

THE IMPORTANCE OF THE INTEGRATED COST ACCOUNTING MANAGEMENT WITH SUSTAINABLE COMPETITIVE ENTERPRISE RESOURCE PLANNING "AN EXAMINATION ON THE CERAMIC SECTOR"

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ABSTRACT

While the concept of “sustainable competitive advantage” is often used in the literature, the definition of the concept is not yet comprehensive. The perspective of the industrial economy suggests that the performance differences between enterprises are due to scale differences. The scale size reflects the industry as monopoly power and can maximize the profits of business owners with scale sizes. Therefore, in industries where there are several dominant entrepreneurs, businesses use monopoly powers to generate long-run excess profits. It is necessary for enterprises to make the right decisions in order to achieve sustainable competitive advantage and to produce information in order to make the right decisions. The information produced needs to be shared and implemented for cost management purposes. Cost management is of great importance in terms of increasing the financial information needs of enterprises, competitive advantage, full time production systems and especially integration of business applications and information systems. Significant benefits of Enterprise Resource Planning systems are crucial in terms of competition and correct decision making so that businesses can survive in a competitive environment and create new strategic breakthroughs. Enterprise Resource Planning Systems are the coordinated planning of the sources of factories of enterprises, their supplier companies and distribution centers in different regions. It plans how to coordinate and jointly use the machinery, materials, workforce, energy information and other sources of production and distribution in the hands of factories, where it is appropriate to meet the material and service needs of all factories, from which distribution center the customer order must be met or from which plant it should be produced. Enterprise Resource Planning is known to have strategic advantages and advantages in management and cost accounting decisions. In this study, cost accounting practices integrated with sustainable recurrent new generation enterprise resource planning will be addressed through the example of the ceramic sector, a sector that holds monopolistic competition market assumptions.

Keywords: Cost management, enterprise resource planning, sustainable competition

INTRODUCTION

In the economic environment where global competition is increasing day by day, To be able to survive, to have a competitive say and sustainable competition Ability to create competitive advantage, It is now the result of completely innovative activities.

The purpose of this article is to incorporate cost accounting practices integrated with sustainable recurrent new generation enterprise resource planning into an example of the ceramic industry, a sector that contains monopolistic

competition market assumptions. In this context, the concept of sustainable competition, the next generation enterprise resource planning and cost accounting concepts will be examined first. The issue will be assessed from a monopolistic (competitive) market perspective. In the study, the underlying reason for the handling of the ceramic sector sample is that the ceramic sector holds monopolistic competition market assumptions. Businesses; depending on their ability to develop innovative activities Due to both its cost reduction and its differentiation in its products and services It has a competitive edge over other businesses.

SUSTAINABLE COMPETITION CONCEPT

The basic philosophy of the free market economy is competition. In this market be able to sustain the lives of countries and businesses that are not competitive It is not possible. Competitiveness of an enterprise The products the company produces are preferred over alternatives Is an indication of your ability to deliver on a sustainable basis. To capture growth revenue opportunities and enrich customer value. The two main components that affect the competitive power of businesses productivity and growth (sustainability) '. Productivity, overall productivity level increase and cost advantage to capture growth revenue opportunities and enrich customer value brings with it.

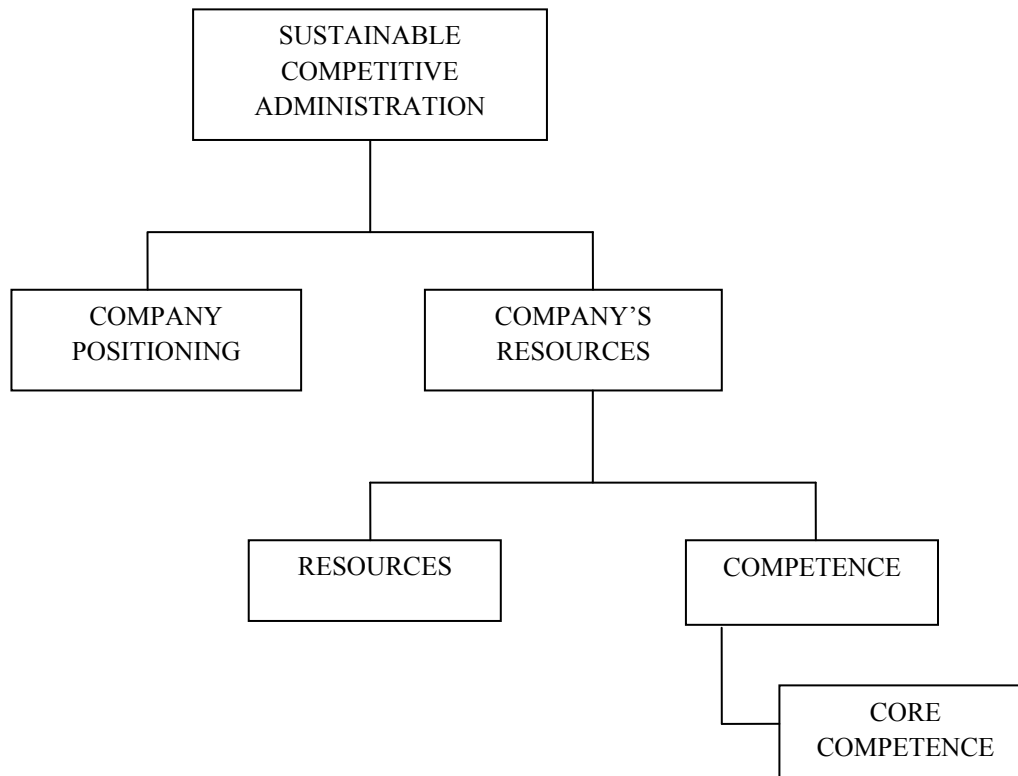
In the 2000s, competition among businesses in every sector of the business world is rapidly and continuously increasing. Constantly competitive environment businesses are seeking to be different from others and to make a difference. Creation of difference is not limited to the products offered to customers and it is stated that the actual difference is hidden in the level of the differences that the operator makes in the inner environment. The different ways of doing business developed by businesses are becoming an important variable in making a difference. Businesses are constantly striving to ensure that the products and / or services they offer to customers from customers have features that will exceed or even exceed customer expectations and provide more customer satisfaction than alternatives. On the other side, the production struggle is to be ahead of the competitors in many fronts, such as improving the work processes, increasing the speed and efficiency of the production, reducing the production mistakes to the minimum and decreasing costs.

These efforts provide advantages such as competitive outsourcing, offering quality and flawless products to customers and cost leadership. At this point, it gives a serious competitive advantage especially to cost leadership businesses. Cost leadership is achieved through approaches such as scale economics of production, tight cost control, the impact of learning curves, or minimizing costs in areas such as research and development, service, sales or advertising. Businesses embracing this strategy are trying to increase their sales and become leaders in the market by keeping the cost of service and therefore the price of the goods they produce lower than their competitors (Dalğar, 2012: 30).

A Sustainable Competitive Advantage emerges as an important factor in the perception of value of goods and services, which should be considered as elements of competitive differentiation (Guimarães, Severo, Vasconcelos, 2017, 352). The importance of sustainable competitive advantage (SCA) to the future success of firms has made it a hot area of research. SCA evolved as a result of competition. Alderson (1965) was one of the first to acknowledge that an organization should strive to create unique attributes in order to differentiate itself from its competitors so that it has a competitive advantage with consumers.

Other pioneers built on Alderson's work by acknowledging that organizations surpass the performance of their competition by developing new ideas that will keep them a step ahead. Also, during this time period, other researchers argued that the uniqueness of a firm is what will allow it to thrive in a competitive environment. The work of these gurus is what led to the concept of sustainable competitive advantage. The idea for the SCA concept was first introduced in 1984 by George Day. In one of Day's writings, he implied that there were certain types of strategies that could help an organization "sustain the competitive advantage." Porter (1985) moved the idea to a concept by describing the types of competitive strategies an organization should possess in order to achieve long term SCA. One of Porter's major contributions to this area is the Five Force Analysis model (Gould, 2015).

Figure 1. Monitoring of Basic Capability Structure with Resource Based Approach



Source: Çetintürk, 2017: 50

In this context, Sustainable is to gain competitive advantage and to increase its resources and capabilities from the resources and capabilities of competing companies.. Differentiation and transformation into basic skills.

As Powell (2001) notes, prior theories suggest that superior performance arises from different SCAs. Whatever the underlying theory, a firm's competitive advantage is determined by two major forces, an endogenous force from resources and capabilities (the RBV perspective)¹, and an exogenous force from market position (the IO perspective)². From the IO perspective, superior performance derives from monopoly rents sustained by protected market positions (Caves and Porter, 1977; Porter, 1980). From the RBV perspective, Ricardian rents take place due to idiosyncratic firmspecific resources, or Schumpeterian rents emerge due to the dynamic capability to renew advantages over time. Thus, a firm achieves a superior performance either from a stronger market position (Porter, 1980) or from possessing valuable, rare, inimitable and nonsubstitutable resources. In other words, a firm's competitive advantage consists of two components, sources of competitive advantage (i.e. market position or resources) and the outcome of competitive advantage (i.e. performance such as profitability) (Huan, Dyerson, Wu, Harindranath 2015: 618).

Sustainable competitive advantage is a long-term addition to the company. It is derived by implementing values. These values help in creating strategies that enhance the uniqueness of the organisation and in optimally using the internal strengths and exploiting external opportunities. This can be best done by avoiding external threats and minimising the internal weaknesses. These processes may take a longer time as they create sustainable competitive advantage. Thus, it has to remain, by nature, a premeditated strategy for companies. This is because strong identities can be utilized as a forte in competitive markets. The organization gains advantages by utilizing its core competencies. These elements reflect the company's promise of quality, enhance the organization's credibility, give the consumers a reason to believe in the company's brand and encourage brand loyalty (Jain, Paul, B:E: and Chauhan, 2016: 7).

COST MANAGEMENT

Effective cost management is growing in prominence when measuring organizational success, often on par with meeting the mission. Organizational success is often found to be the measure of optimal productivity, quality, competitiveness, and/or reliability within specific financial constraints. Cost management is certainly considered one of

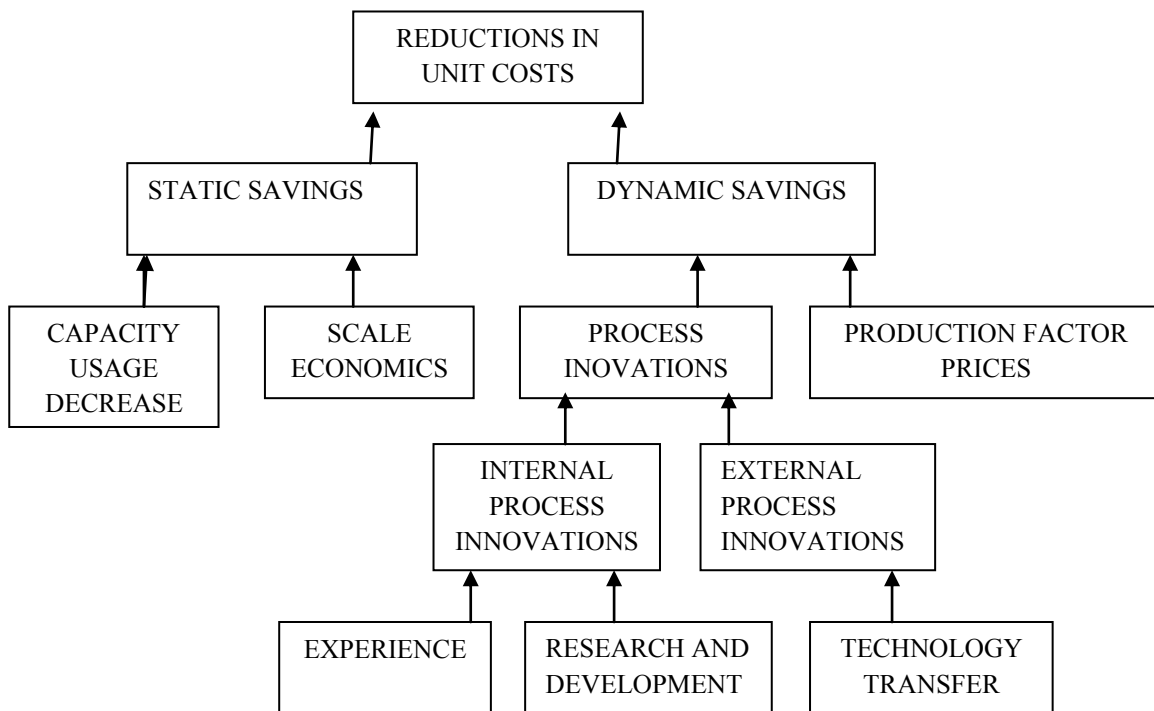
¹ Research Based View

² Industrial Organization

the top measures of leadership accountability. Successful cost management will occur more simply if it is embedded into the culture as continuous and ongoing. A strong culture of effective cost management is one that provides the tools and visibility, management prioritization, knowledge and training, and best practice process collaboration. The organization's leaders must be the champions of this culture by encouraging and enabling employees to identify efficiencies that will ultimately reduce costs while still meeting the mission requirements (Gass, 2017: 26).

A cost management system (CMS) consists of methods that are developed to assist in the planning and controlling of an organization's cost managing activities in the short and long term. As managers develop their strategies, they must address two main challenges -- profitability in the short term and securing a competitive position in the long term. In addition, there are two key roles that a CMS should address. It should be able to manage the organization's core competencies in order to take advantage of opportunities and minimize potential threats. Link plans and strategies to the organization's performance. The primary goals of a cost management system are to develop accurate product costs. Provide a way to develop accurate product and service costs. Product and service costs are a factor when managers are planning, preparing financial statements, and assessing employee performance and productivity. Provide information about the life cycle performance of a product or service. The financial statements do not list this type of information; therefore, it is imperative that financial professionals are able to collect the information from another source. This type of information will allow managers to assess costs incurred in one stage to the costs and profitability of other stages. Generate information that will assist managers with measuring and evaluating performance. Generate information that allows the managers to define and implement organizational strategies (Gould, 2015).

Figure 2: Cost Saving Types



Source: Elmacı and Akıncı, 2012: 78.

Technological change brings high overall production costs. It has brought. As a result, the total cost of production. It has become increasingly prevalent in the cost of production. It began. On the production costs of technological changes, two significant influence exists.

There are many factors to consider when designing a cost management system. However, one of the key factors is the need to integrate the organization's current information system. When evaluating this possibility, one should ask the following questions: What input data are being gathered in what form? What outputs are being generated and in what form? How do the current systems interact with one another, and how effectively? Is the current chart of accounts appropriate? What significant issues are not being addressed by the current system, and could these be integrated into the current "feeder" systems?

At this point using application software for business is an appropriate solution. Many organizations adopted the use of computers in their business practices in the early 1960s, and the main purpose was to provide a simple way of automating many of the routine business tasks that had been performed manually. Sometime during the 1970s, some organizations elected to customize software packages to meet the needs of their individual businesses. As a result, these organizations felt a need to have someone oversee sure the systems were meeting the needs of the organization, especially as related to financial transactions. Given the nature of the system, some organizations have the information systems department reporting to the controller or vice president of finance. Vendors started to offer fully integrated suites of applications during the late 1980s, and the enterprise resource planning (ERP) packages became popular in the 1990s.

ENTERPRISE RESOURCES PLANNING

Enterprise Resource Planning Software is single vendor-based enterprise resource planning (ERP) software became the dominant strategic platform for supporting company-wide business processes" (Hyvonen, 2003, p. 156). Many organizations used an enterprise resource planning (ERP) system in order to link their feeder systems into an integrated cost management system, which will allow them to: Standardize information systems and replace different "legacy" systems Integrate information systems and automate the transfer of data among systems Improve the quality of information, including purchase preferences of customers Improve the timeliness of information by providing real-time, on-line reporting.

Collection of applications designed to automate the business operations of a company (especially the accounting and human resources departments) and to help the enterprises to manage more effectively activities related to the production process, orders from customers, production planning etc. ERP systems create an interactive environment that helps the company to manage and analyze business processes within the company, associated with the production of goods: inventory control, order handling, accounting, etc. In terms of functionalities, an ERP software covers the following areas of business interests: production planning, purchase management, inventory management, the interaction with suppliers, customer relationship management, orders monitoring, financial management, human resource management and facilitating the knowledge management processes (Scurtu and Lupu, 2016: 145).

The advantages of the integrated ERP System Proposed

- *Reducing operating cost*
- *Improving the sales processes*
- *Increasing the level of order fulfillment*
- *Cash flow improvement*
- *Store optimisation*
- *Efficient management of production activities*
- *Facilitating the decision making prpcess*

Companies should establish an optimum balance between quality and low cost. Total management quality is a management philosophy for achieving this goal. Enterprises which embrace this philosophy understand the need to bring employee participation in all stages, teamwork and continuous improvement to the forefront to increase product or service quality, eliminate waste, decrease cost, and raise productivity and customer satisfaction (Eker and Aytac, 2017: 85). At this point, target costing also plays an important role in enterprise resource planning systems. The target costing approach helps a firm integrate its accounting function with operations management and effectively support the firm's competitive strategies (Lee et al., 2002: 111). Lee et al. (2002) argued that there are four types of processes and decision support requirements in the target costing (TC) strategy. The process of TC consists of market strategies, target costing reengineering, increased competitiveness and improved market share. Decision-support requirements include general strategic decision support, activity-based management support, business process reengineering and product and process (re-) design. They concluded that a target costing-based strategic decision support system integrates transactions with strategies and therefore provides an excellent model for enhancing the decision-support capabilities of enterprise systems. Zhang (2010) stated that, the model of Target Costing Management in the ERP analysis and control environment focuses on product cost planning and designing stages. Zhang suggests that Target Costing= Target Price-Profit Margin and mentions that target cost management starts with reducing cost in the product design phase or even at the initial stage of the product development cycle.

AN OVERVIEW OF THE CERAMIC INDUSTRY IN TURKEY

Turkish ceramic coating materials sector is one of the leading sectors in Turkey. In terms of organization, weight is located in Eskisehir-Bilecik-Kütahya region. The fact that the ceramic coating materials are produced in

Turkey are Çanakkale, İstanbul, Bilecik, Eskişehir, Kütahya, Uşak, İzmir, Aydın and Yozgat. Ceramic coating materials plants;

- 14,61% in Çanakkale,
- 49.82% in the Bilecik-Eskişehir-Kütahya region,
- 28,61% were in İzmir-Manisa-Uşak-Aydın region,
- 6.96% were established in Çankırı-Yozgat region.(Turkey Ministry of Development)

Table 2. Turkish Ceramic Sector Production-Capacity-Export-Import Figures

YEAR	CAPACITY (000) m2	PRODUCTION (000) M2	DOMESTIC MARKET SALES	EXPORT		IMPORT	
				(000) M2	(000) \$	(000) M2	(000) \$
2002	255.100	162.000	89.000	72.370	246.265	1.115	9.441
2003	258.500	189.000	102.350	83.815	311.500	1.552	10.623
2004	275.000	216.000	120.000	94.170	389.520	3.530	28.444
2005	310.000	261.000	145.000	96.850	407.130	5.331	58.867
2006	325.000	275.000	165.000	93.190	406.040	7.047	87.861
2007	360.000	260.000	156.000	104.000	475.000	4.492	63.712
2008	360.000	225.000	125.000	91.880	525.357	4.292	67.307
2009	360.000	205.000	135.000	62.271	400.663	2.749	42.482
2010	406.000	245.000	150.000	83.949	478.624	4.653	68.236
2011	413.000	260.000	165.000	87.377	531.310	4.498	73.105
2012	430.000	280.000	180.000	94.797	586.606	4.556	77.121
2013	432.000	330.000	220.000	87.790	605.047	5.572	104.304

Source: General Directorate of Industry, 2016

As seen in the Table 1, Turkish ceramics sector has increased production and export capacity considerably in 12 years period. Indicating that the ceramic sector may be among the competitive sectors in Turkey.

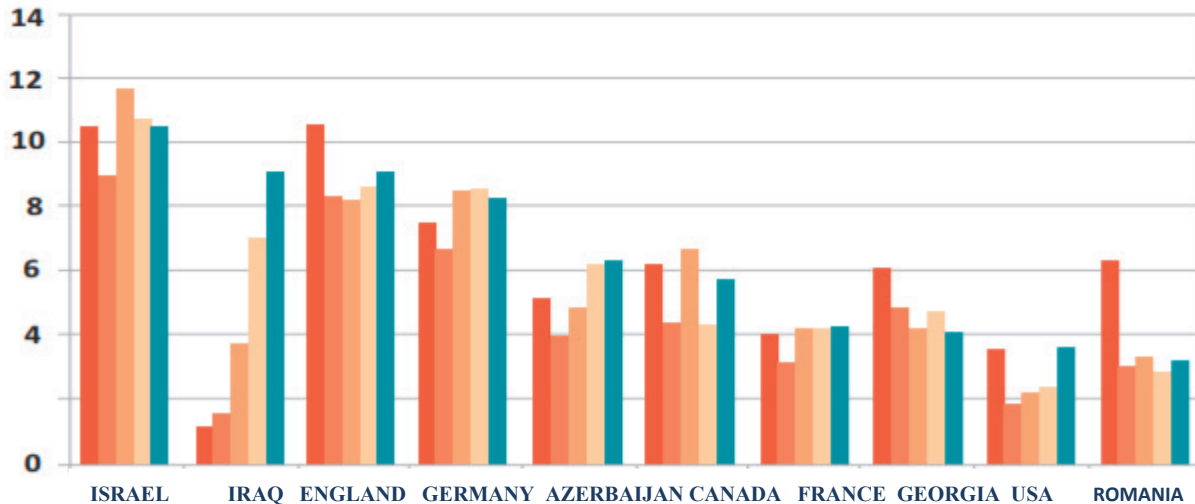
Table 3: Top 10 Countries in World Ceramic Coating Materials Production

	COUNTRY	2009 (mio m2)	2010 (mio m2)	2011 (mio m2)	2012 (mio m2)	2013 (mio m2)	Share of world production in 2012	Rate of change 2012/2013
1	CHINA	3.600	4.200	4.800	5.200	5.700	47.8	9.6
2	BRASIL	715	754	844	866	871	7.3	0.6
3	INDIA	490	550	617	691	750	6.3	8.5
4	IRANIAN	350	400	475	500	500	4.2	0.0
5	SPAIN	324	366	392	404	420	3.5	4.0
6	INDONESIA	278	287	320	360	390	3.3	8.3
7	ITALY	368	387	400	367	363	3.0	-1.1
8	TURKEY	205	245	260	280	340	2.9	21.4
9	VIETNAM	295	375	380	290	300	2.5	3.4
10	MEXICO	204	210	219	229	228	1.9	-0.4
	TOTAL	6.829	7.774	8.707	9.187	9.862	82.8	7.3
	WORLD TOTAL	8.581	9.619	10.599	11.194	11.913	100	6.4

Source: General Directorate of Industry, 2016

As seen in the Table 2, It seems that the share of the world in the ceramic sector of Turkey can be increased. Analysis and restructuring of costs will have a positive impact on the development of the sector.

Graphic 1: Turkish Ceramic Coating Materials Export Data (2008-2012)



CONCLUSION

Competitive environment has increased customer expectations on businesses and price press requires companies to develop new solutions that make the production processes they perform inside more efficient. Better follow the production processes and to be able to calculate their costs realistically, To create production follow-up and cost accounting systems by using information systems They are active. Thanks to these systems, enterprises can make production operations more efficient and Efficient production as well as cost information they are aiming. Track production in an integrated structure with cost accounting in enterprises systems, taking into account the specific conditions and structure of the careful. Such applications have a strong institutional infrastructure it is always better to cooperate with the software company. After completing the system installation work in the operating enterprise. The management of the enterprise can monitor and control the production process much better. Cost information. Initially, the work flow chart starting with determining the data retrieval points and seeing the whole picture and play an important role in establishing an effective system. In summary this type of system the establishment of a specialist project in the framework of a project logic, to be compatible with the production flow chart and the account plan and to use the personnel system. As the main findings of the study of the importance of educating.

In the course of the global economic crisis, many European companies operating in diverse. Had to sell the whole or a substantial portion of his shares. Difficulty of companies in Spain Purchasing opportunity for Turkish ceramics sector. It has given birth. Thus, some European companies operating in the ceramic sector. Turkish companies were also aspiring to their shares. Some ceramics firms in the Turkish Ceramics sector make new investments in 2014 while some. While ceramic firms have added strength to their power by purchasing ceramic firms from abroad. Turkish Ceramics brands in the last 7 years by purchasing the European 7 ceramic brand in the world it has the floor.

Cost management is of great importance in the ceramic sector, which is a sector that holds monopolistic competition market assumptions at this point. The integration of enterprise resource planning in cost management will ensure that the overall business of the enterprise is integrated. The increase in the competitive power of the companies operating in the sector will have an effect of increasing the competitive power of the Turkish ceramics industry in the world.

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