QUALITY MANAGEMENT SYSTEM IN TOURIST COMMUNITY 
(METHODOLOGY OF PROCESS MODELLING)

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Abstract:

Requests of interested parties, amongst which the customer has the central position, are starting points of quality management system that complies with requirements of ISO 9001:2008 international norms. Regardless of the fact whether we want to arrange management system to meet the requirements of this norm, one should be able to recognize exact requests of interested parties. Classic structural model of organization must be upgraded through developed, documented and implemented processes. That is very important for all organizations, and tourist communities of places, communes, regions, counties and cities, too. That is the central topic of hypothesis. Especially in Croatia as a tourist country and this detail can provide competitiveness for Croatian tourism on global tourist market. Processes are one of structural elements of each management system. Scientists and experts do not agree about generally accepted methodology of process modelling. In this paper author offers IDEF0 diagram as a method for business process display. This method can be used in process modelling as a part of quality management system project in tourist community organizations, too.

Key words: quality, tourist community, competitiveness, process modelling methodology.

1. INTRODUCTION

Despite the fact that only one Tourist Community in Croatia implemented and certified its Quality Management System according the requirements of international norm ISO 9001:2008, the quality management system in tourist organizations is very important part of its management system. That is the Tourist Board of Velika Gorica City in Zagreb County. The Quality Management System is implemented and certified at the end of 2006. The director of the Tourist Community in that period was Ružica Rašperić, M. Sc., and the consultant was an author of this paper. Especially that is important detail for Croatia because the tourist communities structure is very reach.
The system of tourist communities consists of: tourist boards of places, tourist boards of communes, tourist boards of cities, tourist boards of regions, tourist boards of counties, Tourist Board of Zagreb City and Croatian Tourist Board (Law on tourism communities and the promotion of Croatian tourism, N.N. 152/2008). One of the basic requirements of quality management system according the ISO 9001, and one of eight basic principles of quality management is proving the process approach. That means the tourist community needs to define, model, document and implement their business processes. Independently of the degree of awareness of management in organization, processes can be developed in any of the following ways: 1) in a long-established manner - which is based on „know-how” of the most important parameters of business processes, with interventions only in situations when reliability of business process is seriously affected, 2) without any control, when in extreme cases the business process develops in completely uncontrollable conditions, 3) in partly controllable conditions – characterized by business process model according to chosen methodology, in conditions which are controlled in the same amount as the basic parameters that define them, and 4) in completely controllable conditions - those business processes whose basic parameters of definition are under complete control. Basic parameters of definition of business processes are: a) object of activity (material, information, product, service and similar); b) frequency of operation (continually, sometimes only once, and similar); c) area of activity (state, city, company/organisation, part of company, and similar.); d) manner of operation (usual, uncontrollable, in partly controllable conditions, in completely controllable conditions).

Process structure as a structural element of the management system of tourist communities and the assumption of its quality management system, tourist community will be able to manifest a greater impact on the economic aspect of tourist destination. Tourist community its goals achieves operating on the general benefit principle, and these goals are: 1) to encourage and initiate the development and improvement of existing tourism products and initiating the development of tourism product of area in which it operates; 2) promotion of the tourism product of destination; 3) developing an awareness of the importance of economic, social and other impacts of tourism. These goals achieving is important according the aspect of sustainable tourism. Sustainable tourism assumes management that ensures the continuity of the business success of tourist destinations. Both phenomena (sustained and continuity) include the continuous improvement of quality management systems in the time dynamics.

In order to create completely controlled environment for developing of all processes in an organization, and in tourist community, too, it is necessary that organizations processes be: 1) named, 2) described, 3) structurally/organised, 4) controlled, 5) managed, and 6) always improving. In order to fulfil it, business processes in organization need to be conceived, i.e. developed according to chosen methodology.

2. METHODS

The problem lies in the fact that ISO 9001:2000 norm (Quality Management Systems – Requirements) requires the proof that business processes are managed, but methodology of business processes developing is not being suggested (Drljača, 2002, 5-6). The choice of methodology, and often its definition, is left to be made by the organizations management.

Scientists and experts do not agree about generally accepted methodology of process modelling. Depends of the situation and main goal of research, many methods and tools can be used for process display and process modelling. Some of them are: 1) DFD - Data Flow Diagram as an information perspective; 2) SADT - Structured
Analysis and Design Technique as a functional perspective; 3) ULM - Unified Modelling Language as an organizational perspective; 4) eEPC - Even Driven Process as a process perspective. In this paper author offers IDEF₀ diagram as a part of SADT model as a method for business process display. This method is very commonly used for modelling business processes in organizations that have implemented quality management system according ISO 9001:2008 international norm in Croatia. This method can be used in process modelling as a part of quality management system project in tourist community organizations, too.

3. DEFINITION OF PROCESS AND PROCESS APPROACH

The word „process“ evolves from Latin word „procedere“, which originally means „move“ or „go ahead“. This word form was followed by noun „processus“, which is translated as „process“ and means „a series of actions, phases or events, development (in any direction or form) and transformation (inputs→outputs) of anything that was took under consideration (element, structure, sub-system, system, etc.).“

Process can be also defined as “a course, evolution or manner through which something was born or transformed, it is a development, a procedure …” (Domović, Anić and Klaić, 1998, 1163). HRN EN ISO 8402:1996 norm defines the process as a “group of mutually independent resources and actions which transform input elements into output elements.” Transformation of input elements into output is in fact a transformation of one into the other. Each process thus becomes unique and special.

Transformation of input into output is a system of complex interactions of operations and resources. It is a technology. It is “know how.” International norm ISO 9000:2000 defines the process as „group of connected or mutually dependent activities which transform input into results.” The application of process system in a company, its definition and mutual interaction, as well as the management of process system - can be called „process approach."

Figure 1. Process presentation

The process approach has the advantage of permanent managing of links between – particular processes (within the process structure), which is the structural element of management system, –and– combination and mutual interaction of these elements. Except process structure, structural elements of management system of every organization are: 1) strategic documents of company (mission, vision, strategy, politics, general and special managerial aims); 2) organisation; 3) resources; 4) partnerships, and 5) communication and notification. When applied in the quality management system in tourist community context, this process approach underlines the importance of the following:

- understanding and meeting of interested parties requests,
- need of supervision of quality management system in value added conditions,
- achieving results of quality management system and its efficiency, and
- continuously improvement of quality management system, based on impartial estimation.

Regardless of many possible types of processes, and diversities of process structures, all processes in organization and tourist community, too can be divided into four types:

- processes for the management processes of an organization (management processes),
- processes for managing resources (support processes),
- realization processes (core processes), and
- measurement, analysis and improvement processes (MAI processes).

Figure 2. Four typical types of business processes

*Management* processes are important for progress of core processes, as well as of support process. These are processes of development, planning, quality management, management of organisation, environmental management, too. Because of entirety and directions of their influence onto core processes - Management processes are called – *vertical* processes.

*Support* processes which are also called logistical or resourceful processes, are directed towards producing satisfaction of internal users within organisational structure. They are able to create added value for the customer. However, this influence
on making added value is indirect and is fulfilled through support of core processes. Support processes are auxiliary business processes and represent a support to core processes. With regard to direction of activities onto core processes, they are also called - vertical processes.

Core processes are focused on the achievement of satisfaction of customers, (buyers/users). They directly add new value to the product, meaning service. They meet requests of the customer and are generator of their contentment. Core processes, processes of fulfilment or realization, are processes whose result - in form of product or service has direct value confirmation on the market. The plan and the product in their creation are in core processes strongly integrated. Core processes are called - horizontal processes.

Measurement, analysis and improvement processes (MAI) include the processes needed to measure and gather data for performance analysis and improvement of effectiveness and efficiency. They include measuring, monitoring, auditing, performance analysis and improvement processes (e.g. for corrective and preventive actions). Measurement processes are often documented as an integral part of the management, resource and realisation processes, whereas analysis and improvement processes are treated frequently as autonomous processes that interact with other processes, receive inputs from measurement results, and send outputs for the improvement of those processes.

Numerous management, support, core and MAI processes develop within this process structure simultaneously. They have a series of interactions. Each interaction in certain measure affects the business process result in terms of meeting the interested parties request.

4. RESULTS

At identifying of processes in tourist community organization as an integral part of integrated management system in organization and dividing them into types, it is necessary to avoid identification of business function and business process in an organization, too. Essential differences are at least these as follows (Drljača, 2003, 2010):

- business function is static category, while process is dynamic category,
- business function is mostly operated within one structural unit of an organization, and is usually named after it, while process implies more participants from more structural units in an organization,
- business function is operated within an organization, while process can have participants from outside of the structural organisation, but who are important for progress of concrete process,
- business function is run by functional manager, and process is run by process manager, and identification of these roles must not be a rule but an exception,
- process is one of the possible inner aspects of supervision of costs, quality costs as well, while function is not,
- due to all these differences, function is a narrower concept than process.
**Table 1. Types of business processes of tourist community management system**

<table>
<thead>
<tr>
<th>Management processes:</th>
<th>Support processes:</th>
<th>Core business processes:</th>
<th>Measurement, analysis and improvement processes (MAI):</th>
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<td>8. Process of environmental management</td>
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Source: Made by author.

Basic task of management of an organization during of processes development is in fact establishing, directing and describing of events during transformation process of input into output. In order this task could be accomplished, we must have suitable methodology of business process development within the quality management system, too. Different organizations use dissimilar methodologies. Modelling of methodology in great measure depends on knowledge about quality management. Regardless of which methodology is used by teams who developing processes, they should remain consistent when they apply it in developing all processes in an organization. The management in an organization must create its own methodology or choose already existing methodology of process development. Teams for process development in practice often encounter the problem of verification of correctness of their own solutions.

This paper presents one of the possible approaches of methodology very commonly used for modelling business processes in organizations that have implemented quality management system according ISO 9001:2008 international norm.
in Croatia, including processes of tourist community organizations, too (Bešker and Injac, 2003).

1. **Identification of business processes** is initial task in process developing and demands (from the team): naming of the process, appointing of the leader (manager) of process, defining of its objective(s), defining of input and output requests, description of mechanisms, rules and controls. Afterwards, they must determine outer and inner users of process results, as well as designate process steps as consisting parts of the processes in tourist community organization, too.

2. **Diagram of the context of process** is simple display of process of tourist community organization at the highest level from which an interaction can be seen: rules, controls and mechanisms during transformation of input into output.

**Figure 3. Diagram of the context of business process**

![Diagram of the context of business process]

Source: Made by author.

3. **Display of static model of process** presents logical sequence of process steps development as consisting parts of processes of the tourist community organization. This phase of process development identifies structural units where individual process step develops, and locates control points at which measurements will be performed - and thus manage the process.

4. **Process description** describes requests that result from requests and needs of interested parties, then from specifications, norms, regulations, elaborations, methods and resources. Here are also identified requests, objectives and descriptions of their fulfilment, as well as allowed deviations. By defining of allowed deviations we in fact determine the minimum quality level of processes.

5. **Diagram of process decomposition** is methodologically confirmed graphical representation of the process with all its consisting parts - process steps. It represents logical sequence of process steps development. It specifies input, rules and controls, mechanisms and output of each process step. Diagram of decomposition represents a technology. It shows process of tourist community organization per process steps that logically develop in sequence. At least one exit from a process step is also an entry into the next. Process steps in the processes of tourist community organization in Velika Gorica city (for example) are identified applying IDEF0 diagram as a part of SADT model as a method for business process display as follows:
Figure 4. Decomposition of process of organizing and holding events

Source: Made by author.

- A-0.1 Analysis of interested parties request.
- A-0.2 Event planning.
- A-0.3 Event organizing.
- A-0.4 Event holding.
- A-0.5 Final activities.

6. Description of process steps in processes of organizing and holding events must specify input, output, mechanisms, rules and controls of each process step, as well as locate structural organization unit in which certain process step develops. Also, written procedure is named, if any of process steps should be additionally documented.

7. Presentation of dynamic model of the process is plan of implementation of developed process of organizing and holding events into functional structure of organization. The plan shows in which structural organization unit develops activities of each process step, and which unit of organization is responsible for their execution. Making of presentation of dynamic model of process is a precondition of the process organisation itself. Table 2. shows the dynamic model of process of organizing and holding events in tourist community of Velika Gorica city, as a core business process.
Table 2. Dynamic model of process of organizing and holding events

<table>
<thead>
<tr>
<th>Process steps</th>
<th>Structural units</th>
<th>Assembly</th>
<th>Tourist council</th>
<th>Supervisory board</th>
<th>Directors office</th>
<th>Quality manager</th>
<th>Planning department</th>
<th>Promotion department</th>
<th>Financial department</th>
<th>City administration</th>
<th>Partners</th>
<th>Customers (Tourists)</th>
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<tbody>
<tr>
<td>Analysis of interested</td>
<td>A-01</td>
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<td>Event planning</td>
<td>A-02</td>
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<tr>
<td>Event organizing</td>
<td>A-03</td>
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<td>Event holding</td>
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<td>Final activities</td>
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Source: Made by author.

8. Establishing of responsibility for the process is logical continuation of work on process development. It implies exact establishment of responsibility of concrete executor of individual process step. After establishment of responsibility, the conditions for establishment of management team for concrete process are prepared. Management team is headed by process manager. It can be Quality Manager or other competent person. In this way we have a model of process organisation, based on team work (Sikavica, 1998, 108-116).

9. Plan of measuring within the process is based on description of business process defined limits of allowed deviations, up to which process still shows reliability as one of its crucial characteristics. The plan of measuring defines names of control points where certain measurements will be performed. It also defines target value, allowed deviations and measuring method. By all these measurements, comparisons with target values, and possible application of corrective measures and activities - we manage the process in tourist community organization.

10. Plan of providing information within process is necessary in order to clearly define: which participant of process provides the information, who receives it, what its contents is, and when is the information sent and received.
11. Making of further process documentation implies writing of procedures for particular process step which definitely needs it, and writing of lower level documents, like work instructions, check lists, plans of corrective measures and activities, etc. The process of organizing and holding events in tourist community organization in Velika Gorica city is supported by five written procedures, one for each process step: 1) Procedure for analysis of interested parties request; 2) Procedure for event planning; 3) Procedure for event organizing; 4) Procedure for event holding and 5) Procedure for final activities providing. Besides that some of procedures are mandatory according to the requests of international norm ISO 9001:2008.

5. ECONOMIC IMPACT OF QUALITY MANAGEMENT SYSTEM

Tourist communities are an important part of the tourism institutional infrastructure of the tourism sector in Croatia. Their economic impact on the economy of the area where work is multifaceted and is manifested through: 1) coordination of all subjects involved in creation a tourist destination products; 2) through action to achieve the objectives laid down by law, and 3) promotion of quality as a resource that has economic value and acting on the principles of quality management, because only one control system is arranged and operates on the principles of quality management can...
manage their business processes in a way that the product or service as a result of these processes are of good quality, which measures the degree of satisfaction of tourists.

Ad 1) Tourism is often, even the highest officials in government and other institutions, called the economic branch. Given that the tourism expenditure is only a part of the total revenues in various branches, can be concluded that tourism should not be equated with an economic branch as it makes a component of various economic branches and activities (Pirjevec, 1998, 110): catering industry, transport, sales, tourist agencies, hospitality industry, etc.

Tourist community in a particular area, within its powers and duties in the creation of the tourism product of tourist destinations, coordinate all these activities to achieve a synergistic effect which is measured by economic parameters: 1) number of arrivals; 2) number of tourist and overnight stays; 3) consumption and most importantly and often forgotten; 4) financial effect. In this sense Tourist community has a significant impact on economic developments in the area in which it operates.

Ad 2) Effect tourist board established by the Law (Law on tourism communities and the promotion of Croatian tourism, N.N. 152/2008) includes the economic aspect of their action in the direction of: 1) management of public tourism infrastructure given to management; 2) organizing events and performances; 3) publishing of commercial adverts, etc.; 4) sale of souvenirs, guide books, etc.; 5) intermediation in renting accommodation; as well as 6) performing other duties in the public interest in tourism development and destination. The quality of the tourist community action depends on the contribution of tourism to the area where it operates. And in this way Tourist Board manifests its economic impact on the economic development of areas in which it operates.

Ad 3) Tourist community, which has been introduced and certified quality management system in accordance with the requirements of ISO 9001:2008, has: 1) designated, documented and implemented business processes; 2) documented management system; 3) staff educated for quality management; 4) orientation to the customer/tourist; 5) effect on principles of quality management; 6) lower risk for the entropy of the system, which means more economic using of resources that are available entrusted to manage. Through such action contributes to overall economic activity of area in which it operates (employment, evaluation of resources, infrastructure development, financially impacts).

The results of research has been conducted since 2000, about the dynamics of development the quality management system in Croatia (Drljača, 2008), show that industries which are a component of tourism, between the most efficient according the total income, except food and beverage (77,14%) no organizations with certified quality management system or their number is negligible: retail sales (13,33%), land transport (4,71%), hospitality industry (0,00%), furniture manufacturing (0,00%).

The role of tourist communities in raising the quality level of management system of its members is significant. Motivating its members to raise the quality level of management system through the implementation of quality management system ISO according to the requirements of international norm ISO 9001:2008, and modelling the process and its structure as a structural element of management system, Tourist community also manifests its economic impact on the areas in which it operates. In this way, the quality management system of Tourist community manifests its economic contribution to the business success of the tourist destination. The quality management system on that way contributes to the sustainability of tourism and increasing competitiveness of tourist destinations as a whole. Apart from the above examples in the introduction, this option in Croatia is completely unused.
6. CONCLUSION

In the audit of quality management system in tourist community organization it is necessary to document and prove the request for process approach and process management. The difficult question for organizations is: which methods were used to name, describe and organize structural units of processes, and how were these processes controlled, managed and constantly improved. There are no ready universal solutions. Imitating of another company’s solutions or adoptions of lesser adjustments of these solutions as their own optimum solutions are - delusion, and in practice will be causing entropy. Every process is different. It can even have the same name, same number and same names of process steps, same inputs and outputs, but still there are no identical processes. Differences and originalities are happening in the interaction of inputs and outputs, rules, and controls, as well as mechanisms in each process step - in the area of transformation of inputs into outputs. In the context of quality management systems we may conclude that ISO 9001:2008 international norm does not suggest methodology of process development, but demands the proof that processes are being managed. It can be concluded that every methodology of process developing is satisfactory, if it can prove the management of processes. Very important matter to know is that the quality of destination means the quality of all integrated factors of tourist destination: local community (city, county, etc.), members of tourist community, tourist community organization and tourist as customers. Tourist community organization can be a leader in quality management system implementation process of destination. It is very important for Croatia as a tourist country, but the fact that only one tourist community organization in Croatia, in Velika Gorica city, has a certificate as a proof about international ISO 9001:2008 quality standard implementation, can’t be enough. Quality management system of Tourist communities and its example states can significantly affect the quality management system, and business processes and services as their results, too, and thus make the destination known for its quality. In this sense, the quality and the Tourist community as its carrier manifest its economic impact on the development of the area where Tourist community operates. In this way, creation of economic assumptions, Tourist community contributes to the development of sustainable tourism of tourist destination, too.

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Ključne riječi: kvaliteta, turistička zajednica, konkurentnost metodologija modeliranja procesa.

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