

The methodology for designing health and spa business processes

Irina Potashova¹ and Yuriy Dreizis^{2,*}

¹Sochi State University, 26-A Sovietskaya str., Sochi, 354000, Russia

²Finance and credit Department, Sochi State University, 26-A Sovietskaya str., Sochi, 354000, Russia

Abstract. Improving the quality of health and spa services, as well as quality in general, is a constant process of business activity. It is aimed at improving the level of services, the quality of their provision, the improvement of the elements of production and the quality system. Currently, the health and spa services quality is an important element of efficiency and profitability of health and spa resorts. That is why specialists should pay constant attention to the quality of services. Everyone should be engaged in quality: from the head of the health and spa resort to the specific performer. All processes to ensure, design, preserve quality must be integrated into a management system. This fact makes it urgent to apply new market-oriented approaches for managing the resorts. Thus, the author of the article suggest a methodology for designing health and spa processes based on wishes, needs and opportunities of clients.

1 Introduction

From our point of view, the sphere of health and spa services represents a broad field of activity in terms of intra-firm changes and application of process management for the following reasons:

- in this area there are numerous management problems, in particular, the creation of information support for management, which cannot be solved on the previous organizational, technical and technological basis;
- in the sphere of health and spa services in the application of the process approach will solve a number of organizational problems associated with the distribution of databases and the need to consolidate information flows, but these problems can also be solved by the simplest technical means;
- at health and spa resorts there is no need for major investments, it is possible to realize activity based management (ABM) here by small means and on the basis of available domestic developments;
- the division of labor in this area has historically been limited by the nature of the service and a specific focus on the client. Consequently, the re-design of economic activities for a business process that is client-centered will not be accompanied by a fundamental breakdown of the managerial structure and consciousness of managers;

*Corresponding author: potashova@mail.ru

- as a result of historical transformations in the health and spa resort sphere, there are no cumbersome pyramidal management structures with a powerful apparatus, which, as a result of the application of the process control, threatens a significant reduction. Consequently, the use of ABM (activity based management) can be realized with less social upheaval and without releasing the critical mass of the employed population;
- process management in the sphere of health and spa services as a whole can give very tangible results in economic, financial, statistical, social, accounting and analytical plans.

The urgency of improving the internal management and implementation of ABM in the sphere of health and spa services is caused not so much by the need to redesign business processes towards clients, but rather by the need to improve the internal service quality. In the case of practical application of ABM, individual working procedures are combined into business processes. In the health and spa services, as such, it is necessary to determine the customer service.

In terms of the introduction of ABM for the health and spa resorts it should be noted that it is necessary to implement it with mandatory improvement of information technologies, eliminating inadequate time the manual method of creating databases and, as a result, inefficient information support for management.

Process management with the simultaneous improvement of information management support in the health and spa resorts can raise to a qualitatively new level many management subsystems: marketing and personnel management, etc. A correctly calculated and successfully implemented process management approach promotes successful promotion in the market.

2 Methods

In the process of solving the tasks set, the methods of system, logical, structural-functional, comparative, documentary analysis, analytical modeling using the software product BPwin, and direct observation were used.

Information base of the research was the statistical data of the development of the health and spa resort industry and in particular the city of Sochi, the planning and reporting data on the activities of sanatoriums, economic literature and periodicals, scientific conferences, and materials obtained by the author as a result of conducting his own research on various enterprises of the health and spa resort complex.

3 Results

It is known that the customer service at the health and spa resorts is personal: the process of servicing often occurs directly between the client and the contact personnel. Thus, by means of ABM it is possible to establish a really working mechanism of discipline in the interests of the management of the health and spa resorts, etc.

We have developed a methodology and the main components of the health and spa resorts process management.

However, it should be noted that experts in the field of service [1-12] in the practical implementation of the process approach in service enterprises distinguish the service design and its rendering (delivery). Thus, developing the methodology of health and spa resorts process management, we settled on the proposition that the process control of the health and spa resorts should consist of two main and interrelated parts: resort service design (RSD) and its implementation. Therefore, our point of view does not contradict the views of the above main specialists in the field of service.

The author's methodology for the health and spa resorts process management includes:

- basic concepts and elements of health and spa resorts process management;
- methods of resort service design;
- functional model of health and spa resorts process management;
- a method for assessing the optimality of the modeling health and spa services processes;
- the main stages of the process management implementation in the health and spa resorts management.

We consider this methodology can be used by any health and spa resorts, and its practical application will allow them to solve the main tasks, such as:

1. in the field of improving the overall management of health and spa resorts :

- to develop a set of measures to improve the activities of the management apparatus, its structure and staff, organization and working conditions, as well as to develop measures to rationalize certain types of work performed both in the management apparatus and personnel of health and spa resorts ;

- create information management support;
- to raise to a qualitatively new level many subsystems of management: marketing, personnel management, etc.

2. in the field of improving customer service:

- identify the needs of customers for services and initialize the services provided by health and spa resorts with the identified needs of consumers;

- integrate the identified customer requirements into the development process and the design characteristics of the service, then into the components of these characteristics, then into the process parameters and instructions for the performers;

3. in the field of improving the quality management of services:

- to develop an intuitive organizational model that will allow to realize the possibility of a holistic representation of the entire providing service process, get the necessary information to both the management staff and the personnel of the enterprise to improve the quality of service;

- identify problems within the service delivery process, i.e. bottlenecks and duplication of operations both within and between departments;

- measure both the internal and external quality of the enterprise's service by assessing the expected and actual quality of personnel and customers of health and spa resorts ;

4. in the field of improving the work with personnel:

- establish a really working mechanism of discipline in the interests of leadership;
- by meeting the needs of staff to improve the quality of customer service, to stay longer in the enterprise, increasing the value of the workforce and reducing the cost of hiring and training new staff.

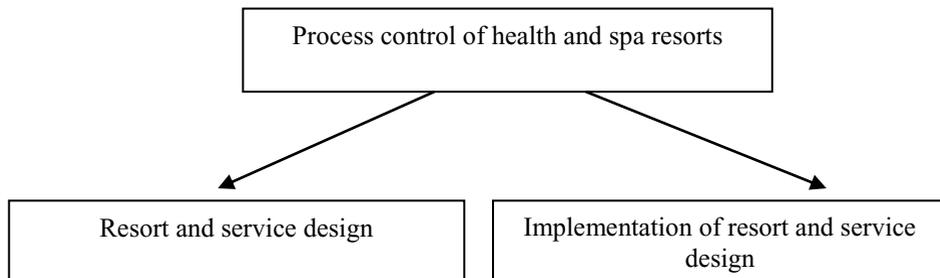
In our point of view, the scheme of the health and spa resorts process management is as follows (Fig. 1).

Considering the first component part of the process management of health and spa resorts – resort service design (RSD) – it should be noted that the term "design" in relation to the service has a different interpretation.

In general, organizational design means the development and implementation of projects to rationalize managerial work. There are complex and local organizational design. Complex design involves the development of a set of measures to improve the management apparatus activities, its structure and staff, organizational and working conditions. Local - includes the development of measures to rationalize certain types of work performed in the management apparatus.

By another definition, "Organizational Design" is the process of developing project solutions and activities to organize and improve the functioning of the project management

system. Since in this study this term applies only to service enterprises, in the future we use the term "service design" in relation to service activities.



1. Designing kinds of health and spa services.
2. Design of elementary spa processes and health and spa services of the organization.
3. Design of the organizational structure.
4. Distribution of responsibilities within health and spa resorts.
5. Creation of an organizational model of health and spa resorts using specialized software products.
6. Assessment of the optimality of the modeling health and spa services processes.

1. Introduction of the organizational model into the activity of health and spa resorts.
2. Adjustment of the model according to the quality services management standards.

Fig. 1. Components of the health and spa resorts process management.

Until now, service specialists have not developed a unified approach to determining the content of this concept and the methodology for its implementation. Therefore, in general terms, under service engineering, we mean a description of the specific service delivery processes, complemented by specifications, guidelines, planned results.

The closest to our understanding of service design is the service blueprinting methodology developed by Lynn Shostack specifically for marketing services. From her point of view, it is a method of graphical analysis, which gives the possibility of a holistic representation of the whole process of rendering services and includes the following three components [13]:

- the definition of all consecutive service delivery, time of their implementation and responsible personnel;
- graphical representation of all identified stages using special symbols;
- for each stage, the permissible limits of deviations should be identified, not leading to a perceptible loss of quality.

In this case, the process of rendering the service is presented visually in the form of block diagrams.

Another method of service design, coming from the Japanese manufacturing sector. It was called integrated or simultaneous design [14]. It provides for the unification of all the necessary functional specialists in one project team. At the same time, there is no special methodology for the development and design of design solutions.

Professor Yohji Akao [15] proposed to use for the design of production processes a method called "quality function deployment" or "quality house". This method involves the integration of customer requirements into the development process and includes several tables with which the basic consumer needs are sequentially and hierarchically translated into the design characteristics of the product, then into the components of these characteristics, then into the process parameters and instructions for the performers. There are known works where this method was used for design in the field of services - dry cleaning laundries [16].

Another method of designing processes, including service ones, is the SIPOC diagram. They represent an enlarged process map with its division into elements S (supplier), I (input), P (process), O (output) and C (customer). The diagram contains a list of indicators and operations for each element and parameters that are critical for the quality of the service. It is used mainly in the framework of the Six Sigma methodology [17], especially when it is necessary to represent all workflows in the foreshortening "at first sight". Among the advantages of the diagram is the fact that it, among other things:

1. Reflects a multifunctional set of processes on a single simple scheme.
2. Constructed on a design that is applicable to processes of all sizes - even organizational ones.
3. Allows you to save the perspective of a "general plan", to which you can always add new details.

Binding one after another all the models of the enterprise into a single whole, where the results / end products of one process become input data / source materials of the other, get the scheme of the processes of the entire enterprise.

All these methods of designing processes are universal, but the methodology of service-oriented design is used only for the purposes of planning and implementing IT strategies and creating an enterprise information architecture, so it is unpromising to consider it in the framework of this work (despite the same name).

Another method of service design, applied in a field close to the subject of our research, is recreational design, which is understood as the variational modeling of recreation programs and the systems serving them, taking into account the requirements of recreation [18]. The basis of recreational design is based on two main principles: the hierarchy of recreational activities and the activity-landscape principle, which allow us to consider design as a structural-modular process of drawing up a program of rest based on a set of simpler elements (elementary recreational activities, types of recreational activities and recreational activities). This methodology can be applied in health and spa resort practice, but it does not allow to solve the tasks set in this study, since it does not contain a methodology for describing the processes and reflects the activities of the consumer, and not the service offer of the health and spa resort.

4 Discussion

Developing a methodology for designing processes in relation to the sphere of health and spa services, we tried to use the most successful solutions found by previous researchers.

In the method of recreational design, we are interested in the principles of hierarchy and typology of design elements. However, the most recreational design according to the developers' version is subject to recreational people activities, we are also engaged in the solution of another problem - the design of services rendered to the customer by the service enterprise.

From the methodology of service planning, it seemed to us valuable to compile maps of the services provision; however, the mapping in the author's version is carried out in a

manual simplified form, which makes possible the practical application of this technique only to simple services.

From the SIPOC diagrams, we were attracted by the possibility to visualize all the service processes in their interrelation, but the tabular version of this visualization presented by the authors does not seem to us successful.

We took into account the noted advantages and disadvantages in the development of our resort and service design methods. Resort service design (RSD) is a process-structural variational modeling of spa services programs based on the needs of clients and the possibilities of a health and spa resort.

RSD authoring technique includes:

- principles of construction;
- typology and hierarchy of basic elements;
- structural model of the health and spa resort processes;
- design algorithm.

When designing its services, the health and spa resort must solve the following tasks:

- the definition of recreational specialization of structural elements;
- description of the specific service;
- arrangement of a set of services within available resources (resort program);
- financial calculation of the proposed program.

As the conceptual basis of RSD, engineering of business processes was used.

Proceeding from this, the basis of modeling is based on the following principles:

- the principle of process hierarchy;
- the principle of processes specialization (typology);
- the principle of periodicity (cyclicity);
- principle of contact.

The hierarchy principle is to identify the levels of processes subordination from the most elementary to the more complex ones, which are completed as a set of previous level processes. At the same time, processes of a higher level have a completely different qualitative content.

The specialization principle is in the fact that the processes of the resort service are qualitatively different from each other, which causes their specialization. This principle is realized by allocating the basic (target), auxiliary (providing) and managerial processes.

The periodicity principle is related to the fact that the nature of health and spa services causes their uneven consumption in the form of certain, more or less complete cycles.

The contact principle is to identify the processes of contact (that is, the direct service of holidaymakers) and contactless, that is, auxiliary (for internal consumers).

These principles allow us to consider the RSD as a structural-modular scheme (map) containing various combinations of tourist service processes in the health and spa resort.

The main concepts of RSD are, first of all, health and spa services. These benefits are realized by the consumer health and spa resorts.

Its simplest element is an elementary spa process (ESP), by which we mean an internally complete homogeneous element of health and spa services inseparable into technological components.

From separate ESPs there is a health and spa service - grouping of elementary processes (EP) in their interaction and sequence, perceived by the consumer as a homogeneous single action. These services include massage, balneotherapy, ultrasound diagnostics, sauna, etc. It should be noted that the service can be composed of several similar ESP (in the form of a course of procedures), and various ESPs, complementary to each other.

Combining services in accordance with their specification makes it possible to highlight the kind of health and spa service (e.g., recreation services, medical spa services, food services).

Kind of health and spa service determines the type of health and spa service and, accordingly, the type of health and spa resorts. It is an interconnected and interdependent mix of different kinds of spa service activity that occurs at the leading type of service (e.g., health and spa enterprises of leisure - rest home, boarding house, spa resorts of treatment - sanatoria, etc.).

Let's imagine a structural model of the health and spa processes (Fig. 2). This model is built based on the above principles and basic RSD concepts.

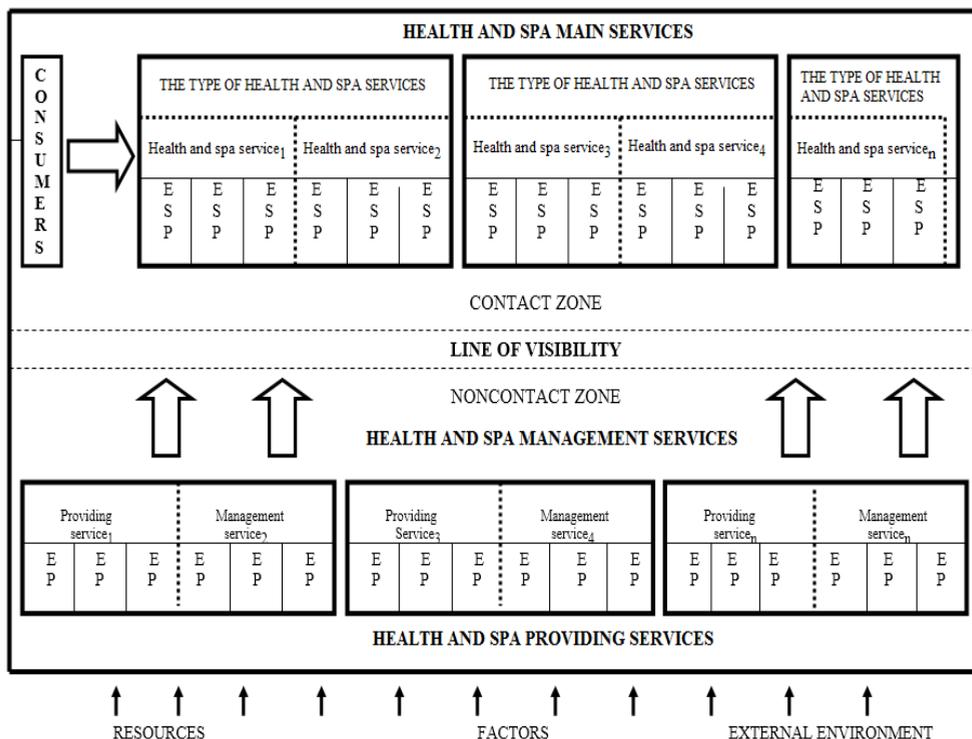


Fig. 2. The health and spa resort process model.

In accordance with the principle of specialization RSD, we have identified three groups of processes occurring in health and spa resorts:

- the health and spa main services, which are directly related to the client's health and spa services;
- health and spa providing services that support and provide basic sanatorium-resort services with the necessary resources;
- health and spa management services, without which neither basic nor providing health and spa services can be realized.

The health and spa main services are aimed at interaction with the external consumer, i.e. client health and spa resorts, health and spa providing services and health and spa management services are auxiliary and connected with the internal consumer, i.e. staff of the enterprise.

However, in the presented scheme, we as «providing services and management services», which is related to simplifying the model visibility and avoiding confusion, designate the supporting processes. In the presented model, all services are related to health and spa resorts, however, we retained the definition of "health and spa resort service" only for basic services.

5 Conclusions

In conclusion, when designing the health and spa services, a large number of ESPs is obtained. In order to improve the efficiency of processing a large amount of information, these ESPs need to be properly structured. To this end, spa services existing in the health and spa resort should be divided into three groups, each of which has its own distinctive features: the health and spa main services that provide health and spa services and management services.

Having defined the main, providing and management services, it is necessary to build a tree of health and spa services for the whole enterprise, and then proceed to detailing each process on the ESP, of which it consists.

References

1. T.N. Araslanov, Marketing v Rossii i za rubezhom **2(40)**, 106 (2004)
2. M.V. Vinogradova, Z.I. Panina, *Organizaciya i planirovanie deyatel'nosti predpriyatij sfery servisa: Uchebnoe posobie* (Dashkov i K°, Moscow, 2014)
3. V.G. Eliferov, V.V. Repin, *Biznes-processy: reglamentaciya i upravlenie: uchebnik* (INFRA-M, Moscow, 2015)
5. M.J. Bitner, Journal of Marketing, **56-58** (1992)
6. R.N. Bolton, J.H. Drew, Journal of Consumer Research **17**, 375-384 (1991)
7. S.W. Brown, M.J. Bitner, R.P. Fisk, Int. J. of Service Marketing **5-1**, 21-48 (2002)
8. B. Edvardsson, E. E. Sheuing. Managing Service Quality **4-4**, 24-31 (1994)
9. B. Edvardsson, T. Strandvik, Managing Service Quality **10-2**, 82-91 (2000)
10. B. Edvardsson, Int. J. of Service Industry Management **3-4**, 17-29 (1992)
11. P. Eiglier, E. Langeard, *Principles de politique marketing pour les entreprises de services* (Universite d'Aix-Marseille, 1976)
12. C. Grönroos, *Service Management and Marketing* (Macmillan/Lexington Books, New York, NY, 1992)
13. A. Parasuraman, V. A. Zeithaml, L. L. Berry, Journal of Marketing, **41-50** (1985)
14. L. Shostack, T.A. Schwartz, D.E. Bowen, S.W. Brown, *Understanding Services through Blueprinting, Advances in service marketing and management* (JAI Press, Greenwich, 1992)
15. K. Haksever, B. Render, R. Rassel, R. Merdjik, *Upravlenie i organizaciya v sfere uslug* (Piter, SPb, 2002)
16. Y. Akao, *QFD: Quality Function Deployment - Integrating Customer Requirements into Product Design* (Productivity Press, Cambridge, 1990)
17. R.J. Schonberger, E.M. Knod Jr., *Operation Management Continuous Improvement* (Burr Ridge, IL, Irwin, 1994)
18. D. L. Majkl, «Berezhlivoe proizvodstvo + shest' sigm» v sfere uslug: Kak skorost' berezhlivogo proizvodstva i kachestvo shesti sigm pomogayut sovershenstvovaniyu biznesa (Alpina Biznes Buks, Moscow, 2005)
19. I.V. Zorin, A.I. Zorin, T.A. Irisova, *Menedzhment turizma. Turizm i otraslevye sistemy: Uchebnik* (Finansy i statistika, Moscow, 2005)
20. URL: <http://www.fostas.ru/library>