PREREQUISITES FOR ACCOUNTING SUPPORT IN APPLYING DIFFERENTIATION STRATEGY

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ABSTRACT

The paper is based on the thesis that the company competitiveness should be built on the basis of accounting support to strategic choices. Competitiveness at the single company level is, for the most part, a consequence of management activities. More recently, modern management concepts are available to them, which also require adequate information support. Hence, the content of the defined topic was intended to present the possibilities of accounting information support in achieving and measuring competitiveness, as identified based on customer attitudes about the key factors for company's market success. Achieving such an aim would contribute to identifying the criteria of accounting information system success in achieving desired market position, but also in promotion, to a great extent neglected possibilities of this part of information system, in domestic companies. Required adequacy of information support is presented in the form of accounting instruments which can help in setting and implementing differentiation strategy.

1. INTRODUCTION

The question: "how to be competitive" or "how to be better than others" in satisfying needs for products or services, is occupying the thoughts of economists for centuries. In conditions of globalized market and growing offers of different products and services, which satisfy needs of their users in a same or similar way, the competitiveness concept gets additional importance. This is exactly why one starts from the standpoint where the competitiveness is "the requirement of survival and the prosperity of the company" (Malinić, 2013, p. 50).

Subject of this research is related to one of the key assumptions of competitiveness of companies as market participants: accounting support to the managers, especially in implementing differentiation strategy. The key factors of market

success have been identified in theory and practice. Based on them, new management concepts have emerged, and those concepts require an adequate information support, so the paper will present the accounting instruments that should provide that support.

2. LITERATURE REVIEW

In economic terms, competitiveness can be viewed from different points of view: from the point of view of multinational associations, national economies, regions, firms and from the point of view of individuals. Individual levels are interdependent, which makes the analysis and achievement of competitiveness assumptions, a very complex problem.

The issue of competitiveness was initially treated from the point of view of the national economy, in the form of absolute and comparative advantages that one nation has compared to others. These benefits have been found in natural resources, capital and people. Over time, with the development of transport connections, technology, communication tools and other forms of globalization, competitiveness was sought at the level of individual companies who began to prove their competitiveness in a growing market and whose regulation and functioning characteristics became more and more standardized. As measures of competitiveness at the level of an individual company, the size of market share, profitability, amount of comparable costs and productivity are commonly used. Also, this successfulness or competitiveness is nowadays measured by the results related to compliance with the standards regarding social responsibility, environmental protection, working conditions of employees and the like.

2.1. Conceptual assumptions of company competitiveness

The issue of companies' competitiveness is a matter of its strategic choices. By choosing a way in which the company will oppose the competitors, the so-called competitive or business strategy and basic direction in investing limited funds will be defined. In that sense, companies use generic strategies (Porter, 1985) that should enable a firm to compete on the basis of: a) differentiation leadership in a way of meeting the needs of products and services users, b) cost leadership and c) focusing on the needs that no one satisfies (manufacturer or service provider within a small market segment - the so-called niche). Also, for different markets companies "may choose the combination of different strategies" and in that way achieve strategic positioning (Drury, 2012, p. 581).

The basis of competition has changed over time, with continues upgrade of previously identified prerequisites of competitiveness (see figure 1), by which a growing satisfaction of customer needs was verified. This growing satisfaction should enable customer loyalty, i.e. company's long-term competitiveness.

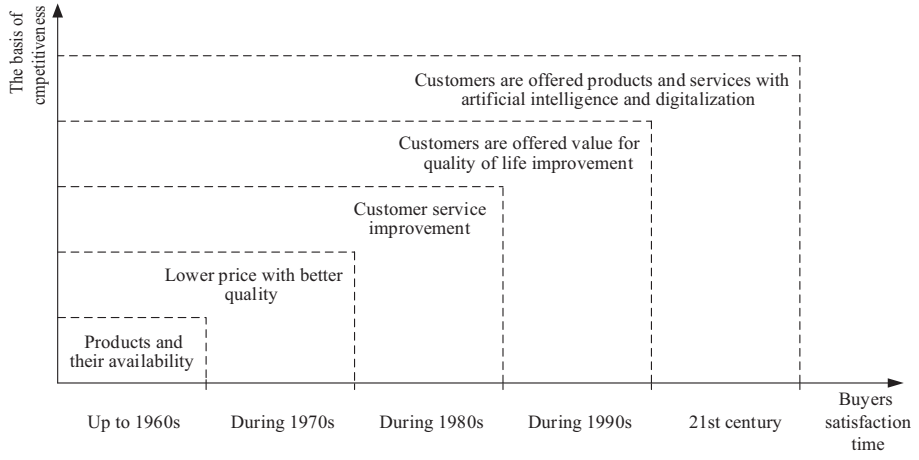

Figure 1. Evolution in the elements of competitiveness.
Source: Gajić, 2017, p. 80

There are many factors that affect the customer satisfaction and loyalty. However, there is sufficient evidence and consistent views that relevant factors for selection of products and services could be systematized into so-called key success factors for individual product and service providers, based on buyer's wishes. There are also different ways in defining key success factors. For example, Miller and Roth identified eleven competencies for achieving competitive advantage: consistent quality, reliable delivery, high-performance products, fast delivery, low-cost offerings, introducing new products or fast changes in design, offering of wide range of products, advertising i.e. effective promotion, broad distribution, fast volume change and after sales services (Miller & Roth, Manufacturing Strategies, Operations Management Review, 1988, pp. 8–20, as cited in Juran & Gryna, 1999, p. 84); Hansen, Moven, & Guan state that quality, flexibility, and cost-effectiveness are fundamental principles of the global level of competitiveness (Hansen, Mowen, & Guan, 2009, p. 766), Melnik & Denzler define quality, delivery, flexibility and cost as key drivers of market success from a customer perspective (Melnyk & Denzler, Production Operations Management. Irwin. Chicago. 1996, as cited in Fredendall & Hill, 2001, p. 28), while for some authors, simultaneously management and accounting instruments can be found as competitive prerequisite (Dunk, 2012). According to the most cited authors from

management accounting field, Colin Drury and Charles Horngren, key success factors are: quality, time, innovations and costs (Drury, 1996, p. 23; Horngren, Foster, & Datar, 2000, p. 8).

These views are supported by domestic market research (Gajić, 2010, pp. 379 - 407). The research was carried out for three types of products: products that belong to basic low-value consumer goods (milk), products that are subject to seasonal purchases (winter jacket) and to luxury goods, that is, products that are purchased only a few times over the lifetime of the buyer (car). In order to identify the key factors of competitiveness, the criteria by which buyers make their purchase choices were identified. The total number of different criteria for the analyzed products is: for milk - 30, for winter jacket - 29, and for car - 36. It was concluded that each of the product selection criteria can be classified into the following categories, which were considered as key factors of market success, known also as competitive factors[1]:

1) Quality - characteristics of product usage value and production and sale of products without making errors or failures in the process;
2) Time - customer needs are quickly met (external context), and the entire process of preparation, production and delivery takes place quickly and without time waste (internal context);
3) Innovation - applied novelty in characteristics that affect product attributes (product innovations) or ways of its production (process innovations), and in ways customer needs are met, but also those changes that affect the cost of meeting customer needs;
4) Cost - as a characteristic of competitiveness, this key success factor implies that all three previous elements are provided at low cost so that the price of the product or service that is determined on the basis of these costs is competitive.

It is clear that the costs have a direct impact on business results, but at the same time they are a common feature of all key success factors. Regardless of the way in which the market strategy is defined and on which key factors of market success it is based on, efficiency in the use of resources, as measured by the amount of costs, is an inevitable competition factor. However, due to the objectives of this research, further attention will be focused on other factors of market success, as a general base for differentiation strategy.

1 The relative share of the "other" buying criteria in the total number of criteria for analyzed three products allows for them to be considered irrelevant and, according to consumer behaviour theory, are considered irrational and cannot be treated as universal assumptions of competitiveness.

2.2. The impact of accounting support on achieving competitiveness

Traditionally, accounting and the tools at its disposal have been perceived as means of recording the consequences of business transactions, with the key task of achieving a clear understanding of the value of scarce resources used (costing) and the economic and non-economic effects (measuring results) of such resource consumption. Over time, with the development of the management profession and various management techniques, accounting is first asked for help with tactical and then strategic decisions about how to manage these scarce resources.

The lack of adequate accounting support for strategic management and achieving competitiveness was exactly the basis for a critical approach to the content of accounting reports, which was especially emphasized in the second half of the 80s and early 90s of the twentieth century. Johnson and Kaplan's conclusion from 1987, that management accounting lacks innovative content that would adequately take account of changes in the business environment has been confirmed by later research (Drury, 1996; Bromwich and Bhimani, 1989, 1994). Criticisms were especially related to: the need to take into account the changed structure of production costs and diversification of offerings, which is why traditional production cost accounting systems provided misleading information for decision making purposes; the view that conventional management accounting practices are identified only as a means of supporting the reporting needs of external users of accounting reports, while also completely ignoring the need for accounting treatment of the external environment within which the company operated.

Domestic practice studies[2] in this segment are not numerous and have not yielded positive results. Available domestic market research (for example, Gajić, 2011, pp. 127-152) indicates an insufficient use of traditional accounting support instruments for the management process. For example, only 40% of respondents know the data pertaining to activity level required for total business costs to be covered (data on the break-even point); only 31% of respondents in addition to the absorption costing for valuing stock of products (statutory calculation), also uses the variable costing (known to be more suitable for management needs); only 63% of respondents use the operating budget as a guideline for how to plan activities of a company; only 37% respondents calculate deviations from planned numbers, which significantly reduces the informative value of the plan itself; in 64% of companies the management makes a decision that is not based on accounting information.

2 Research conducted on Republic of Srpska companies.

Research conducted to identify the application of accounting instruments in the segment of the application of integrated cost management, with an emphasis on accounting support for strategic decisions (Lučić, 2016, pp. 61-87)[3] gives similar results. Practically none of the analyzed companies use modern cost accounting concepts and 53% of them use actual (real) absorption cost accounting, while the remaining companies use standard and standard variable cost accounting equally, which is consistent with the conclusion from the research presented earlier that costing which is better for managerial activities is insufficiently used. In the segment of aforementioned research, related to the modern methods of cost management, the cited author got the following results: two out of thirty companies from the relevant sample apply activity-based costing (7 apply it partially) and target costing (4 apply it partially) while the cost calculation according to the kaizen methodology (as an assumption for just-in-time costing concept) is not applied. However, in the conclusion of the obtained results, it is stated that "the application of conventional cost accounting systems in the surveyed companies is justified" (Lučić, 2016, p. 77).

However, there is no sufficient information on the national and international competitiveness of the analyzed companies (especially those that do not apply modern management and cost accounting concepts). The author justifies the use of conventional costing systems with the low level in the indirect cost and having business done in a low competitive environment (Lučić, 2016, p. 75). Still, if one assumes that the technological advancement and globalization are the two key assumptions of doing business in contemporary business conditions, while technological advancements implies the change in the structure of total costs towards indirect costs and globalization implies a serious exposure to competition, then one could indirectly conclude that the analyzed companies do not have the necessary "strength" from a competitive standpoint.

3. RESEARCH RESULTS RELATED TO ACCOUNTING SUPPORT FOR ACHIEVING COMPETITIVENESS

When defining the tasks of an accounting function in relation to achieving competitiveness, clear answers to the key questions should be given: when to prepare the information or the competitiveness report, how the reporting subject (competitiveness) will be defined, what source of information will be used and what is the specific content of the information or the competitiveness report (Figure 2).

3 Research conducted on a large production companies from Bosnia and Herzegovina.

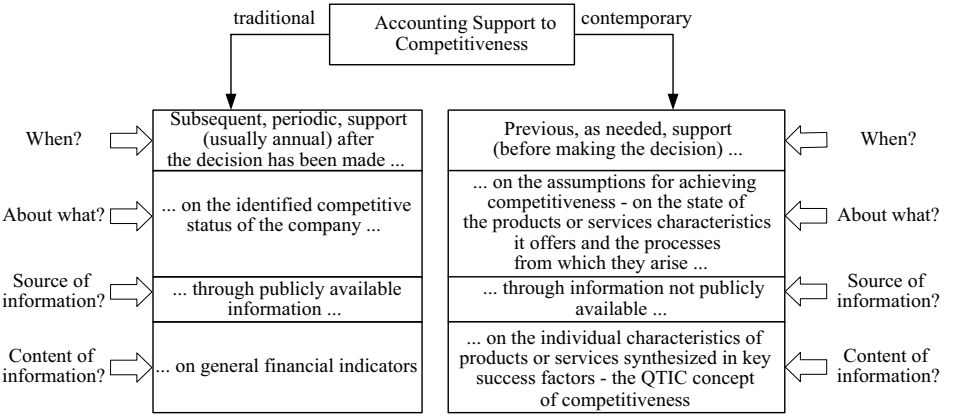

Figure 2. Assumptions for defining accounting support to competitiveness. Source: Author

Of course, these reports are not mutually exclusive, but rather dependent and complementary.

3.1. The concept of traditional and contemporary accounting support in measuring competitiveness

Traditionally, the accounting provides ex-post comparisons of historical performance in the competitive segment, based on publicly available information from the financial statements of competitors. There are several common indicators of competitiveness that can be viewed comparatively. For these purposes, suppose an example of comparative analysis for: company "ABC", a direct competitor (a company whose performances should be reached in a short-term), a potential competitor (a company whose results are close to those of "ABC") and a market leader, best company whose accomplishments everyone wants to reach (see Table 1).

For the analyzed company ("ABC") in 2019, sales revenue increased by 11.11% compared to the previous accounting period (indicator from row 4), but its market share decreased by 5.41% (indicator from row 7). Thus, while revenues have increased, the competitiveness of businesses, as measured by market share, has decreased. The importance of this indicator is even more emphasized when looking at the immediate and potential competitor, and the market leader, because they all have higher relative sales revenues growth than the analyzed company, and the potential competitor and market leader have also grows in market share. An increase in sales revenue does not lead to an increase in the competitive position of a company if the percentage of growth in the potential (size) of the market to generate sales revenue is greater than the percentage increase in sales revenue.

Table 1. Example of analysis of ABC's competitive position based on publicly available information

Elements of the analysis	Company "ABC"		Direct competitor		Potential competitor		Market leader		Market potential	
	Accounting periods		Accounting periods		Accounting periods		Accounting periods		Accounting periods	
	2018.	2019.	2018.	2019.	2018.	2019.	2018.	2019.	2018.	2019.
1. Sales volume	200 000	235 000	270 000	325 000	140 000	175 000	500 000	610 000	1 110 000	1 345 000
2. Change in sales volume	-	17.50%	-	20.37%	-	25.00%	-	22.00%	-	21.17%
3. Sales revenues	1 800 000	2 000 000	2 300 000	2 600 000	1 050 000	1 250 000	4 300 000	5 250 000	9 450 000	11 100 000
4. Change in sales revenues	-	11.11%	-	13.04%	-	19.05%	-	22.09%	-	17.46%
5. Average selling price	9.00	8.51	8.52	8.00	7.50	7.14	8.60	8.61	-	-
6. Change in aver. selling price	-	-5.44%	-	-6.09%	-	-4.76%	-	0.08%		
7. Market share in sales revenue	19.05%	18.02%	24.34%	23.42%	11.11%	11.26%	45.50%	47.30%	100.00%	100.00%
8. The ratio of market share to the sales revenue of competitors and "ABC"	-	-	1.28	1.30	0.58	0.63	2.39	2.63	-	-
9. Total cost	1 200 000	1 280 000	1 380 000	1 480 000	826 000	920 000	2 900 000	3 300 000	6 306 000	6 980 000
10. Change in total cost	-	6.67%	-	7.25%	-	11.38%	-	13.79%	-	10.69%
11. Average cost	6.00	5.45	5.11	4.55	5.90	5.26	5.80	5.41	5.68	5.19
12. Change in average cost	-	-9.22%	-	-10.90%	-	-10.90%	-	-6.73%		-8.65%
13. Operating result (3-9)	600 000	720 000	920 000	1 120 000	224 000	330 000	1 400 000	1 950 000	3 144 000	4 120 000
14. Relative change in operating results		20.00%		21.74%		47.32%		39.29%		31.04%
15. Profitability rate	33.33%	36.00%	40.00%	43.08%	21.33%	26.40%	32.56%	37.14%	33.27%	37.12%
16. Average unit profit (5-11)	3.00	3.06	3.41	3.45	1.60	1.89	2.80	3.20	-	-

Source: Author's calculation

As a result, the market position of the "ABC" company and its immediate competitor has deteriorated.

ABC's relative market share with respect to competition (indicator from row 8) is an indicator that will give a more accurate understanding of ABC's competitive position and prospects. It is the ratio of the market share of an individual competitor to the market share of "ABC".

According to the analyzed data, it can be concluded that the situation of the analyzed company has worsened with respect to all three competitors in the current accounting period, compared to the previous one. The difference in market share increases with respect to companies where the backlog was recorded in the previous accounting period (with respect to the direct competitor and market leader) and decreases with respect to potential competitor.

Also, the relative increase in the business results of the analyzed company is smaller compared to other competitors (indicator from row 14), where the data about the average unit profit indicates that direct competitor and market leader can further improve their competitive position by reducing sales prices and consequent increase in sales. The general conclusion in this segment is that an increase in the business result (for the analyzed company 20%) does not lead to an increase in the competitive position of the company if the percentage of growth of market potential is higher (as in this example: 31.12%).

The analysis of the competitive position of the analyzed company can be further supplemented by analysis and comparison of costs.

In this segment, it can be concluded that the reduction of average production costs per unit of product at the company "ABC" by 9.22% (indicator from line 12), does not strengthen its competitive position, because the percentage reduction in average production costs of direct and potential competitors is greater than the percentage reduction of the average costs of the analyzed company, and although the percentage reduction is higher than the market leader, the average costs of that company are still the lowest. A decrease in sales prices is evident in all companies, which suggests that all companies use a strategy of reducing sales prices to improve their competitive position. The analyzed company reduced the selling price by 5.44%, while the reduction of average costs was 9.22%, which is a better option than if the indicators were reversed.

In a way described above, the accounting report could enable conclusion on the competitive status of the analyzed company.[4]

4 The above example can be extended with more details, especially regarding global competitiveness indicators, such as: the rate of growth of foreign sales ratio and total sales, the growth of the rate of foreign and total sources of financing, and others.

In contemporary business conditions, a broader concept of measuring and comparing business results against competition is available. It shows business results in a more comprehensive way. Namely, the example above contains only financial indicators available from official financial statements. Information on sources of competitiveness is missing, which are generally "hidden" under non-financial performance indicators. For the purpose of identifying sources of competitive position and sources of competitiveness, Balanced Scorecard[5] is extensively used. It is an integrated set of measures linked in four specific perspectives for viewing results: the financial perspective (focused on results relevant to owners), the customer perspective (focused on customer satisfaction with wideness of supply and product or service characteristics), the internal processes perspective (especially those relevant to the core business, and those relevant to customers), and the learning and growth perspective (especially important from the point of view of the ability to adapt to external changes). The application of this concept implies that the managers, depending on the specifics of the companies they manage, select the measures that best suit their business needs, which can identify competitive strengths and weaknesses. These types of competitive performance indicators, apart from financial performance indicators, are not publicly available. They can mostly be collected on the basis of informal links, from joint buyers and sellers, creditors, employees of their own company, and from analysts and consultants from different segments of the competition. An example of one such set of indicators is given in Figure 3.

Results obtained by given measures (which of course are not exhausted by Example 2) may be subject to comparison with competitor's results.

In order to support the efficient management of key success factors, the accounting information system is also expected to have "ex ante" support. This would enable desirable integration of the information base preparation stage and the decision-making stages, since "actions must already be taken in the information evaluation process" (Bhimani & Bromwich, 2010, p. 105).

If the support of selection and implementation of a market strategy is done through accounting reports, then there are two basic directions. Namely, it was stated earlier that the factors of market success in contemporary business conditions are synthesized in quality of performance, reaction time to customer demands, offerings of innovative contents and costs, as a basis for defining the sales price. Companies that apply a differentiation strategy to competitiveness are based precisely on the first three factors identified, while cost-based strategies are primarily defined by the desire to offer customers a cheaper product or service over competition.

5 This concept was originally promoted by its authors (Kaplan & Norton, 1992, 71–79).

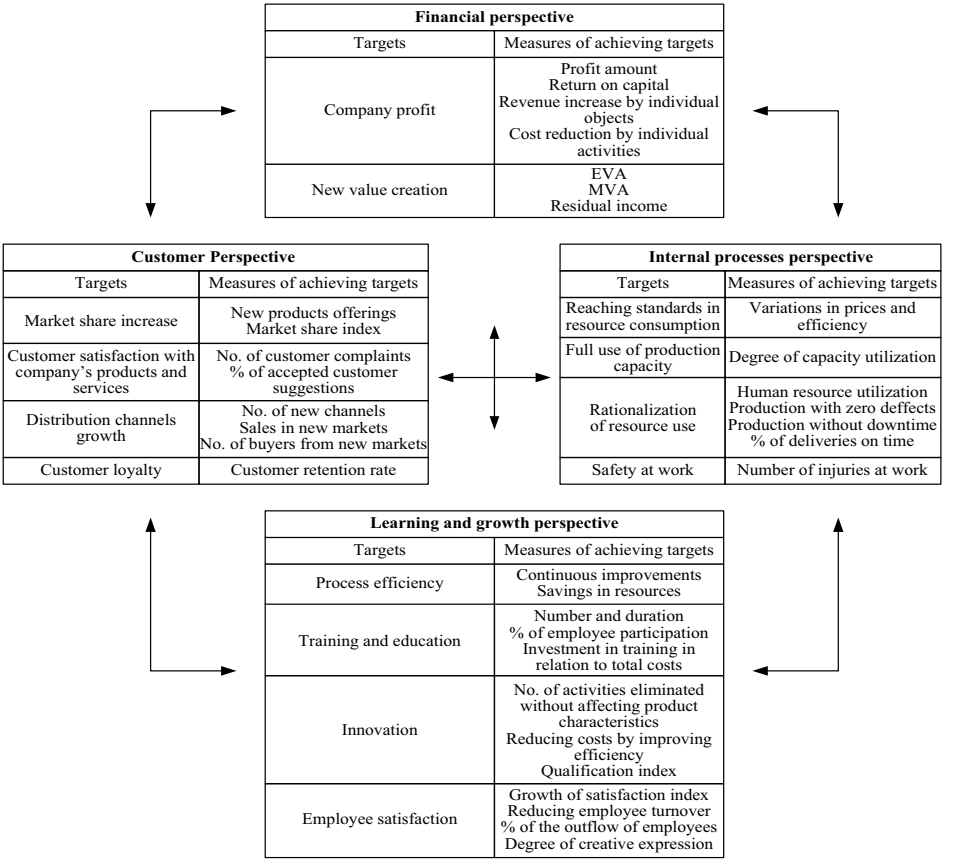

Figure 3. An example of a Balanced Scorecard. Source: Author

3.2. Concepts of contemporary accounting support to achieving competitiveness based on differentiation strategy

Differentiation strategy is possible to implement by acting on the key factors of market success: 1) quality, 2) time and 3) innovation.

(1) In order to ensure adequate quality management and competitiveness in this segment of competition, it is necessary that the accounting function successfully carries out the following activities:

- identify necessary activities for achieving characteristics that generate costs of quality,
- determine the types of quality costs and measure them,
- conduct measurements of effects of resources consumed in order to improve quality and

– adequately inform management on the costs and effects of quality improvement.

In the simplified review (Table 2) a possible layout of the cost of quality report is given. The given review provides information on what activities cause quality costs (prevention, control (or measurement), internally and externally identified defects), how are the individual quality costs grouped, what are the costs of individual activities, and all for two consecutive periods relative to the target cost amount.

The knowledge of provided information will allow the management to more easily plan, control and make decisions regarding the quality of products and services which the company markets. Another important use of quality cost reports is to monitor the amount of quality costs that track the expected cost savings foreseen by the introduction of the quality improvement program. Also, what is particularly important is that the company improves the structure of total costs of quality, since the costs of preventive and measurement activities increase relative to the costs of errors (whether internally or externally stated), based on the principle of investing in preventing defects and costs rather than correcting and covering them. For example, the share of costs of externally identified defects in total costs is decreasing (from 28.13% in 2018 to 22.52% in 2019). It also means that the number of defects that "reached" customers is reduced, which is the most disastrous from the point of view of the market image of the company.

(2) When competition is based on time, or rather the speed of meeting customer needs, it is done by: faster introduction of new products and faster delivery of existing products or services to customers.

In contemporary business conditions, faster introduction of new products or services is achieved by respecting the needs and wishes of customers, and by cooperation of individual functional areas within the company. Operationally, the entire process must be supported by innovation in products and services, in production technologies, as well as with appropriate information tools to assist in the creation and processing of databases, simulating various options in the product design and engineering phases. For this reason, the description of accounting support for such a market-based strategy is usually presented in the segment concerned with innovation-based competitiveness, either in processes or in products and services.

The time of delivering the existing products or services to customers consists of: order receipt time, manufacturing cycle time and delivery time (see figure 4).

Table 2. Example of the cost of quality report

Types of costs	Results in 2019 (in KM)			Results in 2018 (in KM)			Difference in actual results	Target costs for 2024	Variances from target costs
	actual	planned	variance	actual	planned	variance			
	(1)	(2)	(3) = (2) - (1)	(4)	(5)	(6) = (4) - (5)	(7) = (1) - (4)	(8)	(9) = (1) - (8)
Examples of prevention costs:									
- quality planning	60 000	63 000	3 000 (F)	64 000	62 000	2 000 (U)	4 000 (F)	45 000	15 000 (U)
- training	110 000	105 000	5 000 (U)	113 000	108 000	5 000 (U)	3 000(F)	88 000	22 000 (U)
- certification	25 000	22 000	3 000 (U)	28 000	24 000	3 000 (U)	3 000 (F)	23 000	2 000 (U)
Total	**195 000**	**190 000**	**5 000 (U)**	**205 000**	**194 000**	**11 000 (U)**	**10 000 (F)**	**156 000**	**39 000 (U)**
Examples of control costs:									
- input control	19 000	18 000	1 000 (U)	23 000	21 000	2.000 (U)	4 000 (F)	12 000	7 000 (U)
- process control	77 000	74 000	3 000 (U)	70 000	70 000	0	7 000 (U)	65 000	12 000 (U)
- output control	14 000	13 000	1 000 (U)	19 000	20 000	1.000 (F)	5 000 (F)	10 000	4 000 (U)
Total	**110 000**	**105 000**	**5 000 (U)**	**112 000**	**111 000**	**1.000(U)**	**2 000 (F)**	**87 000**	**23 000 (U)**
Examples of costs of internal defects:									
- spoilage	35 000	28 000	7 000 (U)	39 000	32 000	7 000 (U)	4 000 (F)	15 000	20 000 (U)
- repairs	20 000	0	20 000 (U)	26 000	0	26 000 (U)	6 000 (F)	20 000	0
- repeated measurement	15 000	0	15 000 (U)	14 000	0	14 000 (U)	1 000 (U)	5 000	10 000 (U)
Total	**70 000**	**28 000**	**42 000 (U)**	**79 000**	**32 000**	**47 000 (U)**	**9 000 (F)**	**40 000**	**30 000 (U)**
Examples of costs of external defects:									
- warranty costs	40 000	31 000	9 000 (U)	60 000	49 000	11 000 (U)	20 000 (F)	0	40 000 (U)
- out of court settlement	55 000	48 000	7 000 (U)	70 000	40 000	30 000 (U)	15 000 (F)	0	55 000(U)
- reparations	14 000	8 000	6 000 (U)	25 000	15 000	10 000 (U)	11 000 (F)	0	14 000 (U)
Total	**109 000**	**87 000**	**22 000 (U)**	**155 000**	**104 000**	**51 000 (U)**	**46 000 (F)**	**0**	**109 000 (U)**
Total cost of quality	**484 000**	**410 000**	**74 000 (U)**	**551 000**	**441 000**	**110 000 (U)**	**67 000 (F)**	**283 000**	**201 000 (U)**
Percentage of share of individual types of quality costs in total quality costs:									
- prevention costs	40.29%	46.34%	-	37.21%	43.99%	-	-	55.12%	-
- control costs	22.73%	25.61%	-	20.33%	25.17%	-	-	30.74%	-
- costs of internal defects	14.46%	6.83%	-	14.34%	7.26%	-	-	14.13%	-
- costs of external defects	22.52%	21.22%	-	28.13%	23.58%	-	-	0.00%	-
Total revenue	5 000 000	4 900 000	-	4 500 000	4 300 000	-	-	7 500 000	-
Share of quality costs in total reven.	9.68%	8.37%	-	12.24%	10.26%	-	-	3.77%	-

Source: Author's calculation

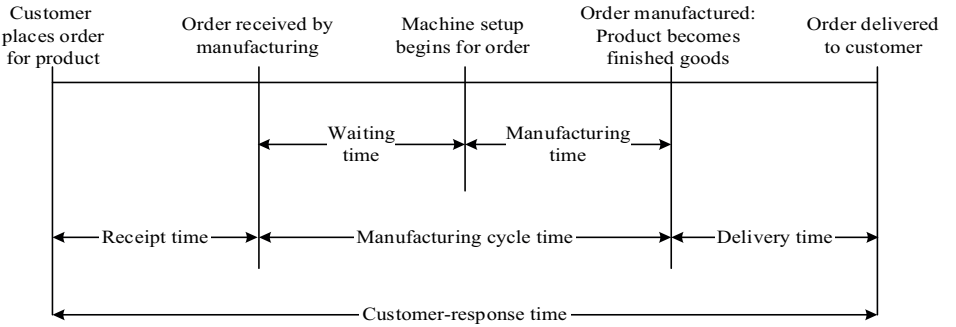

Figure 4. Components of customer response time
Source: Horngren, Datar, & Rajan, 2015, p. 745

Faster delivery of existing products or services to the customers is achieved by applying total quality management concepts and procedures based on the "just-in-time" (JIT) concept. The impact of the concept of total quality management on the time management is clear: the fewer defects in products and the fewer products that do not meet the product-specific criteria, the less time it will take to correct these deficiencies and the less time it will take to "retake" the market and customers, who are "lost" because of these shortcomings. The basics of accounting support for the concept of quality-based competitiveness have been briefly outlined previously.

Also, the "just in time" concept can significantly reduce the time that does not add to the new value of a product or service, especially the time it takes for products to go from raw material through the entire production process to finished products. In such a concept, it is the responsibility of the accounting information system to identify time that does not contribute to the new value of the product (service), with particular attention being paid to inventory management, as a traditional factor that adversely affects time consumption and also the liquidity and solvency of a company. This approach provides significant cost savings by reducing inventory levels, and the ultimate goal of the concept is to convert the row material into finished products over a cycle time equal to the processing time of the product, thus eliminating time or activities that do not add new value to the product.[6]

6 One of the precise empirical studies of the concrete benefits of applying this concept of inventory management, for the four companies analyzed, is the following (Kanji & Asher, 2006, 50):

Company	Inventory reduction	Reduction in time losses	Reduced reprocessing	Reduction of required storage space
A	94 %	95 %	50 %	40 %
B	82 %	95 %	51 %	70 %
C	75 %	92 %	37 %	58 %
D	94 %	70 %	75 %	40 %

According to this concept, all activities are aimed at reducing the quantity and thus the value of the stocks, establishing closer relations with suppliers, which should provide smaller quantities of purchases but at shorter intervals and with customers who need to receive finished products without their prior storage in the company. Both goals must be achieved in the form of so-called strategic partnership of all participants in the supply chain who deliver the product to the end user. For the purposes of that strategic partnership, the key responsibility of the accounting function is that for a fixed period of time - for example between one and three months in advance, delivery schedules are defined, to allow the cost and revenue centers, but also buyers and suppliers, to determine their own schedules, thereby significantly increasing the accountability and importance of accounting planning. The precision of such schedules implies that all value flows in the enterprise, as well as all the processes, are harmonized internally, within the enterprise, as well as at the level of the supply chain of which it is an integral part.

Due to the fact that inputs are received from suppliers only in quantity and at the time when they are required for production, the manufacturer does not create the inventories of inputs. This means that the accounting planning depends on the accuracy of time for which individual activities are anticipated and the quality of process inputs obtained, but firstly on the timing and volume of requested outputs from customers, since the entire process of creating and delivering to customers is initiated by them.

While supporting the process of time management, accounting reports should identify the chronology of the business process and the time required of each individual activity of that process. Therefore, cooperation with the managers of individual functional areas is necessary, since it is important to measure the time spent on individual activities performed. Also, it is important to separate those activities and time spent on them, which occur without contributing to the value for customers. This applies to all activities that take place in internal value chain, but also in the customer supply chain (external value chain). This would create an informational basis for reducing redundant activities, synchronizing available resources with the time needed to adequately meet customer needs, and reducing total time in a supply chain, which are undoubtedly effects that will give the accounting support a strategic importance, and contribute to the competitiveness of the company.

Common instruments for measuring customer response time are:

- Manufacturing Lead Time - the time between receipt of the order in the sales department and delivery of the ordered to the customer,

- Throughput Time - the time between the receipt of an order in production and the completion of a product or batch, during which following activities are done: processing of inputs, movement or manipulation of resources and work equipment, waiting time for the next stage of the process and the control time of the products and processes,
- Manufacturing cycle efficiency - calculated as a ratio of product production time to the total production cycle time; whereby this indicator should be as close to number 1, as the rest of the time does not add to the new value for customers,
- Takt Time – the ratio of available production time and the number of units required, whereby this indicator has a particularly important use in cases where the company has a limited capacity and in cases where the order relates to different products.

Of course, to the extent possible, given the internal character of this information, the values obtained should be compared with competitor's results, in order to obtain clear information on what is the competitive status of the company.

(3) Although they can also be seen as cost-cutting activities, the innovations of products and services and processes are seen as activities undertaken to implement a differentiation strategy. Namely, the goal of innovation is novelty in the process of product preparation, its distribution, sales, use, appearance, functional characteristics, etc. Basically, it is about continually adjusting to customer requirements to win and preserve their affection.

The accounting function should help to identify the economic viability of investing in innovative contents by comparing the costs and effects expected from such investments. For this purpose, conventional differential value analyses within the cost-benefit concept is used, which should be made in advance, already in the design phase of such innovative contents.

Contemporary accounting support for innovation processes starts from the assumption that it begins from the market price for the product or a service that is offered to customers. In this context, the concept of "target cost" is used as a key accounting tool. Unlike the traditional approach to innovation, when the price of an end-product or service is identified at the end of the innovation process, the concept of target cost starts with a price which is already defined by the market. The increased competition leads to the fact that price as a mechanism of competition is taken as a given, limiting, known factor. This is especially true in the production of consumer goods or services, which are under greater pressure from competitors. Assuming that the owners also have a predefined yield that they hope for and that it is also taken as a given data, the only thing left to the manag-

ers is to influence the cost. The design process, engineering and trial production process is repeated until the target cost is reached.

Key elements of accounting support for the management process in this segment are:

- preparing reports on activities or product/service characteristics that add value to the customer and those which do not,
- preparing information on costs and effects based on initial and corrected ideas and blueprints,
- a review of the costs incurred by planned activities or characteristics, indicating areas where costs have been reduced and where there has been no progress,
- determining the difference between actual (current) or assumed and target costs,
- participation in the development of an information system that should efficiently support the introduction of this calculation, but also the operational process of continuous improvement and reduction of costs in the later stages, once production has started and
- preparation of analysis for the possibly necessary capital investments.

To illustrate, suppose an example (Table 3) of target costing for a company that manufactures and sales cars, and is considering the introduction of a new model.

Table 3. Example of target costing

Target costing at the product level (in KM)	
Sales Price - defined by the market (for models with similar characteristics)	44 460
Selling price (net, excl. 17% VAT)	38 000
Target unit operating profit (20% of market sales price)	8 892
Overhead allocated per unit of product	2 108
Target production costs	27 000
Anticipated costs	31 400
Difference (cost reduction required)	4 400

Source: Author's calculation

Thus, the anticipated unit cost should be reduced by 4 400 KM and compressed to the target level. If analysis is performed by components, the target cost would be determined for each component. Taking into account the previously identified importance of the individual components for customers, an overview of the required reduction by components could be as presented in Table 4.

Column 1 presents an index of the importance of components or product characteristics, which is calculated as the sum of the results of multiplication of the

relative importance of each element of the quality – time – innovation - costs concept of competitiveness (as ranked by customers) and the contribution of each component to an individual element of the quality – time – innovation - costs concept of competitiveness.[7] Column 2 presents the estimated costs per component of the product under design; while column 3 calculates the proportion of individual cost values per component in the total estimated costs. Under column 4, it is possible to identify which components should be sought for cost reduction options regarding the fact that the buyers treat some components less important in relation to the relative cost share of those components in the total cost. Product components where the indicator in column 4 is greater than 1 indicate that this component causes more costs in relation to its importance for the customer. Indices with a value greater than 1 show excessive costs. According to the obtained indicators, the company by its investment in "electronics", overestimates its importance from the point of view of the customer by 76%, while the investment in "braking mechanism", underestimates its importance for the customers by 45%, etc. Column 5 presents the breakdown of target costs by individual components with the help of the degree of importance of the specified components for the customers, in order to obtain also the nominal amounts of the required cost reduction by individual components in column 6.

Table 4. Example of target costing – cost reduction by components

Product Components	The degree (index) of importance of the individual component for customers	Anticipated costs (in KM)	The relative participation of costs of a component in total cost	Ratio of a relative share of costs by components and index of importance	Breakdown of target costs on individual components (allowable costs)	Needed cost reduction by component
	(1)	(2)	(3) = (2) / 31 200	(4) = (3) / (1)	(5) = (1) x 27 000	(6) = (2) – (5)
Engine	18.16%	6 400	20.38%	1.12	4 903	1 497
Transmission mechanism	13.44%	4 000	12.74%	0.95	3 629	371
Braking mechanism	20.40%	3 600	11.46%	0.56	5 508	-1 908
Chassis	16.52%	4 500	14.33%	0.87	4 460	40
Electronics	10.76%	5 900	18.79%	1.75	2 905	2 995
Comfort	10.72%	4 200	13.38%	1.25	2 894	1 306
Other features	10.00%	2 800	8.92%	0.89	2 700	100
Total	100.00%	31 400	100.00%	1	27 000	4 400

Source: Author's calculation

7 These data were taken from the survey done by: Gajić, 2010, p. 402.

Given that it has previously been stated that the key factors of market success are essentially interrelated and formally linked by the cost component, individual accounting support instruments of management can also be viewed in relation to each other, or uniquely. The basis for this uniqueness lies in the fact that each of the factors of market success will have a different influence on the buyer's decision. In doing so, the relative relationships of these factors must be identified for each individual product or service in order to understand the importance of the individual characteristics. This will further enable the resource management based on the importance of the individual characteristics of the products or services, and each enterprise, or its customers, will identify the specific importance of the individual factors from the point of view of the specific activity the enterprise performs (as shown in Table 4).

Companies that are strategically focused on diversifying their product or service range, that is, gaining a competitive advantage based on differences in the characteristics of the products and services they offer, need to identify the value of resources spent and revenues generated based on individual characteristics of the product and service, especially those on which competitive advantage is being built upon and realized. Accounting treats the product characteristics as cost drivers. Each individual characteristic (attribute) must be analyzed in the form of a cost / benefit ratio, and the results obtained are compared with the customer expectations and the index of importance of the individual characteristic for the customers.

From an accounting standpoint, this assumption is covered by cost calculation based on product features or attributes (Feature Costing). In doing so, elements within the key success factors would be considered as individual features or attributes. The calculation is based on the premise that management should manage the product features, which make the unique value delivered to the customer. The concept was introduced as a continuation of the activity-based costing idea. Each activity is viewed from the standpoint of the product characteristics that the activity seeks to achieve, with the aim of identifying the cost behind the defined product characteristic, since the basis of competitive advantage in the market is identified through individual product characteristics. Such a procedure would mean a simpler assumption of strategic planning and determination of the focus of business policy at the stage when defining how to allocate scarce resources.

4. DISCUSSION AND CONCLUSIONS

In contemporary business environment, a key competitive assumption will be brought down to the ability of information systems to provide a better basis

for making adequate decisions about how to implement competitive strategies. To this end, some of the key accounting support instruments for managing key factors of market success, that is, competitiveness, are presented. The thesis presented in the paper is that competitiveness must be based on the key success factors (quality-time-innovation-cost concept), which precisely fit into two basic generic strategies: the strategy of leadership in diversity and the cost leadership strategy. Without appropriate accounting support companies can operate only within markets niches, dominantly determined by market imperfections, such as: lack of healthy competition, inadequate customer information and the like.

The fact that some modern accounting tools are expensive or complicated to apply, such as activity-based accounting, does not mean that they cannot or may not be applied, especially if one knows that the original assumptions of the model have changed (see Kaplan & Anderson, 2004). A key limitation in this regard relates to the ability to perform an accurate cost-benefit analysis of the application of instruments that accounting offers. Also, the findings that "traditional costing systems meet the costing objectives" are not acceptable without identifying the current competitive status of the company, in which segment the appropriate tools are also offered.

On the other hand, on the way to achieving competitiveness, it is also very important a managerial vision of competitiveness, whether adopted as a formal or informal basis for defining the goals of a company. If management activities are undertaken to achieve local and short-term goals, this cannot lead to competitiveness, even at that local level. Therefore, investments in the development of an accounting system must be of strategic importance for the company, because the problem is not whether the existing system meets current needs, but whether it is possible to be better than competitors on the basis of additional information, currently and in the future.

The presented concepts of accounting support for management used in order to achieve competitiveness in the market are of microeconomic character in nature, intended for individual companies whose product or services are subject to opposition in the globalized market. With stable macroeconomic assumptions, which are assumed by the given analyzes, they can contribute to better resource management both in tactical (operational) and strategic terms, and consequently in better business results. The answer to the question whether they belong to strategic or operational tools to support managerial activities will depend on how the individual instrument is used. For example, the use of activity-based costing as a concept to support a product range decision at the stage where the production line is installed can support tactical decisions, while at the stage of production

line selection it can have strategic importance and directly affect the competitiveness of the company.

Because of all that has been stated above, individual market strategies must be clearly defined and persistently implemented on the basis of appropriate accounting tools. Likewise, individual accounting tools, although presented separately by different market strategies, have multiple utility values in terms of supporting management activities that affect competitiveness. For example, the use of activity-based costing will allow appropriate assumptions for more accurate determination of unit costs, as well as the ability to better manage quality costs, which will further affect the ability to meet customer needs faster and identify the needs and opportunities for development innovative contents in products and services or processes. Similarly, identifying and calculating quality costs will reveal the types and extent of resources that are generated without (or without sufficient) effects on customer value added, and so on.

Without modern accounting concepts of recording resource spending, its calculation and without measuring the effects of resource spending, it will not be possible to achieve adequate information support to managers, and therefore to achieve satisfactory competitiveness based on differentiation strategy. Because of that the future of the management-oriented segment of the accounting information system will depend on the ability to offer adequate support in achieving the companies' competitiveness, as evidenced by actual accounting trends (Cokins, 2013).

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ПРЕТПОСТАВКЕ РАЧУНОВОДСТВЕНЕ ПОДРШКЕ ПРИ ПРИМЈЕНИ СТРАТЕГИЈЕ ДИФЕРЕНЦИЈАЦИЈЕ

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САЖЕТАК

Рад је базиран на тези да конкурентност предузећа треба градити на основу рачуноводствене подршке стратегијским изборима. Конкурентност на нивоу појединачног привредног друштва је, у највећој мјери, посљедица управљачких активности менаџера. У новије вријеме, њима су на располагању савремени управљачки концепти, који такође захтијевају адекватну, информациону подршку. Због тога је садржај дефинисане теме имао за циљ да представи могућности рачуноводствене информационе подршке при достизању и мјерењу конкурентности, дефинисане на бази ставова купаца о кључним факторима тржишног успјеха предузећа. Достизање тако постављеног циља допринијело би идентификацији критеријума успјешности рачуноводственог информационог система у обезбјеђивању информационе подршке у достизању жељене тржишне позиције, али и промоцији, у знатној мјери, занемарених могућности овог дијела информационог система у домаћим предузећима. Потребна адекватност информационе подршке представљена је у форми рачуноводствених инструмената који треба да помогну постављање и проведбу стратегије диференцијације.

Кључне ријечи: *конкурентност, конкурентска стратегија, управљачко рачуноводство, обрачун трошкова квалитета, обрачун трошкова на бази атрибута производа, обрачун трошкова на бази циљних трошкова, обрачун трошкова на бази активности*