

# Monitoring of Quality Costs in the Croatian Hotel Industry

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The implementation of a quality cost system in hotel industry management accounting enables an increase in competitiveness in the race to provide a better service adjusted to the needs of the guests. In order to be able to manage quality costs for the purpose of reducing the costs of non-quality, it is necessary to ensure a methodological basis for monitoring and assessment of the effects of managerial decisions on investments into total quality management systems, as well as get insight in the amount and structure of quality costs. The purpose of this survey, carried out in 2002, was to find out to what degree the preconditions for the implementation of quality cost accounting as part of management accounting, a subsystem of the management information system, have been ensured in the Croatian hotel industry. We conducted an extensive survey that included 41 business systems, i.e. 140 hotels (31.1% of the total number of hotels in Croatia). The sample included hoteliers from all more significant tourist destinations in Istria, Kvarner Region, Dalmatia, Zagreb and continental Croatia, thus ensuring a geographically balanced account of the observed area.

**Key words:** quality costs, management accounting, TQM, hotel industry, USALI, ABC, TC.

## Spremljanje stroškov, povezanih s kakovostjo, v hrvaškem hotelirstvu

Uvajanje sistema stroškov, povezanih s kakovostjo, v upravljavsko računovodstvo hotelirske industrije, omogoča povečanje konkurenčnosti v bitki za zagotavljanje boljših storitev gostom. Vendar, da bi lahko upravljali s stroški s ciljem zniževanja tistih, ki so povezani z neakovostnimi storitvami, pa je potrebno zagotoviti metodološko osnovo za spremljanje in oceno učinkov managerskih odločitev glede investicij v vseh sistemih kakovostnega managementa, kot tudi vpogled v vsoto in strukturo stroškov, ki so povezani s kakovostjo. Cilj te raziskave, izvedene leta 2002, je bil, da se ugotovi, do katere stopnje so zagotovljeni predpogoji za uvedbo stroškovnega računovodstva, povezanega s kakovostjo, kot dela upravljavskega računovodstva in podsistema managementa informacijskega sistema v hrvaški hotelirski industriji. Raziskava je bila obsežna in je vključevala 41 poslovnih sistemov, tj. 140 hotelov, kar je 31% vseh hotelov na Hrvaškem. Vzorec je vključeval hotele iz vseh pomembnejših turističnih destinacij Istre, Kvarnerja, Dalmacije, Zagreba in kontinentalne Hrvaške, s čimer je bila zagotovljena zemljepisna uravnoteženost raziskovanega področja.

**Ključne besede:** stroški, povezani s kakovostjo, upravljavsko računovodstvo, TQM, hotelirska industrija, USALI, ABC, TC.

## 1 Introduction

The purpose of this paper is to present the results of the survey that produced answers to the following questions:

- Are quality costs monitored and presented in the Croatian hotel industry?
- How do Croatian hoteliers perceive quality and in which way do they collect guest comments and opinions (through surveys, serviexpress, interviews, welcome cocktails, book of impressions, congratulations cards etc.)?
- Do they monitor information by responsibility centers?

- Do they prepare reports on costs and income of responsibility centers using the USALI?
- Do they use the activity-based costing or target costing method in the preparation of quality cost information?

## 2 Quality Cost Accounting as Part of Internal Business Accounting

One of the main postulates of TQM is to offer the buyer the best quality/price ratio possible. Total Quality Management (TQM) is a system for continuous improvement of the quality of products and services, i.e. continu-

ous improvement of the quality of the entire business. It is defined as follows (Avelini Holjevac, 2002:38-39):

- TQM is a system ensuring improvement, increase in flexibility, effectiveness and efficiency of business.
- TQM strives to ensure and create such conditions in which all employees can work together to achieve a single goal with maximum effectiveness and efficiency, i.e. to make a product or provide a service when, where and how the buyer and customer so wish and expect the first and every other time.
- TQM is based on the concept of continuous enhancement and improvement of processes, permanent quality and teamwork, all of which leads to continuous improvement.

Starting from the premise that *the one who manages costs, manages the business results* (Avelini Holjevac, 2000:14), we come to the conclusion that it is very important to ensure a relevant methodological basis to include costs arising from managerial decisions to invest in the total quality management system into business accounts. Therefore, quality costs must be identified and included in the accounts since such information is necessary in the quality system management process.

When speaking about quality costs, it should be emphasized that we are not referring only to the costs of the Quality Department (service, division or similar), but primarily to the costs related to establishing, securing and improving the quality level or those related to the need to repeat certain activities due to lower quality.

The estimation of the amount of the costs arising from investments in quality and those incurred on account of non-quality is an important factor in quality management and the foundation for estimation and assessment of total business performance.

Only when measurable, quality costs enable the management to make decisions on value-based information. As they represent instruments for measuring and control

of the financial effects of TQM, the need arises to use an analytical approach in the first phase of classifying and recording the same for the purpose of ensuring the pre-conditions for the implementation of a quality cost reporting system.

## 2.1 Classification of Quality Costs

Quality costs are costs related to TQM and they include:

- (a) costs related to investments in better quality, and
- (b) costs incurred due to non-quality.

*Quality costs represent the total amount needed to spend in order to create a product or service in accordance with quality standards. Research shows that in many business systems it is necessary to invest for this purpose 3-4% of the total realization (Peršić, 1999:135). Unlike these, the costs incurred due to non-quality appear when a business process goes awry, when the errors have already occurred, regardless of whether the effects have reached the customer or not. It is estimated that such costs account for 30-40% of total quality costs in many business systems, even though it would be wise to reduce them to a reasonable percentage of about 5-10% (Peršić 2000:139)*

Operational quality costs are incurred in the process of production and provision of services. During these processes, all preventive measures must be taken in order to adjust the existing product portfolio to market demands in accordance with contemporary trends. The costs of such preventive measures fall under **quality costs**. It is also necessary to monitor the costs arising from deviations from the desired quality, i.e. **costs of non-quality**. *The nature of quality costs depends on specific features of activities (production or provision of services), and requires that such costs be identified and adequately included in internal accounts by type, origin and/or activity, and presented by cost bearers (Peršić, 2000:139).*

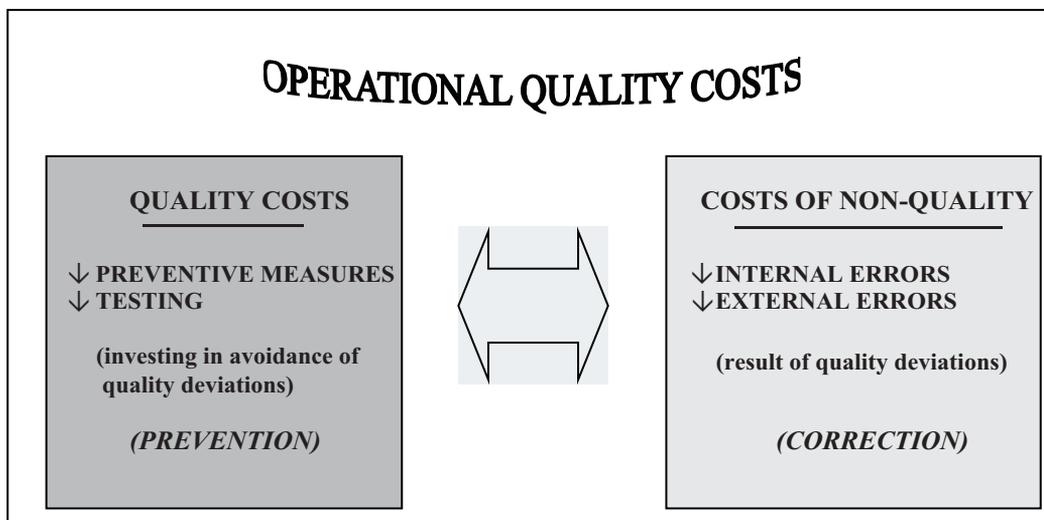


Figure 1: Operational Quality Costs (Source: Peršić 2000: 139)

Costs grouped in the above-mentioned way become preconditions for planning, monitoring and improvement of the quality management system. The necessity of quality cost monitoring arises also from the mere structure of the quality cost system that consists of the following processes (Arsovski, 2002:38)

- development of a quality cost model in line with the concrete organization,
- definition of procedures and policies for:
- planning of financial resources (including quality costs and a budget for corrective measures),
- ensuring financial resources,
- monitoring and control of the flow of financial resources,

- analysis of deviations and management activities and corrective measures,
- method of reporting and periodical rechecking,
- development of a quality cost implementation model,
- identification of key factors affecting quality costs,
- definition of the quality improvement project,
- assessment of financial effects of the introduction of the quality system.

For the purpose of determining the present situation concerning the quality cost classification in the Croatian hotel industry we divided the offered quality costs into two basic groups and sub-groups. The interviewees were supposed to mark those that are included in their accounts or some other records.

Table 1: Quality Costs in Croatian Hotel Industry Accounting (Source: Analysis by the author)

No.		Description	No. of interviewees	%
		<b>I. Prevention Costs</b>		
1.	Quality costs	Reference books	31	84
2.		Plants	28	68
3.		Travel expenses for visits the purpose of which is to get to know the competition	27	66
4.		Flowers in the reception area	24	59
5.		Supplier analysis	23	56
6.		Gifts for guests	21	51
7.		Rewards for workers	20	49
8.		Visits to competing business entities	19	46
9.		Flowers in rooms	19	46
10.		Education in quality assurance	16	39
11.		Activities in cooperation with suppliers	14	34
12.		Costs related to quality assessment in the selection of suppliers	11	27
13.		Costs related to the checking of suppliers' activities in the process of their selection	10	24
14.		Costs related to quality planning	9	22
15.		Costs related to new product launches	9	22
16.		Pillow sweets	7	17
17.		Costs related to supplier consultation	3	7
		<b>II. Testing Costs</b>		
1.	Quality costs	Hotel managers' stays at hotels to get familiar with products and services	15	37
2.		Costs related to determining the quality of products bought through inspection upon reception	14	34
3.		Lab testing	8	20
4.		Costs of stock testing	7	17
5.		Cost of quality AUDIT (independent assessment)	5	12
6.		Cost of quality AUDIT (independent check)	4	10
7.		Supervision (specialized organizations)	4	10
8.		Costs related to <i>no name</i> guests	3	7
9.		Materials and supplies necessary to perform control	1	2
		<b>III. Costs arising due to internal errors (low-quality product or service as yet not affecting the guest)</b>		
1.	Costs of non-quality	Reduced selling prices due to low quality	14	34
2.		Repeated services (cleaning, towels) if the first-time service proved not good	12	29
3.		Loss of earnings due to low quality	5	12
4.		Junk due to quality deviations	3	7
5.		Repeated control and testing	3	7
		<b>IV. Costs arising due to external errors (low-quality product or service already affecting the guest)</b>		
1.	Costs of non-quality	Discounts due to guest complaints	29	71
2.		Free services	26	63
3.		Subsequently determined expenses (complaints from previous years)	14	34
4.		Discounts to guests on the spot	9	22
5.		Discounts to tour operators for defaults in the fulfillment of contracts	5	12

The research results show that Croatian hoteliers have recognized the importance of quality cost monitoring, and that there are analytical preconditions for creating a quality cost monitoring system. The hoteliers believe that by increasing their investments in quality and reducing all those costs incurred due to non-quality they are moving closer to achieving business success *...because every monetary unit or work hour used to produce non-usable products... can at the same time be used to produce better products or improve the existing products or business processes (Peršić, 2000:138).*

As far as **quality costs** are concerned, more than 50% of the interviewees recognized the costs related to visits to competing business systems, supplier analyses, reference books, flowers in rooms and the reception area, plants, gifts for guests, rewards for workers and study visits.

When speaking about **costs of non-quality**, more than 50% of the interviewees recognized two types of costs, i.e. discounts awarded to guests due to defaults in the provision of agreed or advertized services (free service due to non-quality) and discounts arising from low-quality service complaints.

Quality costs are investments in better quality and results of non-quality expressed as values, which means that it is necessary to ensure a methodological basis for monitoring and assessing the effects of managerial decisions on the amount and structure of quality costs. From the total number of interviewees, as many as 90 recognized quality costs and expressed their willingness to keep records of the same in their accounts. Regardless of the fact that most business systems that participated in the survey did not have a quality system, they did however recognize quality costs (50% of the interviewees) such as: visits to competing business systems, supplier relations, reference books, plants and flowers, gifts for guests, rewards for workers and guests, and study travel. More than 50% of the interviewees recognized non-quality costs such as discounts and free services due to guest complaints.

In order to be efficient, the process of continuous quality improvement must include all segments of a business system, which is one of TQM's main guidelines: *...inclusion of all employees, customer orientation, benchmarking and continuous improvement (Buble, 2000:44).*

Cross-functional teams, presupposing horizontal communication between functions and departments and including suppliers and buyers, are formed for the purpose of implementation of the mentioned process. The so-formed teams are coordinated by a central team whose members *...become responsible moderators selected from the lines of sub-team leaders, which ensures close coordination within the framework of objectives of the parts and of the whole (Peršić, 2000:184).* Such a form of organization creates a new organizational culture in which bureaucratic forms of control by specialized services are replaced by a system in which all employees bear responsibility. Cross-functional teams are responsible for ensuring compliance with high quality standards, and not for ensuring short-term profit.

For Croatia, the results of the survey show that 57% of the interviewees already implemented tasks for improvement and development of a quality system in their organizational structure. In 9% of the cases such tasks were entrusted with special Quality Departments. Here it must be emphasized that the interviewees had multiple-choice questions. No one stated under *Other* that the improvement and development of a quality system was entrusted with cross-functional teams.

## 2.2 Keeping Records of Quality Costs

By keeping records of quality costs, management accounting enables managers to enhance the quality of products and services, which is a precondition for the reduction of costs arising from customer dissatisfaction or shortcomings discovered before the guests had a chance to encounter them (costs of non-quality), and therefore the total costs as well.

Table 2: What is the purpose of keeping records of and monitoring quality costs? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Adjustment to the needs and wishes of buyers	29	71
2.	Contribution to the improvement of quality of the organization and system as a whole	22	54
3.	Adjustment to the regulations on categorization	20	49
4.	Identification and elimination of causes of costs of non-quality	19	46
5.	Employee incentives to achieve better quality	18	44
6.	Raising the level of awareness about the interdependency of production and sales	13	32
7.	Meeting the ISO 1400 ff., HACCP and other standards	9	22
8.	Elimination of bottlenecks	9	22
9.	Assessing the contribution of particular programs to business performance	9	22
10.	Factors in the development of personnel, especially management personnel	9	22
11.	Contribution to the level of reporting in the business system	8	20
12.	Finding and sanctioning those responsible for non-quality	6	15
13.	The only measurable form of assessment of TQM's effects	4	10
14.	No response	6	15

In management accounting, the quality cost reporting method must be adjusted to the demands of the management, so that the management could assume the responsibility and influence the satisfaction of guests and thus bring about a reduction of costs of non-quality.

Information related to quality costs represent a resource, *input*, in the management information system. *Quality cost reduction enables increase in profits without increasing the sales, buying new equipment or hiring new people (Crosby, 1989:98).*

Table 3: Do you keep records, monitor and present data significant in determining the costs of quality in any way?  
(Source: Analysis by the author)

No.	Description	ACCOMMODATION SERVICES		FOOD PREPARATION SERVICES		FOOD AND BEVERAGE SERVICES		OTHER TOURISM SERVICES		AUXILIAR, ADDITIONAL AND ADMINISTRATIVE SERVICES	
		No. of interviewees	%	No. of interviewees	%	No. of interviewees	%	No. of interviewees	%	No. of interviewees	%
1.	Survey	26	63		0		0	21	51	6	15
2.	Magazine	21	51		0		0		0		0
3.	Plan	26	63	23	56	21	51	23	56	18	44
4.	Research by external agencies	7	17		0		0		0		0
5.	Statistics	28	68	19	46	21	51		54	15	37
6.	Reports	26	63	26	63	28	68	22	56	20	49
7.	Check lists	12	29	10	24	11	27	23	12	3	7
8.	VIP client check lists	11	27	7	17	8	20	5	15	1	2
9.	Serviexpress	8	20	6	15	9	22	6	20	2	5
10.	Top 10 clients list	7	17		0		0	8	2	1	2
11.	Program for guests – entertainment & other activities	9	22	9	22	8	20	1	15	3	7
12.	Reservation procedure	21	51		0		0	6	0		0
13.	Procedure for a la carte program, theme nights, decorations		0	19	46	19	46		0		0
14.	Show cutting/cooking procedure		0	9	22	9	22		0		0
15.	Room service procedure		0		0	13	32		0		0
16.	Mini bar procedure		0		0	15	37		0		0
17.	Hygiene standards		0	25	61		0		0		0
18.	Kitchen work safety procedure		0	21	51	17	41		0		0
19.	Buffet/table setting procedure		0		0	17	41		0		0
20.	Entertainment program		0		0		0	19	46		0
21.	Supplier research		0	16	39		0		0		0
22.	Restaurant work safety procedure		0		0	1	2		0		0
23.	Other		0	2	5	1	2		0		0
	Total no. of documents	202	25	192	24,2	198	25	134	16,9	69	8,7

Although 49% of Croatian hoteliers consider that the purpose of keeping records of and monitoring quality costs is to meet the regulations on categorization, 71% of the interviewees believe that adjustment to the needs and wishes of buyers is the purpose of the afore-mentioned. The second most frequent answer selected by 54% of the interviewees is that the purpose of keeping records of and monitoring quality costs is in that it contributes to the improvement of quality of the organization and system as a whole. Unfortunately, only 10% of the interviewees actually see that the purpose of keeping records of and monitoring quality costs lies in the fact that it represents the only measurable method for assessing TQM's effects. Insufficient familiarity with the term, content and role of quality costs in a business system is the biggest obstacle and the fundamental reason why this subject is not approached to in a more serious manner. One of the reasons is also the insufficient investment in education, especially education in the field of quality.

### 2.3 Reporting about Quality Costs

The quality cost management system is based on information grouped into reports in order to enable continuous monitoring and comparison with real results. The goal is to present *as current and fresh as possible* data that enable making short-term decisions whereby... *quality costs must be analyzed separately and the preparation of reports must be based on such criteria that represent the preconditions for quality cost measuring* (Peršić, 2000:157). In the quality cost management system management accounting has a central role that consists of establishing preconditions for reporting. Quality cost accounting as a subsystem of management accounting must make possible the monitoring of quality costs by type, activity and all segments, depending on the specific features of tourism services. From 41 interviewees only 6 answered that documents concerning the quality cost monitoring system existed in their business system.

Quality cost management presupposes measurability of quality costs, identification of the causes of their occur-

rence and possibilities for their improvement. Therefore, the quality management system must include continuous testing (checking) of a) internal processes in order to find possibilities for improvement; b) of suppliers that are also a very important factor of internal processes in the circle of achieving quality; and c) of buyers whose needs are our guiding light. The survey covered the methods of keeping records of, monitoring and presenting data significant in determining quality costs.

Most reports are prepared with regards to accommodation (25%) and food and beverage services (24%). 17% reports are related to other services, and only 9% to auxiliary, additional and administrative services. As far as structure is concerned, we are mainly speaking of statistical data, elements of various reports and procedures, whereas there are not too many guest surveys. The results of surveys carried out by external agencies or data concerning supplier perceptions are used to a very small degree as well. The above-mentioned indicates a need to direct more attention to demands of guests and business partners, as it is a known fact that the product and service portfolio must be adjusted to their needs. The investments in the modification of the product and service offer and the effects of such modifications on possible errors are neglected.

Guest (customer) surveys in the field of accommodation services are carried out in the case of 63% of the interviewees, and 51% of the interviewees carry out surveys in other fields as well. The above-mentioned data lead to a conclusion that there is still a high percentage of hotel systems in Croatia that have not recognized the importance of customer surveys in all segments of their offer.

The above-mentioned indicates a need to dedicate more attention to the segment of quality assurance costs, i.e. the costs of preventive (avoidance of possible errors) and corrective measures (the consequence of adjustment to standards).

In the case of 33 interviewees (81%) customer survey results affect the improvement of the quality of service, employee motivation system and increase in business results. The goals achieved by carrying out customer surveys are numerous, e.g. obtaining feedback about hotel guest impressions, removing shortcomings noticed by guests, mutual satisfaction, focusing on low grades (e.g. ecology, beach cleanliness, environment etc.), working on the weak points identified by the survey, developing the offer and enhancing the service.

In the case of 3 interviewees customer survey results do not affect the improvement of the quality of service, employee motivation system and increase in business results (due to the financial situation which does not enable the same). Although this is only a small number of interviewees, this still indicates that there are such business systems that have not recognized the importance of customer surveys and the possibilities in which the information obtained from customers may be used. In the case of 5 interviewees customer surveys are not carried out at all, but they do keep track of the surveys carried out by

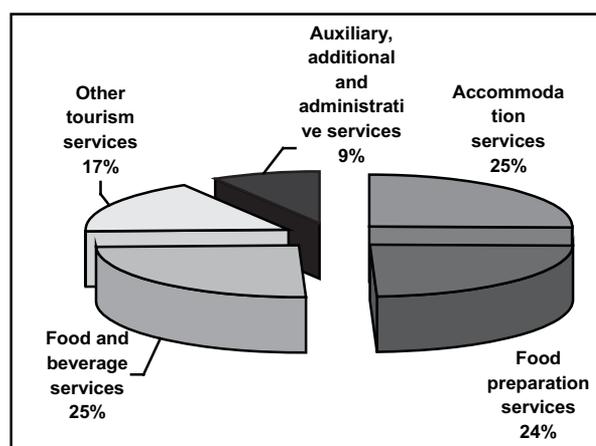


Chart 1: Quality Cost Monitoring Structure By Departments  
(Source: Table 3)

external agencies and are doing everything that is in their power to satisfy their guests. They also said they would try to carry out a survey.

### 3 Reporting Standards in the Field of Accounting in the Croatian Hotel Industry

The USAH<sup>1</sup>, as the forerunner of the USALI<sup>2</sup>, was originally established in 1926 by the Hotel Association of New York City. Since then, the system has been revised several times. *The ninth revised edition of the USALI meets the demands of hotel managers for a unique system for classification, organization and presentation of data expressed as values in a clearly defined system for reporting about externally comparable internal results (Peršić, 2003:1).* The standard reporting system is used in all hotel companies that wish to compare their results because it ensures transparency of information concerning the business results realized by particular responsibility centers called departments, and allows cross-comparison of internally realized results with regards to particular activities within particular companies. According to the USALI reporting standards, profit responsibility centers are those departments that generate income. Those are (*Uniform System of Accounts for the Lodging Industry, 1996: 31 – 144*):

<b>Report no.</b>	<b>Report name</b>
1	– Rooms
2	– Food
3	– Beverages
4	– Telecommunications
5	– Garage and Parking
6	– Golf Course
7	– Golf Pro Shop
8	– Guest Laundry
9	– Health Center
10	– Swimming Pool
11	– Tennis
12	– Tennis Pro Shop
13	– Other Operated Departments
14	– Rentals and Other Income
28	– House Landry
	– Statement for Gaming Operations
	– Casino Department

Responsibility centers, also recognized as cost centers, belong to shared overhead departments the costs of which must be covered by the income from regular activity:

15	– Administrative and General Affairs
16	– Human Resources
17	– Information System
18	– Security
19	– Marketing

19 a	– Franchise Fees
20	– Transportation
21	– Property Operation and Maintenance
22	– Utility Costs
23	– Management Fees
24	– Rent, Property Taxes and Insurance
25	– Interest Expense
26	– Depreciation and Amortization
27	– Income Taxes
29	– Salaries and Wages
30	– Payroll Taxes and Employee Benefits

The 32 envisaged internal reports have been adjusted to specific conditions in the hotel industry and must comply with the principles of responsibility, controllability and accountability. Responsibility is the main principle of making internal reports for each particular responsibility center. In order to be able to include such data into the accounts adequately, the costs must first be classified as fixed or variable and assigned to a certain cost center, and monitoring of interdependency of particular internal income and expenses must be ensured. In order to enable the preparation of such reports, an internal account by responsibility must be formulated (responsibility accounting). The primary task of the mentioned reports is to present income, expenses and particular results for a defined reporting period. The reports based on the USALI enable transparency and consistency of data contained in reports, which further enables detection of deviations and their points of origin, as well as proposing measures for their elimination or removal of bottlenecks that have caused them.

Management accounting represents a necessary precondition for ensuring appropriate data that are the subject of reporting in the USALI. 29% of the interviewees base their internal reporting completely on the USALI, 29% base their internal reporting partly on the USALI, and 20% intend to implement the Uniform System of Accounts in the Lodging Industry. 5% of the interviewees are not familiar with the meaning of the term USALI, and 2% do not intend to base their reporting on the said system. The survey showed an increase in the number of Croatian hotel systems that base their internal accounting completely on the USALI in comparison with the results from the 2001 survey when there were only 27.5% such systems (*Turčić, 2001:100*).

A four-level internal system of accounts is a precondition for business monitoring. Its task is to shape goal-oriented standard reports based on the USALI that are necessary for making quality managerial decisions. The preparation of relevant reports at all hierarchical levels will only be possible once the cost monitoring is associated with particular activities in a system of accounts.

<sup>1</sup> Uniform System of Accounts for Hotels

<sup>2</sup> Uniform System of Accounts for the Lodging Industry

Table 4: Do you have a four-level internal system of accounts based on the USALI? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Level 1 – legal entity within a complex business system, chain, corporation	16	39
2.	Level 2 – segments as responsibility centers	22	54
3.	Level 3 – synthetic accounts of assets, capital, expenses and income	24	59
4.	Level 4 – analytical accounts, codes, specific features of the activity in question	27	66
5.	Other	1	2
6.	No response	8	20

Business systems using the USALI envisaged in most cases (66%) the possibility of monitoring up to the fourth level, i.e. analytical accounts were grouped according to specific features of the activity in question. This information leads us to conclude that in the Croatian hotel industry the preconditions for inclusion of quality cost reporting into the existing internal reporting system have been realized. This is necessary because contemporary business operations of hotel companies require modernization of the information system to include all relevant information concerning business quality and quality costs, thus enabling the management to see the real situation for the purpose of making timely decisions.

The fact that as many as 95% of the interviewees wish to find room in their systems of accounts for quality cost monitoring, mainly at the level of cost centers (41%), is encouraging. Quality costs that are already included in the system of accounts are: flowers, plants, free services, employee education, study travel, management education, music, entertainment & animation, decoration, gifts for partners, welcome drinks, professional magazines, reference books, gifts for guests, rewards for workers, discounts due to complaints, quality testing, tastings, transportation of hotel guests, activities in cooperation with suppliers, standardization of materials, groceries, small supplies and equipment, space decoration, arrangements, professional advancement and specialization, discounts, compensations, costs of court proceedings, subsequently established errors, bonus services, sponsorships...

In the case of 10% of the surveyed business systems the user of reports on quality costs is senior management. Middle management is the user in the case of 21% of the surveyed business systems, whereas in the case of 10% of the surveyed business systems the reports reach low management as well. Compared to the results of the surveys

carried out in 1997 (Peršić and Ilić, 1998:141) and 2001 (Turčić, 2001:99) the obtained results indicate a positive trend. More to the point, in 1997 internal accounting data in most cases did not reach low management, middle management used them in 13% of the cases, whereas senior management used such information in 82% of the cases. The 2001 survey showed that reporting was directed at low management as well (9.3%). Middle management was the user of accounting reports in 24.9% of the cases, whereas senior management used such reports in 65% of the cases. Research shows that the number of users of internal accounting information on lower levels is increasing. This result is relevant for the quality cost accounting because quality costs occur in processes and activities, and all employees are invited to participate in the reduction of the same.

In order to react as promptly as possible in case of deviations, the intention is that the data included in the reports be as current and fresh as possible. The situation in Croatian hotel business systems that have already implemented a quality cost reporting system indicates a need to reorganize such systems with the aim of achieving an increase in the preparation of reports on a daily basis. Quality cost reporting is mainly done on a monthly basis. This result was obtained from the previous surveys as well in which the reporting was done on a monthly basis in the case of 85% of the interviewees (Turčić, 2001:79).

In order to react as promptly as possible in case of more serious deviations, the intention is to shorten the reporting deadlines in order to get as current and fresh data as possible. Therefore, even such business systems that have implemented a quality reporting system in accordance with the ISO standards should try to report on the quality costs on a daily basis.

Table 5: Do you have a quality cost reporting system? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Number of interviewees that answered yes	9	22
<b>Quality cost reporting levels</b>			
1.	At the level of cost centers	5	12
2.	Only at the level of the business system as a whole	4	10
3.	At the level of responsibility centers	4	10
4.	At the level of particular activities	1	2
5.	Other	0	0

In spite of the possibility to separate from the start certain relevant amounts regarding quality and non-quality costs in certain analytical accounts, such costs are not shaped in most business systems. From 22% of the business systems that have introduced the quality cost reporting 12% monitor such costs at the level of cost centers, only 2% at the level of activities, while the others prepare the reports at the level of the business system as a whole or at the level of responsibility centers. This confirms that our accounting is in the second development phase and that what follows is the introduction of activity-based accounting.

The advantage of transparent business operations is the inclusion of all employees in the process of making decisions and determining responsibility at all levels. The task of management accounting is therefore to allow that all report users at all levels receive relevant information. Our next question was related to finding out the actual users of reports in Croatian hotel companies that have a quality cost reporting system.

#### 4 The Role of the ABC and TC Methods in the Preparation of Quality Cost Reports in Croatia

The existing internal accounting system in the Croatian hotel industry does not meet the requirements for quality cost monitoring since the cost center is the lowest level at which internal results are monitored. Therefore, upgrading of the existing internal accounting systems presupposes introduction of activity-based accounting, thus creating the basis for allocation of all direct and general costs. Activity Based Costing (ABC) is an accounting method based on activities, i.e. processes. The ABC method is very significant in that segment because it ensures an increase in process efficiency. According to this method, all costs that can be associated with a product unit are presented

as direct costs on such products, i.e. cost bearers, and all general costs are first classified by activities, i.e. processes in which they occurred, where they are also broken down into sub-processes. In this way the costs of the Quality Department are allocated to cost bearers. The ABC method should be used in order to avoid traditional allocating methods using the non-allocated (in terms of percentage) cost (indirect costs, the hidden part of the iceberg) keys.

*Target Costing (TC) is a method of target cost accounting with respect to new products. The target cost is the maximum cost that can be incurred on a market-oriented product, and is determined through a continuous process of comparing the costs of products, business processes or total operating costs against the best in the market related by type of activity and product structure (Peršić, 2000:143). Target costing represents a structural approach to determining costs necessary to make a product of a specific quality in order for it to generate the desired level of profitability, along with the expected selling prices (Bahtijarević-Šiber and Sikavica, 2001:60).*

In contemporary market races the one who survives is the one who is ready to continuously improve its performance in the environment of an increasingly stronger competition and increasingly demanding customers. The best method for improving the competitive position is benchmarking. Benchmarking is a method that gives us the answers to the following questions: What makes a market leader? Why aren't we market leaders? How to get in line with the market leader? Where do we stand in relation to our competition? *The most efficient way to determine effective changes is to learn from others. In order to succeed we must find out why certain individuals or companies function better than us and try to learn how to get in line with them or even excel. We learn from those who are willing to share their knowledge with us. ...Benchmarking is not a substitute for a strategy, it per se does not enhance business operations; it is however the most efficient way of realizing your own goal, which is*

Table 6: Do you benchmark your results against related business systems in your environment or competition (benchmarking method)? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Number of interviewees that answered yes	34	83
<i>Compared data</i>			
1.	Realized overnights	32	78
2.	Selling prices	27	66
3.	Operating income	24	59
4.	Total income	24	59
5.	Total expenses	20	49
6.	Operating costs	19	46
7.	Gross operating profit	17	41
8.	Results by general indicators	14	34
9.	Gross profit rate	13	32
10.	Cost structure	11	27
11.	Fixed costs	10	24
12.	Variable costs	7	17
13.	Results by indicators according to the USALI	6	15

*business success.* (Renko Nataša, et al, 1999:2). Benchmarking can be carried out in various fields; therefore it is one of the most significant concepts of total quality management.

Only 5% of the interviewees answered that they used the advantages of the target costing method, although as many as 81% of business systems believe this method to be useful and wish to adjust their product and service costs to the solvent demand, i.e. to the level of competition selling prices.

According to this survey, 41% of hoteliers determine gross operating profit at the level of responsibility centers; however still prevailing is the comparison of realized overnights (78%) and selling prices (66%).

Although there still exist business systems that rate the importance of benchmarking with low grades (30% rated the importance with a grade under 7), 32% of Croatian hotel business systems rated the importance with grade 8, 10% with grade 9, and 20% with grade 10. A high percentage of business systems (62%) in the Croatian hotel industry recognize the importance of benchmarking against the best competing business system, which indicates the raising of the level of awareness concerning the importance of improving own business performance and thus ensuring greater satisfaction of guests.

## 5 Conclusion

On the basis of the survey we can conclude the following:

- The results of the survey show that in internal systems of accounts of Croatian hoteliers there is room for upgrading such systems to include quality cost monitoring.
- Insufficient investments in education and insufficiently developed information systems represent the largest obstacle and are the main reason why the implementation of quality cost accounting is not systematically approached to as part of management accounting.
- The USALI has been completely or partly implemented by more than 50% of the interviewees, whereas 20% intend to implement it soon, which is quite significant for the further development of the quality accounting system and its improvement. 66% of the business systems that base their reports on the USALI monitor the results up to the fourth level in their internal accounts, and that exactly is the space where the so far still insufficiently developed quality cost system could be implemented.
- The lowest level at which the quality costs are monitored in the Croatian hotel industry are the cost centers.
- The development of accounting in the Croatian hotel industry should be directed to the application of the activity-based costing (ABC) and target costing (TC) methods, the preconditions for a standardized approach to quality cost accounting concerning costs

incurred in connection with business processes and activities.

- Accounting ensures premises for identification, monitoring and reporting about quality costs in the Croatian hotel industry but it has not been sufficiently applied in practice as yet.

From the above-mentioned we can make a general conclusion that business improvement through the application of the TQM principle obligates management to ensure a methodological basis on the level of responsibility centers for monitoring, classification, grouping and presentation of quality costs based on relevant theories and practical experiences. 71% of Croatian hoteliers have recognized this importance; they see the purpose of keeping records and monitoring of costs of quality in the process of adjustment to the needs and wishes of customers. Quality cost reporting is part of the information system modernization process. In the management information system, relevant information concerning the quality of business and costs of quality represent input information allowing the management to see the real situation for the purpose of reaching business decisions in a timely fashion in order to position their particular business system better in relation to its competition.

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