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APPLICATION AREAS OF THE SHARED SERVICE CONCEPT WITHIN THE ROMANIAN HEALTH SYSTEM

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The Romanian healthcare system can be characterized by chronic under financing, leading to poor services towards the patients, corruption and high debts of the public institutions towards their suppliers. In order to cope with the situation, the Romanian state approved in 2010 the emergency ordinance 48/2010 on the decentralization of the health systems. Due to this legislation more than 370 hospitals across the country had been transferred under the administration of local public administration officials, whereas only roundabout 60 hospitals remained under the control of the Ministry of Health. As a consequence, local authorities have to familiarize themselves with questions concerning the proper management of the assigned hospitals. The present paper explores the different application areas of the shared service concept and the benefits this concept can add to the healthcare system. Three areas from the administration and from the operative function of the hospitals had exemplarily been selected in order to demonstrate the potential of shared services in terms of reducing the existing costs, while increasing the quality and performance of the services in question. In order to provide a holistic picture, possible disadvantages are highlighted and explained. The paper concludes that the benefits of the shared service concept can counterbalance the possible negative aspects and support the Romanian health system in overcoming this crisis and improve overall performance.

Key Words:
Healthcare, Local Public Services, Shared Services, Contracting out, Privatization.

JEL Classification: H51, H72, I18, L33.

1. Introduction

Romania spends 3.6% of GDP on healthcare, less than any other country in the European Union. As such, it is not surprising that the Romanian healthcare system is chronically underfinanced (Lunguescu, 2010). According to the "Euro Health Consumer Index 2009", Romania is ranked 32 out of 33 European states. Furthermore, the results of the survey highlight that the quality of the medical services provided to the patients is lagging far behind European standards (Björnberg, et.al., 2009). In order to overcome this critical situation, hospital managers are asking for extended payment terms from their suppliers, establishing contracts with private health insurances companies, seeking private public partnerships and are asking for donations and sponsorships.

For 2011 the situation is expected to get even more difficult, as the state budget for the Ministry of Health will go down by 40% and the budget of the National Health Insurance Office (CNAS), the main financing source of the local medical system, will decrease by over RON 1 billion (Hritcu, 2010). The latter will according to L. Duta, President of the CNAS lead to blocking of compensated medicines, payments of historic debts towards vendors, supply of hospital pharmacies, carrying out national programs, paying medical personal wages, etc.

According to the Ministry of Health, the overall healthcare system should be improved by changing from the existing administrative hyper centralization to decentralization by relocating hospitals from the state to local authorities. Based on this argumentation the emergency ordinance

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These objectives indicate ambitious institutional intentions with future effects. But between intentions and their putting into practice, there intervenes the system of interests that governs in the end the society and its movement.

48/2010 on the decentralization of the health system had been launched by the Ministry of Health and passed the government in summer 2010 (Lunguescu, 2010). On the grounds of this legislation, more than 370 hospitals across the country had been transferred under the administration of local public administration officials, whereas only roundabout 60 hospitals remained under the control of the Ministry of Health. By doing so, additional funds from the local authorities should and have to be relocated to the respective hospitals in order to increase the overall quality of the services provided. In addition, President Basescu announced in December 2010 that the Ministry of Health intends to close down 200 small and improperly equipped hospitals (N.N., 2010).

Independent from the latter, local authorities have to familiarize themselves more than ever with questions concerning the proper management of the assigned hospitals. The present paper presents the shared service concept, as one way to organize the hospitals that had now been transferred under the responsibility of the local authorities. The description of potential areas of application should serve as examples to demonstrate the advantages and benefits the shared service concept can add to the Romanian healthcare system by reducing the existing costs, while increasing the quality and performance of the services in question. Furthermore, potential disadvantages are highlighted, leading to the final conclusions of this paper.

2. Shared Service Concept

The shared services approach is very often positioned as a new trend or tool for the optimization of the back-office functions (A.T.Kearney Inc., 2004). However, the general approach of shared services is not new, and while it is nowadays classified as an approach for optimization its basic principles and roots go back to the first ideas regarding division of labor.

According to Bergeron (2003, p.3), the shared services concept can be defined as "a collaborative strategy in which a subset of existing business functions is concentrated into a semi-autonomous business unit that has a management structure designed to promote efficiency, value generation, cost savings, and improved service for internal customers of the parent company, like a business competing on the open market".

The provided definition includes the prominent features of shared services, such as the internal customer orientation and the focus on a subset of existing business functions, generally referred to as the support functions of an organization. Via the consolidation of processes in a centralized department, organizations try to achieve cost savings by making use of the resulting scale effects. Different studies (e.g. Kagelmann, 2007) show that cost savings are the key objective pursued by private organizations applying the shared service concept. If the services can also be offered on the free market, additional savings by means of an improved resource allocation can be gained. To enable the primary functions to completely focus on the core of their business is another objective that organizations try to achieve. Resulting from the latter, the relocated support functions become the core of the shared service organization. Furthermore, protagonists of the shared service concept such as Pérez (2008) argue that by means of the standardization of processes and the better use of resources and information technologies, processes will be improved, run- or cycle times can be reduced and in turn the quality of the services provided can be enhanced. Due to the before mentioned achievements the customer satisfaction will also increase, being an additional positive side effect. The term semi-autonomous in the definition of Bergeron gives direction towards the classification of shared services as a hybrid approach, neither really outsourced, nor totally centralized or vertically integrated.

As Dressler (2007) points out, shared services and outsourcing have, regarding the general content, numerous things in common. Similarities in the concepts are in so far as support functions are no longer performed by the original, primary organization anymore. Only the planning and control of the services are remaining. However, the shared services approach is amending the shortfalls associated with the outsourcing approach. One of the key disadvantages of outsourcing is the loss of know-how which is avoided by applying the shared service concept, as – in general – the organization providing the service to the parent company is semi-autonomous, or in other words remains as an affiliate or associated company. In the words of Karmarkar (2004) it can be said that a loss of service competitiveness, associated to outsourcing can be avoided by applying the shared service approach.

The key difference between the shared service concept and centralization is based in the legal form of the shared service organization, which should be semi-autonomous. Due to the latter, prices are not just charged to the service recipient as in a centralized company. Services are invoiced based on a service level agreement and predefined transfer prices. Furthermore, the services provided by a shared service organization are benchmarked and have to be competitive to market prices, respectively to prices offered from external companies like outsourcing providers.

When it comes to the application of Shared Services within the area of local authorities, respectively public policy, the United Kingdom seems to be the leading country in Europe. Following the "Gershon-Reform" in

2004 the country consolidated its human resources, finance and purchasing function in a shared services center at Newport in the southern part of Wales (UK Trade & Investment, 2010). According to the overall concept, underlying the "Gershon-Reform", local authorities should save about £ 6.45 billion of efficiency and productivity improvement annually by 2007-2008 (Sturgess, 2005). Even though official data about the real savings are not available, the 2006 White Paper "Strong and Prosperous Communities", published by the Secretary of State for Communities and Local Government, Ruth Kelly, acknowledges that councils met the 2007-2008 efficiency target a year ahead of schedule (Tomkinson, 2007).

3. Application Areas within the Hospital Organization

The Shared Service concept as explained above can provide additional benefits to the local authorities in Romania as long as at least two or more hospitals are consolidated under the umbrella of one hospital management. A shared service organization is then providing the services towards the consolidated hospitals. Such kind of "holding" structure, as can be found in the private sector, is according to a recent PwC study (Horowitz & Aird, 2008) also a key driver for major cost savings in the public sector. As an alternative, hospitals and their respective management can decide for a cooperative approach and mutually agree on the services that should be relocated from their administration towards a shared service center, which in turn provides the services to them.

Referring to Porter (1986) and his famous value chain model, the activities of any organization can be grouped into primary and secondary activities. While primary activities are basically involved in the creation or production of the product or services, its distribution and marketing, secondary activities are delivering the infrastructure to the organization that allow the primary activities to take place. Applying Porter's methodology to the hospital system, secondary activities can be found in the administrative areas, as well as in the operative areas of a hospital. Support functions in the administrative area comprise functions such as human resources, purchasing, finance and accounting, information technologies, facilities management, logistic, etc. Support functions in the operative areas of hospitals, meaning those areas in which the healthcare professionals are in direct contact with the patients, refer to functions such as sterilization, laboratories, radiology, etc.

It is important to be mentioned that the application areas for shared services as indicated in this paper are examples, highlighting the huge potential the concept offers to the local authorities, whereas the real potential that can be raised with shared services has to be tailored to the individual and specific situation of the hospitals assigned to the respective local authorities.

3.1. Application areas of shared services in the administration area

Human Resources

Human Resource Management (HRM) can be described as a series of activities which: first enables working people and the organization which uses their skills to agree about the objectives and nature of their working relationship and secondly, ensures that the agreement is fulfilled (Torrington et.al., 2002). According to their definition, Human Resources (HR) comprises the following core functions: organization, administration, resourcing, performance, development, employee relations and pay.

Ulrich (1995) divided the application areas of HR shared services into transaction- and transformation-based services. The main differentiating aspects of these application areas are summarized in *Table 1*.

Transaction-based services of the HR function, such as organization, administration and pay can or should be found in all hospitals, especially with regard to transformation-based services, like the development of employees and in employee relations, deficiencies in the Romanian hospitals can be expected.

The key advantage of HR shared services for hospitals will lie in the consolidation of the tasks in a decentralized-centralized unit, achieving scale-effects via the bundling of activities and offering an increased customer satisfaction by employing employees with the respective performance and qualification profile. Access times and advisory or

Table 1

Differentiation between transaction- and transformation-based services

Transaction-based services	Transformation-based services
… deal with the processes and activities relating to meeting the administrative requirements of employees, such as benefit related activities, compensation / pay activities, development and learning activities, etc.	… consist of non-routine and non-administrative activities, which are primarily designed to transform an organization and include staffing, development, organizational design and effectiveness, etc.

Source: *Author, 2011*

consulting levels can be increased and the response time can be shortened, as similar requests from different departments are reaching the shared service unit. Furthermore, via the implementation of internet based on-line self-service systems employees could maintain their personal files on their own which can lead to an additional decrease in headcount in administration or enable the shared service unit to release additional capacities for the advising and assisting of "customers", meaning the healthcare workers, on a decentralized level. An additional advantage is that salaries and compensation packages can be benchmarked in order to identify further potentials for cost savings (Reichwein, 2009). The whole HR function can be perceived by its customers as a closed system from the transaction to the transformation oriented functions in a shared service unit. Surveys in private business show that up to 39.1% of costs within the HR function can be saved by using the shared service concept (Heidbüchel, 2008).

Accounting

In hospitals, the accounting function fulfils various important tasks. In addition to general accounting issues, like the preparation of invoices, the follow up of incoming and outgoing payments, the accounting function forms the connection between the services provided by the hospital and the insurance house, respectively the private insurances of the patients. As such, the accounting function has to ensure that the accounts are settled and that the hospital has sufficient financial resources available. Another key element of the accounting function is its responsibility of informing the hospital management about the financial results and financial situation of the hospital and the preparation of annual reports and financial budgets (Hentze & Kehres, 2007).

As for shared services in human resources, the key benefits within the finance area are with regard to the consolidation of the functions in one unit and the resulting economies of scale. Standard bookings, accounts payables, the clearance of invoices with suppliers or the cost reimbursement with the insurance house can be consolidated and standardized. Furthermore, harmonized and standardized accounting structures, systems and routines can help to increase transparency, identify over proportional use of resources and enable hospitals to benchmark their departments. By identifying best practices, departments might further specialize and the performance of the hospitals can further increase (Reichwein, 2009).

Purchasing

The key target of the purchasing function in each organization is to provide the required products in the respective quality and time to the requesting operative areas of an organization (Slack et.al., 2001). Aligned to the given definition, the purchasing function in a hospital environment has the target to provide the required resources, equipments, medical and pharmaceutical products in the requested quantity, quality, at the right time and at the lowest possible costs. The joint empirical study of the German Hospital Institute (DKI) and the consulting company A.T. Kearney in 2003 detected, that there is a correlation between the size of the hospital and the centralization of the purchasing function. Decentralized purchasing has a variety of disadvantages, such as the loss of scale effects as the purchasing power is not used and because different processes are established.

Under consideration of the Romanian laws and regulations with regard to tender procedures, it can be assumed, that smaller hospitals are wasting their limited resources in time consuming procedures. The key advantages of using shared services in the purchase function can be seen in different aspects. By consolidating the demands of different hospitals in one shared service centre, the overall costs for products could be reduced as a result of the consolidated purchasing power. Furthermore, as one central tender is performed, the material expenses and the purchase processing time can be reduced. Based on a centralized process, the respective employees can create comprehensive and sustainable purchasing competencies which can in turn lead to an optimized overall purchasing process and better purchasing decisions (Reichwein, 2009).

Other areas of application in the administrative area

Apart from the above mentioned areas, shared services might also help hospitals to reduce hospital costs in areas such as information technologies, facility management, logistic or the hospital kitchen/catering.

3.2. Application areas of shared services in the operative area

Sterilization

After each surgical treatment, the instruments used have to be sterilized in order to clean them from blood and residues, and to ensure that no bacteria or viruses can infect another patient. Depending on the size of the hospital, such sterilizations take place either in small units on the ward, close to the operating theatre, or in centralized sterilization units. Sterilization units contain different areas in which the instruments are cleaned, washed, sterilized and finally prepared for the next surgical intervention.

By means of the shared service concept, the contaminated and polluted surgical instruments of different hospitals could be moved and/or consolidated into a shared service centre, respectively a centralized sterilization unit. By doing so, the already mentioned scale effect could be reached which can, according to the

experience of SteriLog (2010), a private company and outsourcing service provider, specialized in the sterilization of instruments in Central Europe lead to cost reductions by up to 20%. By means of the standardization and optimization of the processes, the overall quality can be increased as there is only one validated and qualified process. In addition, investments can be reduced and back-up scenarios can be created ensuring the proper utilization of machines and the human resources. Due to the latter, investments into the expensive autoclaves and cleaning machines, used for the sterilization, could also be consolidated and optimized.

Laboratory Diagnostic

Hospital laboratories are producing diagnostic findings as they analyze clinical or blood samples from the patient. Their findings regarding clinical chemistry, microbiology, hematology or histology are supporting healthcare professionals in making the right diagnosis and choosing the patient specific treatments. Due to the latter, nearly all departments of a hospital can be classified as the customers of the laboratory, using the services provided. As such, they are contributing to the proper treatment of patients in hospitals. Furthermore, private clinics or general practitioners can be seen as customers of laboratories (Luppa & Schlebusch, 2008). Total costs for the laboratory diagnostic amount to only 3-5% of the hospital spending, even though for the state-of-the-art analysis tools and highly qualified laboratory professionals are need. As nearly 2/3 of patient treatments request laboratory analysis in order to provide a unique diagnosis it is not surprising that depending on the size and specialization of the hospital, several thousands of analyses per month are not uncommon (Herzog & Renner, 2001).

According to Reichwein (2009), the shared service concept could add value to hospitals regarding laboratory diagnostic by means of the normal centralization and scale effects via standardizations. Investments could be decreased via their consolidation. The usage of IT-Instruments together with a unified platform for all diagnostic and analytical instruments, as well as the application of standard processes and procedures could lead to further rationalizations. The services offered by the shared service centre should focus on "non-urgent" diagnosis as this would eliminate the disadvantage resulting from time pressure, respectively interrupted processes. Urgent analysis should be performed in decentralized units in areas like the intensive care unit or in the operation theatre. However, in order to improve the process and avoid mistakes, those decentralized units could be connected via "Point of Care Testing (POCT)" units to the central laboratory where the final diagnosis could be made in order to ensure the general quality standards. However, the latter methodology is seen to be very expensive (Herzog & Renner, 2001) and as such might not be the first option under consideration of the financial challenges in the Romanian healthcare system.

Radiology

The key objective of the radiology in any hospital is to diagnose and interpret external radiologic pictures from patients sent to the radiology by the decision of doctors of all departments in the hospitals. Such pictures are generated using projector radiographies, detector radiographs, computer homographs, magnet resonance tomography and other high sophisticated instruments (Arlart, 2004). In general, one centralized radiology unit can be found in each hospital, even though it depends on the type, the financial budget, as well as from the number and size of specialized departments in the hospital.

With regard to shared services, there isn't a huge volume of such complex radiologic treatments, but when several hospitals are summarized under one holding structure there could be redundancies. Hence, in order to ensure that the expensive and high sophisticated devices are properly used and the available knowledge is summarized, all radiology departments of the different hospitals in a hospital holding structure could be consolidated in one centralized shared service centre. Smaller units, dedicated to emergency cases and night shifts could remain in the different hospitals. As such, the level of professionalism among radiologists could increase, leading to improved expertise and better diagnosis and at the end to higher customer satisfaction. Furthermore, the budget necessary to expensive investments can be reduced as only one or two units serve a number of hospitals.

Other areas of application in the operative area

Apart from the areas of application mentioned above, shared services could also be applied in the pathology, dialysis treatments, virology or for pharmacy services, such as drug admixture. Independent from the advantages that can be derived from the consolidation of functions and the resulting scale effects, especially the accessibility of the unit in the hospital and the patient flow, respectively the transport ways in the hospitals or from hospital to hospital have to be carefully analyzed and considered.

4. Possible Disadvantages

Besides the different application areas and advantages mentioned above, there are also a number of potential pitfalls that need to be mastered when moving towards shared services.

As the formation of a shared service unit is changing the organizational structure of the hospitals, the move towards shared services is often accompanied by power struggles. The functions within the hospital, as well as responsibilities and duties of individual persons are

altered; some positions may even have to be cutback or downsized which most likely would result in resistance to support the move. Especially with regard to the latter, the shared service concept is subject of controversial discussions. Public discussion and especially political perception criticize the shared services concept as a job destroyer (Dressler, 2007). It is correct and empirical studies like those by A.T. Kearney (2006) show, that the total number of headcount is reduced when organizations move towards shared services. Contrary to this point of view, from a pure business perspective, shared services are a strategy to optimize the existing cost structures, without compromising quality and simultaneously enabling organizations to focus on their core competences and can even generate new jobs (Hollich et.al., 2008). Independent from the point of view, public authorities deciding to apply the shared service concept have to be prepared to face strong political discussions, as well as discussions with nursing and doctors' organizations. As a result, the respective hospital management or the operators of the shared service centre have to be empowered to make the necessary decisions in order to make the new organization successful and generate the expected benefits.

Processes within the hospitals have to be redesigned in order to enable the shared service unit to generate the desired cost savings. That means that before the move towards a shared service organization, the processes in each of the hospitals have to be carefully analyzed and harmonized in order to create one single process that finally is gone to be transferred. Especially in those areas that are close to the patients, transportation times and the smooth running of the hospital internal processes and procedures have to be taken carefully into consideration. IT systems should when and wherever possible be harmonized in order to ensure that one standardized interface for the communication of the shared service organization with the hospitals can be created. As such, there might be a need for investments into the hospital internal IT infrastructure in order to ensure harmonized systems. It has to be mentioned, that such kind of reorganization within the running hospital operation might harm the service level provided to the patients and interrupt the smooth running of the hospital. In such cases, the proper treatment of the patients at the hospitals first priority has to be ensured

In literature the distance to the final users is sometimes mentioned as one disadvantage of shared services (Quinn et.al., 2000). Instead of a personal face-to-face discussion about different topics, the majority of requests from the shared service customers will be dealt with electronically, either via telephone or via e-mail. In the beginning of the shared service operation, these distances to the end-users can result in additional need for coordination and reconciliation (Kris & Fahy, 2003). As counteractive measures, people have to be intensively trained in order to be able to work with the system and at the beginning there might be the need for consultation hours in which people being reluctant to new and modern media can address their questions. Under consideration of the IT infrastructure that can be found in Romanian hospitals, the telephone might be the primary source of communication by the healthcare workers with the shared service organization.

5. Summary and Conclusions

The present paper provides insights into the topic of shared services, explaining the underlying principles and highlighting application areas for shared services within the healthcare system on a theoretical basis. Within the administrative area of hospitals the human resources, accounting and purchasing function has been evaluated. In order to illustrate application areas in the operative areas of hospitals, those areas that are close to the patients, the areas of sterilization, laboratory diagnostics and radiology have been examined. In order to provide a holistic view, potential disadvantages have been identified.

Identified quantitative saving potentials are mainly based on the consolidation of tasks and activities in order to reach better economies of scale and as a result of this, lower cost. Furthermore, via consolidation, the overall purchasing power increases and redundant investments into similar devices for different hospitals and/or wards can be avoided, respectively better equipment might be purchased. Qualitatively, the application of the shared service concept should lead to harmonized processes and procedures, leading to higher transparency and quality in the provided services and ultimately to higher customer satisfaction. Using benchmark techniques, best in class process might be identified, furthermore increasing the productivity in providing the services to the patients.

Empirical studies have shown, that cost savings in private business go on average up to 20% as indicated in the already mentioned study by A.T. Kearney (2004), whereas depending on the company and function, saving expectations go up to 40% (Bearing Point, 2007). As one example, according to Deloitte (2010) the saving potential within the purchasing function of hospitals can be on a level of 25%. As such it can be expected that the average savings of private business can also be reached by public authorities, respectively by hospitals. Under consideration of the difficult financial situation in the Romanian healthcare system such 20% of savings in the hospitals could benefit the treatment of the patients. However, as this paper had been just a theoretical evaluation, further research is proposed, analyzing detailed data of hospitals in Romania in order to quantify the total potential and push administration and authorities towards the shared service concept.

Bibliography

1. A.T. Kearney Inc. (2004) *From Back-Office Function To Strategic Driver: Success through Shared Services*, Chicago: A.T. Kearney Inc.
2. Arlart, I. P. (2004): „Krankenhausradiologie – wohin geht der Weg angesichts der Strukturveränderungen im Gesundheitswesen?“ *Der Radiologe*, no. 1, 2004: pp. 70-74
3. Bearing Point (2007) *Shared Service Center – Wertbeitrag und zukünftige Trends*, Frankfurt am Main, Bearing Point GmbH
4. Bergeron, B. (2003) *Essentials of Shared Services*, Hoboke: John Wiley & Sons Inc.
5. Björnberg, A., Cebolla Garrofé, B. & Lindblad, S (2009) *Euro Health Consumer Index 2009 Report*, Sweden: Health Consumer Powerhouse AB
6. Deloitte (2010): *Beschaffungsmanagement im Krankenhaus*, available at http://www.deloitteconsulting.at/tag/einsparungspotenzial/, accessed: 7 January, 2011
7. DKI & A.T.Kearney (2003): *Best Practice in der Beschaffung im Krankenhaus*, Düsseldorf, Deutsches Krankenhausinstitut und A.T.Kearney
8. Dressler, S. (2007) *Shared Services, Business Process Outsourcing und Offshoring*, Wiesbaden: Betriebswirtschaftler Verlag Dr. Th. Gabler
9. Heidbüchel, M. J. (2008) *Shared Services für Personalwirtschaft*, Saarbrücken: VDM Verlag Dr. Müller
10. Hentze, J. & Kehres, E. (2007) *Buchführung und Jahresabschluss in Krankenhäusern: Methodische Einführung*, Stuttgart: Kohlhammer
11. Herzog, P., Renner, G. (2001): *Outsourcing von Routine-Laboruntersuchungen*. Frankfurt, Wien: Ueberreuter Wirtschaftsverlag
12. Hollich, F., Otter, T. & Scheuermann, H. D. (2008): *Shared Services – Foundation, Practice and Outlook*, München: Martin Meidenbauer Verlag
13. Horowitz, P. & Aird, C. (2008) *Point of View – Shared Service Center – the 2nd Generation*, Delawarfe: PwC - Pricewaterhouse Coopers LLP
14. Hritcu, M. (2010) “Orfanii bugetului de stat”, *Capital*, 13.12.2010: p. 53
15. Kagelmann, U. (2007) *Shared Services als alternative Organisationsform*, Wiesbaden: Deutscher Universitäts-Verlag
16. Karmarkar, U. (2004) “Will you survive the service revolution”, *Harvard Business Review*, June 2004: pp 100-107
17. Kris, A. & Fahy, M. (2003) *Shared Service Centers – Delivering value from effective finance and business processes*, Harlow: Pearson Education Limited
18. Lunguescu, O. (2010) *Romanian healthcare on verge of collapse*; available at http://www.bbc.co.uk/news/world-europe-10914678, accessed on 5 January, 2011
19. Luppa, P. B. & Schlebusch, H. (2008) *POCT – Patientennahe Labordiagnostik*, Berlin: Springer Verlag
20. N.N. “200 de spitale inutilizabile se vor transforma în azilur şi creşe”, *Curentul*, 10.12.2010: p. 7
21. Pérez, N. M. (2008) *Service Center Organisation – Neue Formen der Steuerung von internen Dienstleistungen unter besonderer Berücksichtigung von Shared Services*, Wiesbaden: GWV Fachverlage GmbH
22. Porter, M.E. (1986) “Changing Patterns of International Competition”, *California Management Review*, vol. XXVII, number 2: pp. 9-40
23. Quinn, B., Cooke, R. & Kris, A. (2000) *Shared Services – Mining for Corporate Gold*, Harlow: Pearson Education Limited
24. Reichwein, O. W. (2009) *Einsatz und Gestaltung von Shared Services in der Klinikorganisation*, Hamburg: Verlag Dr. Kovac
25. Slack, N.,Chambers, S. & Johnston, R. (2001): *Operations Management*, Harlow: Pearson Education Limited
26. SteriLog (2010), *Case Studies*, available at http://www.sterilog.com/cps/rde/xchg/ae-sterilog-en/hs.xsl/index.html, accessed on 10 June, 2010
27. Sturgess, G. L. (2005) *Shared Services as a Long-term Solution for Local Government: Delivering on the Gershon-Report*, Birmingham: Serco Solutions

28. Tomkinson, R. (2007) *Shared Services in Local Government – Improving Service Delivery*, Hampshire: Gower Publishing Limited
29. Torrington, D., Hall, L. & Taylor, S. (2007) *Human Resource Management*, Harlow: Pearson Education Limited
30. UK Trade & Investment (2010) *Grossbritannien baut seine Shared-Service-Industrie aus*, available at http://www.ukti.gov.uk/de_de/uktihome/localisation/101604.html, accessed on 20 December, 2010
31. Ulrich, D. (1995) "Shared Services from Vogue to Value", *Human Resource Planning*, vol. 18, Issue 3: pp. 12-23