empowers organizations to have internal mechanisms to secure viability by pursuing the goal of a high performance CSR approach.

Keywords: Cybernetics, Viable System Model, Service management, Organizational Model, Corporate Social Responsibility, Charity Organization

1. Introduction

Developing organizations capable to deal with the present and future competitiveness needs is a challenge (Schuh & Stich, 2013, p. 2). In addition the complexity of relationships and processes is growing (Placzek, 2007, p. 2). As a result many companies lose competitiveness due to a slow adaptation to their environment. Moreover across all sectors, organizations are in an environment with increasing competitive pressure (Schuh et al., 2011, p. 843). The main factors that favor this situation are the increasing globalization and the resulting competition situation that causes an intense reduction of product life cycles as well as a growing individualization of the final products according to specific customer criteria (Abele & Reinhart, 2011, p. 1). This evolution is combined with the demands of customers who want to be served with shorter delivery

times (Tu & Dean, 2011, p.1). Therefore the capability to deal with changing customer requirements, demand volatility and new product launches is acquiring more and more importance for winning competitive advantage (Capgemini, 2010, p. 5). Service industries play an increasingly important role in our overall economy (Kellogg & Nie, 1995, p. 323). In this context there is a need for service management research in order to give methodological answers to the growing service sector (Roth & Menor, 2003, p. 145). However an integrative high performance CSR approach in non-profit organizations is uncovered in practice (Forbes, 2011) and is key for securing viability. To make it possible, information flows, as interconnection element in organizations, are a key element. Information is needed for policy definition, decision-making, planning, control, coordination, etc. Problems with information flows lead to negativ impact in any organization.

Corporate Social Responsibility is a concept that has attracted worldwide attention and has acquired a new resonance in the global economy. The increasing interest in CSR in recent years is due to globalization and international trade influencing business complexity and creating new demands for greater transparency and corporate citizenship (Suárez Serrano, 2016, p. 4). The CSR concept has been developed over the years by expanding its scope of research compared to historical information, and has been a subject of continuous public debate. Currently, CSR has become an area of scientific research carried out not only by psychologists, philosophers, sociologists and economists, but also by business administration specialists. Most of the research works related to the concept provide an analysis of the idea from various points of view (Elijido-Ten at. al., 2010, p. 1037).

Researchers often fail to integrate Corporate Social Responsibility (CSR) aspects in the organisational concept development and its implementation. Many approaches have been studied in order to solve the problem of organizational alignment with the environment in service companies. However most of them have failed due to several reasons, such as lack of information, coordination or control that leads to take strategic decisions neither at an optimal point in time nor in an optimal way. Therefore the main research objective is to make companies more flexible, so that the company can face any kind of environment because its internal structure and communication enables a fast decision-making to align the company with market conditions. The paper will be based on the Viable System Model (VSM). By applying the Viable System Model, the organization is transformed into an autonomous system capable of adapting to constant environment changes (Beer, 1959, p. 17).

As a sub-type of a service organization we can find the set of non-for-profit organizations, and within those, the charities, defined by five characteristics: formal organisations, private understood as separated from government, not designed for distributing profit, self-governing and voluntary (Nasir et al, 2012, p. 19). Knowing that this type of organization doesn´t include making money as a primary goal, performance monitoring and efficiency are essential to improve its impact on social and economic development of society (Nasir et al, 2012, p. 19-20). In this regard a new concept is needed in practice and therefore this research pursues to fulfill the goal for coordinating the non-profit characteristic with the efficiency needed also for this type of organization to secure its viability and increase its impact.

The research work will help to develop a model supporting the following main hypotheses:

Thanks to a new conceptual model for service management taking into account the added value to the end-customer the viability of an organization can be assured.

The Viable System Model provides the necessary structure to determine the interrelationships between areas and parameters that allow them to make continuous improvement possible.

The CSR goals help a charity organization to increase its value-added and also to improve its image. Both are key for securing viability of the organization.

In the faculty of economics of the Rey Juan Carlos University in collaboration with the research area of productive systems of the department of Construction and Fabrication Engineering at the National Distance Education University (UNED) an approach has been developed to solve the problem of service organization with the help of the Viable System Model. The aim of the research is to propose a self-regulating approach how to design service organizations such as charities fulfilling the goals of Corporate Social Responsibility (CSR) including the economic responsibility by maximizing the efficiency of any service organization.

2. Methodological approach and literature review

In this project the objective is the development of an organizational and service management model based on the CSR concept using the Viable System Model (VSM). The methodology used to reach this goal was the following:

Definition of methodological approach.

Literature review for:

The Viable System Model

Service management tasks

CSR concept

Charity Organization

Conceptual model development:

Development of a target system for an organization and for a service system

Service management tasks according to planning horizon levels

Definition of recursion levels within a service organization

Service management tasks and their classification to the VSM systems

Identification of the needed information flows between organization and service recursion levels and within the service management level

Applying the model for charity organizations

After having described the methodology, the VSM as a reference model is compared with other approaches. As described in the literature the VSM is an unmatched conceptual and methodological tool for the modeling and design of organizations and its areas with the goal of being viable (Schwaninger et al., 2008, p. 16). Due to this fact and its alignment with the aim of the research the Viable System Model is applied. Applying the VSM means to implement the organizational structure of any viable or autonomous system in a service organization.

To validate the research methodology, research and practical applications were searched. Many authors have used the VSM as basis to describe and develop models how to deal with complex social and industrial challenges. Some of the topics worked are:

Herold (1991) developed a concept for the organization of a company based on the VSM. In this approach, the general structure of the company is analyzed first by means of a questionnaire (Herold C., 1991, pp. 74-76).

Erbsen (2012) created a concept for optimizing patient care in disease-oriented centers in university hospitals (Erbsen, 2012).

Groten (2017) studied how to design integrated distribution networks based on the Viable System Model and compared it versus classical distribution planning concepts by means of simulation (Groten, 2017).

Gallego et al. (2018) designed a concept for designing manufacturing organizations following lean management principles (Gallego et al., 2018) and for coordinating production and maintenance management in manufacturing companies (Gallego & García, 2018).

3. Basics of the Viable System Model, service management, CSR principles and of charities

The Viable System Model (VSM)

The Viable System Model (VSM) is a cybernetic management model developed by Stafford Beer (Espejo & Harnden, 1989, p. 57). Beer deduced the VSM from the central nervous system of the human being and from the science of cybernetics with the goal to deal with complex systems (Schuh et al., 2011, p. 434). As a consequence the minimum requirements that a system must meet to ensure its viability are derived when analyzing the central nervous system (Beer, 1972, p.198).

The VSM is built on three main principles: viability, recursivity and autonomy. Viability is a property of every system that is able to react to internal and external perturbations in order to maintain separate existence (Schuh et al., 2011, p. 434). The principle of recursion states that every system has the same structure regardless of which recursion level it is (Malik 2006, p. 275). The principle of relative autonomy describes the degree of freedom in the behavior of a recursion level. In this context, autonomy means that a system can act independently as long as it is coordinated with the rules of its management

system (Gomez, 1978, p. 148). The cybernetic model of every viable system consist always in a structure with five necessary and sufficient subsystems that are in relation in any organism or organization that is able to conserve its identity with independency of its environment (Espejo & Harnden, 1989, pp. 21-22).

Systems 1, 2 and 3 regulate internal stability and try to optimize performance within a given structure and criteria (Beer, 1972, p. 230). System 3 is the coordination center of all internal areas of the company condering the goals for the whole company since systems 1 and 2 can only compare deviations locally (Malik, 2006, pp. 131-132).

System 4 is the strategic system that makes strategic analysis of the external environment and the internal capacity to deal with it and, based on it, takes the necessary strategic decisions (Brecher et al., 2011, p. 435). System 5 represents the normative level that makes the balance between current operations (System 3) against future´s needs (System 4). When there is no balance, System 5 plays the role of judge (Espejo & Harnden, 1989, p. 293). It defines the rules that determine how the global system behaves. It is continuously designing the future of the system through the elaboration and choice of behavioral alternatives. Here the company policy is created, through a close interaction between the management systems, 3, 4 and 5 (Malik, 2006, p. 91). System 5 is the top management and it determines policies and establishes the goals to take decisions (Beer, 1972, p. 253).

Organizational functions and service management tasks

Organizational functions as described from Porter can be divided into primary and support functions, which are activities that described the value chain of an organizarion that are related to its competitive strength. Primary activities are directly concerned with the creation or delivery of a product or service. They can be grouped into five main areas: inbound logistics, operations, outbound logistics, marketing and sales, and service. Primary activities are linked to support activities which help to improve their effectiveness or efficiency. There are four main support activities: procurement, technology development (including R&D), human resource management, and infrastructure (IT systems for planning, finance, quality, information management etc.) (Porter, 1985).

Services can be defined as the ability and willingness of the provider in the form of a performance promise. However, this promise can only be realized by the demand of a customer. This also underlines the nature of services, since the sale of the service happens after the actual creation of the need for the service. A process-oriented perspective defines services as the combination of the provider's performance potential and the external factor introduced by the customer. The external factor can be the customer himself, people, objects or information provided by the customer as well as a combination of these. The realization of the service, which is in the foreground of the process orientation, includes the simultaneous activities of the supplier-side provision and customer-side use (Schuh et al., 2016, p. 6). In an organization the level of service-orientation varies acording to a transformation line. As it can be seen in the Figure 1 the transformation line reflects the service scope of a company. The degree of service orientation, the contribution of services to revenue and profits as well as customer loyalty increase with the course of the transformation line (Schuh et al., 2016, p. 44).
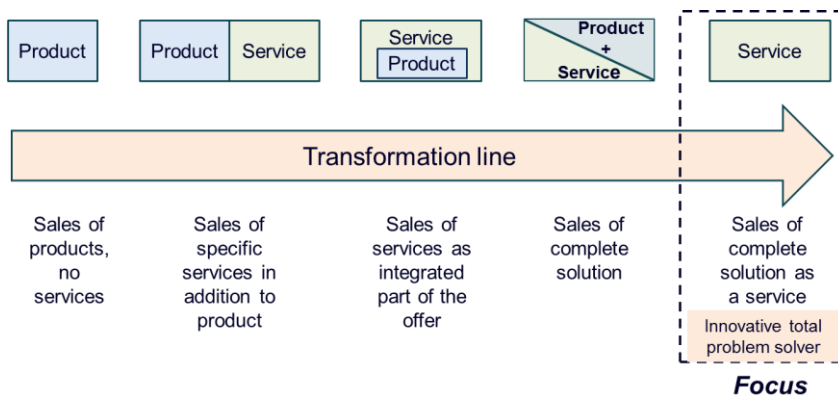

Figure 1: Service orientation and the transformation line (own elaboration based on Hildenbrand (2006) & Schuh et al., 2016, p. 12)

The strategic perspective of service management pursues the goal of differentiate the services of the organization to build customer loyalty and as a consequence generate more profits (Schuh et al., 2016, p. 12). A basic structure for business

models including services consists of the service offer and market addressing model, the service creation model and the revenue model (Schuh et al., 2016, p. 69). The processes of a service organization include the active and supporting value creation activities in the form of business processes and support processes as well as the necessary management processes. The coordination of these different process levels creates an important prerequisite for entrepreneurial success (Rüegg-Stürm, 2003). Moreover, the processes have a time characteristic depending on their horizon of influence. The tasks are assigned according to their temporal relevance at different planning levels. According to the St. Gallen management model, management levels are divided into normative, strategic and operational planning levels (Bleicher, 2004, p. 80). In the past, the main focus was on operational and tactical problems, however to successfully manage logistics in the future, an active strategic planning level is also required (Schuh & Stich, 2013, p. 1).
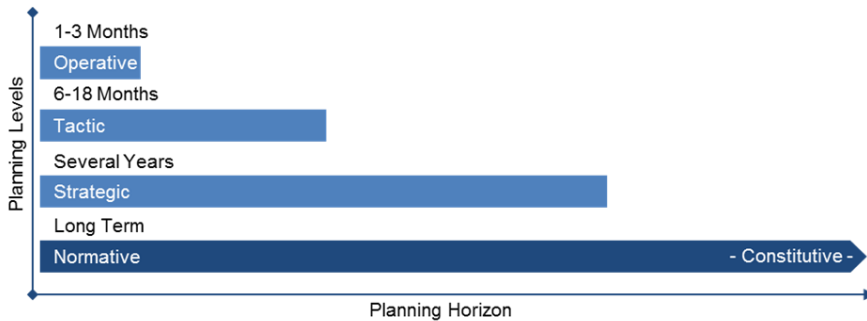

Figure 2: Planning levels and horizons in supply chain management (Bleicher, 2004, p.80).

Corporate Social Responsibility (CSR) concept

CSR term is defined as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" by the EU commission (EU Comission, 2011). Moreover it can be defined as, "the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life" (Heemskerk et. al., 2002).

Since 1958 the number of articles on CSR has remained stable over the decades, with an increase since the 1990s, due to efforts to resolve the debate both in practice and in academic research with respect to the relationship of corporate financial performance of the CSR, that is, whether the corporations benefited economically or not with participation in social activities (Jaramillo, 2007, p. 91). In addition, the evolution of CSR research has been classified into three types of studies: before the introduction of CSR, of the results after its introduction and of the CSR related processes such us decision-making, interpretation of groups of interests, etc. (Jaramillo, 2007, pp. 87-100).

Meanwhile, the evolution of CSR in other institutional contexts, especially in some emerging economies, is much less understood and deserves academic attention. For example, developments in an emerging economy may follow a path similar to that of the developed economies or differ significantly due to their institutional contexts. With an increasingly interconnected global economy, as well as with the globalization of social practices, CSR visions in different institutional contexts can converge or settle into different equilibria (Martínez, 2014, p. 17).

The dilemma is posed in the role of multinational companies, which increasingly deal with the problems of CSR simultaneously in multiple and diverse institutional environments. This suggests that, at a certain moment, a company may be exposed to multiple institutional logics associated with corporate social practices. A specific challenge faced by multinationals is the way in which they meet the expectations of their various stakeholders across national borders (Herrera et. al., 2013, pp. 55-56).

The utility of following the concept of CSR, not only by companies but also by the state, is the improvement in competitiveness that has been presented in numerous studies. In this sense, the main studies of international competitiveness show the important role of the CSR in the construction of the competitive advantage of the company in the region and the country. On the other hand, the need to increase the clarity of commercial activity, eliminate corruption and unethical behavior in business and the use of good practices has also been observed (Salamanca & Gutiérrez, 2018, p. 1539). The CSR concept and its application present the following facts:

Quantitative benefits: 67% of customers say they are more likely to buy products and services from a company if they know it supports good causes,up 11% from previous year (Forbes, 2011)

Qualitative benefit: CSR as new element of leadership is making a profound difference in business performance.

The question still remained, however, of reconciling the firm's economic orientation with its social orientation. A step in this direction was taken when a comprehensive definition of CSR was set forth. In this view, a four-part conceptualization of CSR included the idea that the corporation has not only economic and legal obligations, but ethical and discretionary (philanthropic) responsibilities as well (Carroll, 1979). The point here was that CSR, to be accepted as business person, it should be framed in such a way that the entire range of usiness responsibilities are embraced. It is suggested here that four kinds of social responsibilities constitute total CSR: economic, legal, ethical, and philanthropic. Furthermore, these four categories are shown in Figure 3. To be sure, all of these kinds of responsibilities have always existed to some extent, but it has only been in recent years that ethical and philanthropic functions have taken a significant place. Each of these four categories deserves closer consideration (Carroll, 1991, p. 42).
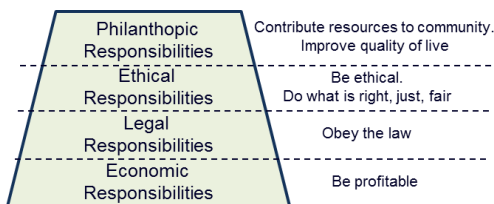

Philanthopic Responsibilities	Contribute resources to community. Improve quality of live
Ethical Responsibilities	Be ethical. Do what is right, just, fair
Legal Responsibilities	Obey the law
Economic Responsibilities	Be profitable

Figure 3: Categories of responsibilities of the CSR concept (Carroll, 1991, p. 42)

To conclude, to implement a CSR strategy in a company's culture and to make people understand the benefits of truly strategic CSR initiatives, senior managers are required to clearly and consistently express their commitment to the strategic initiatives that the organization chooses adopt (Hoque et al., 2014, p. 33). According to Carroll (1991) "Social responsibility can only become reality if more managers become moral instead of amoral or immoral" (Carroll, 1991, p. 42).

Non-for-profit and charity organizations

When referring to non-for-profit organizations (NFP), everything is covered and can refer to a non-profit organization (NPO) or a charity. Non-profit organizations can do virtually anything except operate for a profit motive. Non-profit organizations range from high profile groups, such as political parties, to small groups of a few people linked by a common interest or cause. They can include commercial groups, professional groups, social clubs and sports organizations (Neely, 2003, p. 3).

The National Council of Non-profit Organizations considers itself an authority in the US, in which, 46 of the 52 states have a centralized NFP partnership that provides accreditation and values best practices. In this regard, the National Council of Non-Profit Organizations affirms that the success of the NFP and also of the NPOs are the best practices of responsibility, transparency, prudent fiduciary supervision, legal, ethical and responsible fundraising (NCN, 2016).

Therefore, the success of the NFP means obtaining financing and then delivering the product / service, while only the latter will necessarily be measured in a company, since it would generate the benefit. In other words, an NFP would not be considered successful if it obtained financing but did not deliver the desired service, but a company would be considered successful if it generated income.

The United States of America concentrates one of the highest rates of charity per capita, both in the financial area, as in the personal time. "In 2015, Americans donated $ 373 billion in private charity. In addition, on an annual basis, 64.5 million adults in the US UU They offered a combined amount of 7.9 billion hours of service "(Lupton & Miller, 2016, p. 98). The charity is a type of institution or business that falls within the category of non-profit organization or NPO. This type of organization is often called a foundation or charity. It can be based on educational, religious activities or even activities of public interest. The law and regulation of the charity depend on the country or region where it has been established and operated. A charity is something that is given to an organization or an individual to help or benefit them (Gautier & Pache 2015, p. 346).

Some charities operate as private organizations and others are public. Private foundations obtain their funds through a family, corporation, individual or any financial source. They mainly use their donation funds to grant grants to people who need it or to organizations involved in charitable activities (Fomrbun & Shanley, 1990, p. 250).

On the other hand, public organizations obtain their grants from the state or central government, as well as from private individuals and organizations. Public organizations help in many activities. For example, public organizations in the US UU they are the American Cancer Society, the World Wide Fund for Nature and many other services. They usually seek contributions from the government. They can be hospitals, churches, institutes for medical research, etc. In our country, the panorama is similar (Fomrbun & Shanley, 1990, p. 250).

In the literature four main motivational categories are described by which companies join charitable projects or donate: maximization of strategic gains, altruistic motivation, political motivation and motivation of administrative utility. In fact, most of the combinations of these four motivations summarize the motives of the companies that carry out philanthropic actions (Campbell & Slack, 2007, pp. 333-334).

Non-profit or charitable organizations, whose primary activities have traditionally been based on the achievement of a social mission, are increasingly adopting practices that are often associated with business (Tuckman & Chang, 2006, p. 630). Since at least the 1980s, charities have generated a substantial part of their income from sales of goods and services, especially in the arts, education and health sectors (Child, 2010, p. 149). And they have experienced a growing shift towards hiring professional managers and adopting formal practices such as strategic planning, independent financial auditing and quantitative evaluation and performance measurement (Bromley & Meyer, 2014, p. 945).

4. Conceptual model development

Development of a target system for an organization and for a service system

The final goal of each organization is to be efficient to maximaze its key parameters. Every service organization is oriented to the management approach based on added value. The increase in the company value will be achieved mainly by increasing the performance of the company (Alexandre et al., 2004, pp. 126-127). The key indicator includes, therefore, the factors of turnover, capital employed and costs (Alexandre et al., 2004, pp. 126-127), which are decisive for the success of the company.These factors are included in the Return-on-Capital-Employed (ROCE) indicator. ROCE is a common feature in business practice and describes the return on a company's capital (see formula below) (Isermann, 2008, pp. 876-877):

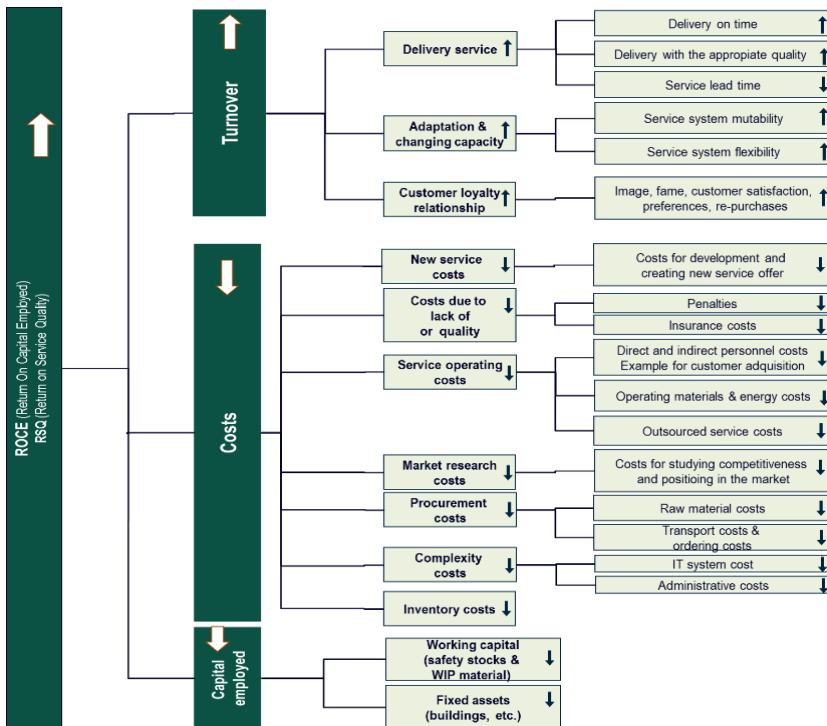ROCE = EBIT / (Capital-Employed) = (Volume of business-Costs) / (Capital employed)

Figure 4: Target system for an organization and for a service system (own elaboration based on Gallego (2018))

On the other hand a non-profit and charity organization is also oriented on added value to be as efficient as possible trying to execute its final goal of providing a service to the community. Moreover, it has to take into account the level of fullfilment of the needs of society and the level of efficiency in doing so.

Service management tasks according to planning horizon levels

As explained before, planning tasks can be classified into strategic, tactical and operational planning depending on the respective planning horizon. Therefore this classification was performed for the conceptual model based on the literature and derived for a production management model (Gallego & García, 2018):
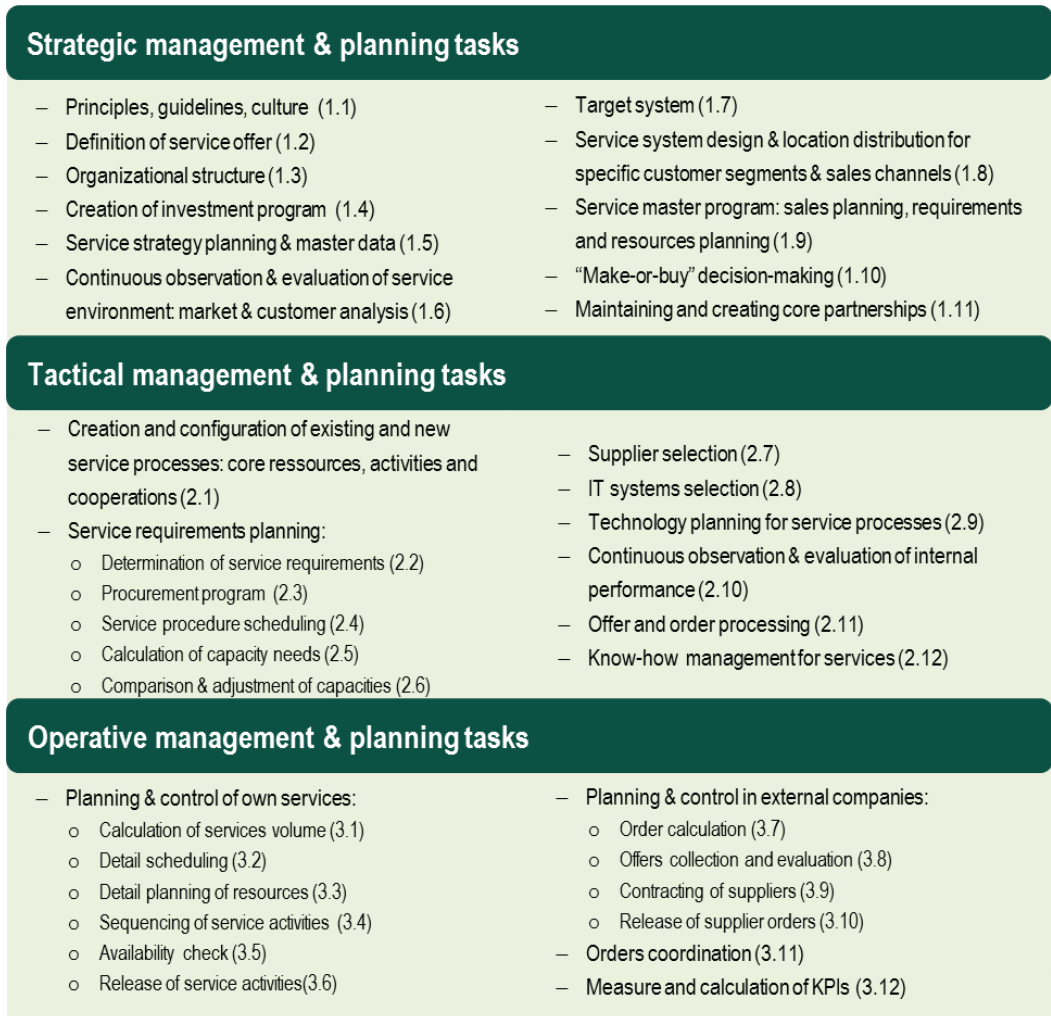
Strategic management & planning tasks

- Principles, guidelines, culture (1.1)
- Definition of service offer (1.2)
- Organizational structure (1.3)
- Creation of investment program (1.4)
- Service strategy planning & master data (1.5)
- Continuous observation & evaluation of service environment: market & customer analysis (1.6)
- Target system (1.7)
- Service system design & location distribution for specific customer segments & sales channels (1.8)
- Service master program: sales planning, requirements and resources planning (1.9)
- "Make-or-buy" decision-making (1.10)
- Maintaining and creating core partnerships (1.11)

Tactical management & planning tasks

- Creation and configuration of existing and new service processes: core ressources, activities and cooperations (2.1)
- Service requirements planning:
  o Determination of service requirements (2.2)
  o Procurement program (2.3)
  o Service procedure scheduling (2.4)
  o Calculation of capacity needs (2.5)
  o Comparison & adjustment of capacities (2.6)
- Supplier selection (2.7)
- IT systems selection (2.8)
- Technology planning for service processes (2.9)
- Continuous observation & evaluation of internal performance (2.10)
- Offer and order processing (2.11)
- Know-how management for services (2.12)

Operative management & planning tasks

- Planning & control of own services:
  o Calculation of services volume (3.1)
  o Detail scheduling (3.2)
  o Detail planning of resources (3.3)
  o Sequencing of service activities (3.4)
  o Availability check (3.5)
  o Release of service activities (3.6)
- Planning & control in external companies:
  o Order calculation (3.7)
  o Offers collection and evaluation (3.8)
  o Contracting of suppliers (3.9)
  o Release of supplier orders (3.10)
- Orders coordination (3.11)
- Measure and calculation of KPIs (3.12)

Figure 5: Service management tasks associated planning horizons (own elaboration based on Gallego (2018))

Definition of recursion levels within a service organization

A company is assumed as a viable system that is the first level of recursion in which the five systems necessary to ensure viability are found. Therefore, in the course of this research work can be differentiated four levels of recursion:

The highest level, the service organization (n-1)

The service recursion level (n). In the same recursion level it can be found finance, human resources, IT, research and development, etc.

The recursion level of the service unit, for example service units for disasters or for family issues (n + 1)

The recursion level of specific services such as treatment of divorce within a family, conflictive children, etc. (n + 2)

The systems 1 of the recursion level n + 2 are no longer viable systems in contrast to the higher recursion levels, because they do not contain a structure since they are the elements of the service execution. Within this first level of recursion of the service organization, the different functions of a company can be found, such as service management, commercial, finance, research and development, information systems, etc. In this research project, service tasks will be analyzed in detail, recursion level n, but also taking into account the function of system 2 at the company level, n-1, whose function is to coordinate the different functional areas of a company.

System 5 of the service organzation (n-1) defines its legal framework, politics, corporate policy and constitution, ethos and underlying values as well as its leadership philosophy. All of this information is transferred to all functional departments inside the organization including the service management system. Using these common normative values the company receives information from the environment that can be: market standards, legal regulations, new technologies, needs of society or information about competition. Based on these inputs the organization defines its strategy in system 4 of the organization level in continuous communication with system 3 to check if the strategy can be implemented and the internal consequences of its implementation on the stability of the company. System 2 at organization level plays the role of coordinator between the functional areas of the organization trying to solve conflicts between them. Moreover the systems 1 at organization level are all functional areas of every company such as service management.

At the recursion level of service management (n) it is assumed that the different service units will be the respective systems 1 which also contains a viable system in each of these units. The VSM of the service management system within a company is described by the tasks performed by its five necessary systems:

System 5 establishes the service objectives and communicates them to the other management systems, systems 3 and 4. Goal of system 5 is to secure the existence and to increase profits of the organization.

System 4 observes and collects essential information from the external environment of the service management system. Its goals area to increase customer loyalty, to position it in the market by creating USP characteristics of the organization to differentiate it from other players by means of a continuous review process of the environment.

System 3 is responsible for maintaining the internal stability of the model by optimizing the use of internal resources using the information received from system 4 about the clients as well as the information of the different divisions of system 1 obtained through system 2. It would be related to functions such us management of performance, time, ressources, etc. Moreover system 3* allows a quick response to possible emergencies in the service units by acting before information flows through system 2. It is capable to perform actions in real time if something happens outside of normal limits such as making changes in service activities to avoid non-meeting customer expectations.

System 2 is represented by the functions of coordination between the different service units in daily activities. This system receives all the information of the different service units and acts as a filter so that only the necessary information reaches the system 3. The difference between both is in the time horizons of action. While system 2 performs functions in daily activities, the tactical system optimizes the performance of the internal system over a longer time horizon. System 2 represents the information function that defines the level of interconnection between systems 1 and the level of hierarchical control of system 3.

System 1: each service unit within the service management system is an operational unit that includes the management of the unit and the division that performs the operational activities. An example could be a disasters service unit that contains different activities for inundations, earthquakes, etc. to be performed. Each system 1, service unit, is in charge of giving priorities in case of multiple disasters.

Environment: represents all the external factors that influence the service management system of an organization. The environment is represented by the demands of customers, new service technologies, market standards, delivery times, service products, strategies and performance of competitors for example to help in making decisions about future an development of USP (Unique Selling Proposition) of the organization, etc.

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The diagram shows the environment of the entire service management system as well as of service unit:
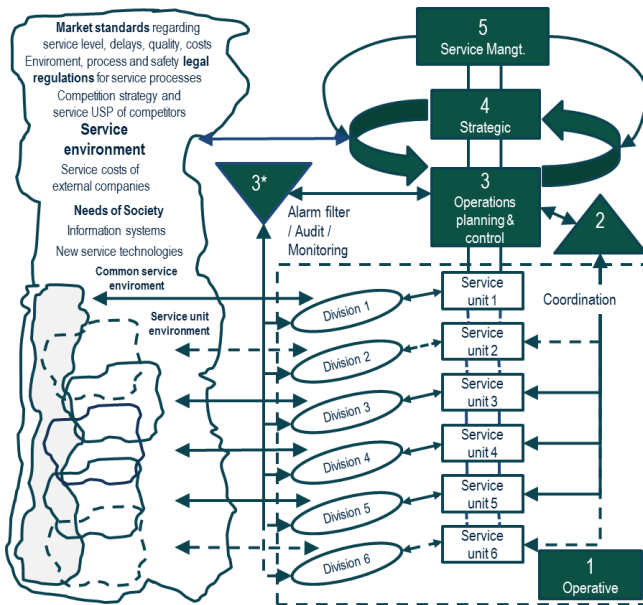

Figure 6: Analogy with the VSM: Service management recursion level (own elaboration)

Service management tasks and their classification to the VSM systems

Service management tasks were assigned to the VSM systems at recursion levels n and n + 1. As an example in Figure 7 are shown the service management tasks and its classification. In the same way it was done for all other tasks:

Strategic planning tasks	Service Mngt. recursion level			Service unit recursion level		
	S 5	S 4	S 3	S 5	S 4	S 3
Principles, guidelines, culture (1.1)	X			X		
Definition of service offer (1.2)	X					
Organizational structure (1.3)		X				
Creation of investment programm (1.4)		X				
Service strategy planning & master data (1.5)		X				
Continuous observation & evaluation of service environment: market & customer analysis (1.6)		X				
Target system (quality, cost, time) (1.7)		X				
Service system design & location distribution for specific customer segments & sales channels (1.8)		X			X	
Service master program: sales planning, requirements and resources planning (1.9)		X	X		X	X
"Make-or-buy" decision-making (1.10)		X				
Maintaining and creating core partnerships (1.11)		X	X		X	X

Figure 7: Strategic service management tasks and its classification to VSM systems (own elaboration)

Identification of the needed information flows between organization and service recursion levels and within the service management level

Current technical literature agrees that the connection interfaces between recursion levels is extremely important (Ríos, 2012, p. 59). Goal is to determine basic links that can be transferred to any VSM in any company. The intensity of this connection between the levels varies according to the company (Ríos, 2012, p. 59). An exchange of information within the company and between levels of recursion is necessary to control the corporate environment, which generally has more information than can be processed in the company (Herold, 1991, p. 287). Between the recursion levels it can be found the following communication flows:

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Between the organization environment and system 4 of the service management recursion level

Between systems 5 of the organization and service management

Between systems 4 of the organization and service management

Between systems 3 of the organization and service management

Between systems 2 of the organization and service management

Between the operating units, systems 1, of the organization and service management

Between the alarm / monitoring filter (System 3*) of the company's recursion level and system 4 of service management

Between the two normative systems of the organization and service management there is a flow of information that defines the degree of freedom of decision making in which the service mangemenet recursion level can act. Specifically, it means that the decisions taken by the management of the company are communicated to the management of service management defining its guidelines for autonomous decision making within the respective areas. These guidelines can be financial, on personnel, on affectation to other areas, etc. In the same way, the objective levels such as service level, quality of service, costs and adaptation capacity are influenced by decisions from the management, defining the priorities and the limits for the coordination among service units. An example could be: the organization in its strategic plan establishes the target number of services performed for the following years as well as the required flexibility in percentage as well as the decrease in target costs. Of course these decisions would influence the decision-making framework for the service management system that should adapt their methods and tools to be able to optimize costs, times and quality based on the given flexibility.

As explained during the research work basic communication flows were defined. In total a number of 79 information connections were defined for the service management recursion level specifying if the communication goes from company´s recursion level to the service management recursion level or between systems in the service management recursion level. An extract is shown in Figure 8:

No.	Information in the service management recursion level	From…to…
1	Information about quality problems in the service units	From System 1 to 2/3
…	…	…
28	Number of services performed	From System 1 to 4/5
29	Number of services that have met the required deadlines and quality	From System 1 to 4/5
30	Average service lead time	From System 1 to 4/5
31	Number of customers acquiring services for the first, second, etc. time → customer loyalty	From System 1 to 4/5
32	Number of services with claims	From System 1 to 4/5
33	Total number of changes made to initial resources planning	From System 1 to 4/5
…	…	…
79	Information about the economic environment of service management	From environment to 4/5

Figure 8: Example of information flows in the conceptual model of a service organization (own elaboration)

Applying the model for charity organizations

A feeback loop has been developed to explain the two main problems identified for charities. It was analyzed the causalities from the introduction of the CSR concept until its impact the financial resources and the performance of the charity. Due to the concept, nowadays, the ethical responsibility and normative compliance with the law are usually fulfilled by charities.

On the other hand, the philanthropic and the economic responsabilities are not often completely fulfilled. For a charity to meet its philanthropic responsibility, it should considered the real demands or needs of the society in order to respond appropriately by allocating ressources based on those needs. Moreover the economic responsibility, be profitable from donations or volunteers, is not maximize because if a charity doesn´t provide the solutions for the society needs, then donations and volunteers can be reduced as a result. As a consequence, the available ressources for developing, performing and control the services will decrease. In addition, there is a potential to improve the performance of the available ressources of a charity organization in order to maximize its impact on society and environment applying the Viable System Model. By doing so, the feedback loop is closed and the research study tries to improve point 3 and 6 by enabling an alignment with the environment, society needs and by improving the internal efficiency.

Figure 9: CSR Causal feedback loop for a charity organization (own elaboration)

From the research it is pursued to fill in the GAP for these two areas:

First, to align the environment and society needs with the goals and utilization of resources of a charity organization.

Second, to provide a structure and a communication framework to increase the efficiency of internal processes.

As a consequence in Figure 10 it can be seen a proposal of a charity applying the VSM:
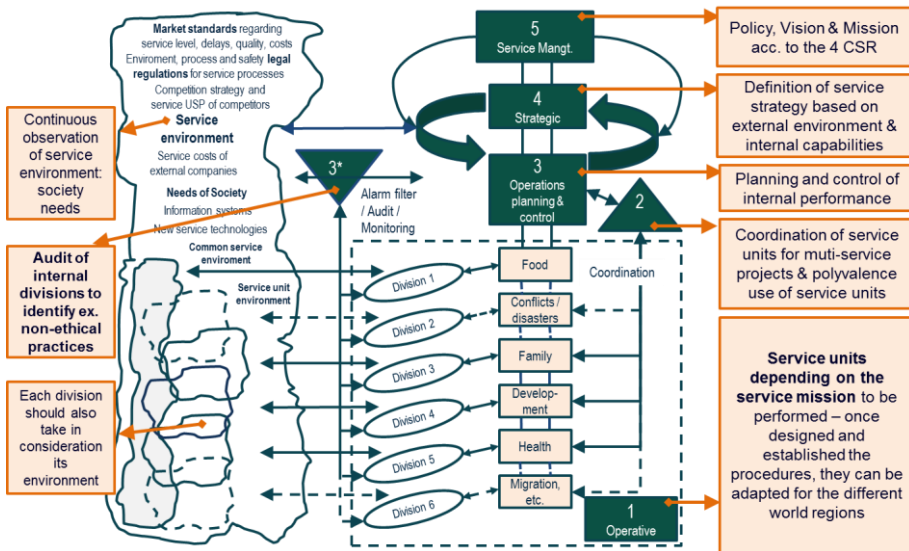

Figure 10: Charity organization applying the Viable System Model (own elaboration)

Figure 10 shows the description of six examples of service units that can exist in a service management model of a charity organization, their relation with the environment and the internal mechanisms with the related communication flows and auditing systems to deal with it taking into consideration the four responsibilities defined in the normative level, system 5, of the model.

5. Conclusions

The research work helped to develop a model supporting the following main hypotheses:

Thanks to a new conceptual model for organizational and service management taking into account the added value to the end-customer the viability of an organization can be assured.

The Viable System Model provides the necessary structure to optimize an organization in a recursive way to ensure the viability of the company in the long term.

The Corporate Social Responsibility mission and goals provide a compromise with and for the community that makes possible to every organization to go beyond its economic activity by improving the external environment impacted or not by its activity. By doing so a company is able to increase its relevance, image and perception on end-customers, current and potential stakeholders. As a consequence it creates a positive feedback loop on sales, donations and society, environment and economy.

In the case study for a charity it was proved how the developed model improves the adaptability to society needs and also the internal performance to maximize the output from the resources available.

Next step of the research will be to simulate company and service performance using the conceptual model developed and to compare it with current available structures how to deal with changing environment. Final goal is to transfer this research method to real service organizations applying it in particular areas or to design organizations and service models based on it, in particular to non-profit organizations such us charity organizations.

In conclusion this proposed approach can increase the efficiency of service organizations such us charity organizations. Also it shows how a VSM approach can be used as a methodology to be successful in any kind of environment together with the CSR goal. By using it a company can adapt itself to all future potential environment scenarios by changing its strategy and internal set-up.

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