

THE ROLE OF THE CORPORATE MANAGEMENT IN THE CRISIS MANAGEMENT IN BUILDING INDUSTRY

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Abstract— Hungary was reached by the great depression in 2008. The 5-year crisis has not left the building.

Keywords— corporate management, Operations management, Strategic management, Project management

I. INTRODUCTION

HUNGARY was reached by the great depression in 2008 and the impact of this is perceptible in 2009. The effects of the great depression are still going on today. The 5-year crisis has not left the building industry untouched, the construction companies have losted daily. Based on the 2012 data from the Central Statistics Office (CSO) the proportion of the construction companies discontinued is more than 50 % for 2013 and the number of company foundations also declined in the construction industry. The construction frequency was reduced because of the economic crisis, that's why number of the companies declared bankrupt because of the drastic fall of new orders.

Therefore, the objective our study is to introduce effects of the great depression in the building industry – especially the small and medium-sized enterprises – in Hungary

Furthermore, our study aims to introduce the position of the building industry, to form an objective view of this crisis situation affecting the construction companies and to present those solutions which can reduce the effects of the economic crisis.

We are examining that which tools and methods cab help to keep up with the competitors for a small and medium-sized enterprise in the crisis.

II. BUSINESS OPPORTUNITIES IN THE ECONOMIC CRISIS

According to the analysts the crisis was strongly influenced by one of the world's largest investment bank's (Lehman Brothers) announcement in the year 2008, that the bank went bankrupt and they asked protection from bankrupt because of the creditors' pressure. This was just one of the milestones of the great depression. The crisis has manifested itself much earlier in the real economy.

“In our country the construction sector was more affected by the crisis in the year 2008 than the other industrial sectors.” (Origo, 2009). The global economic crisis from the United States of America reached Europe and Hungary so quickly and ruthlessly. Because the very significant foreign real estate development companies have gone bankrupt or have weakened, they were forced to liquidate their sublets operating in Hungary (pl: Strabag, Colas, Swietelsky). More people lost their jobs in the construction sector decrease in the number of construction projects.

As a result, the construction industry has continued to deteriorate because the demands for building materials are reduced. For this reason, the manufacture of building materials companies closed down and liquidated a number of their factory in Hungary. „The situation in the construction sector shows a country's economic situation very well and as we can see it's not a thriving industry in our country nowadays” (EVOSZ, 2011).

Government and municipal orders are reducing continuously and the projects which previously provided jobs are disappearing. Fig. 1 shows the changes of the orders in the building sector.

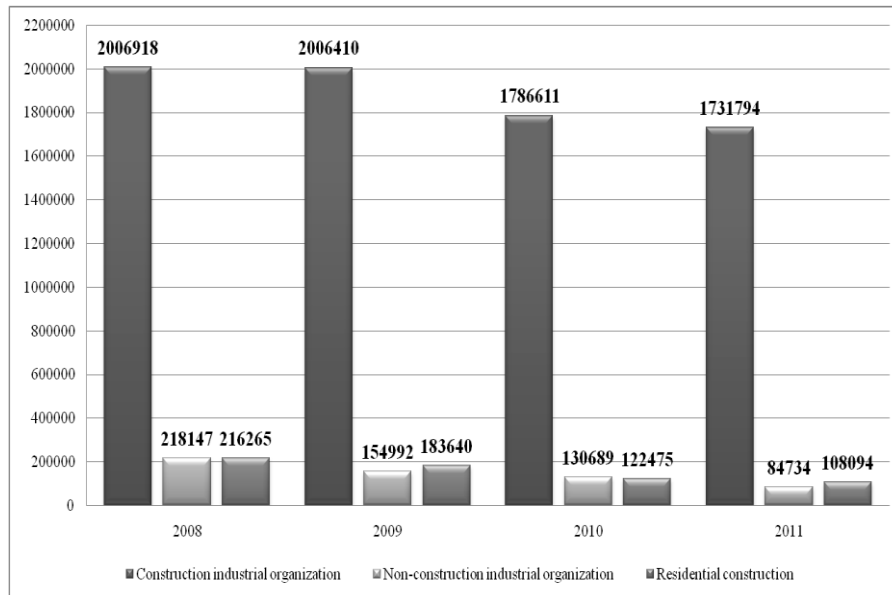


Fig. 1. Contracts in the building sector according to contractors (price (million Ft) /year), (CSO, 2013)

The figure clearly shows that the small and medium-sized enterprises in the construction industry make the significant part of the contractual investments in the building sector. Only a small portion of the investments are in the hands of the private and non-building sector. We can observe that within the small and medium-sized enterprises the contract staff decreased from year to year, but did not show a decrease as high as the non-construction industrial organizations. The numbers of orders from the non-construction industrial organizations are reduced almost by half from 2008 to 2011. The effects of the economic crisis affect especially the residential construction projects and non-construction industry organizations.

Decrease in the number of construction projects lots of people lost their jobs in the construction sector. This resulted in a further deterioration of the building industry and reducing demand for building materials. Thereby engaged in production of building materials companies closed and wound up their several factories in Hungary.

III. SYSTEM AND DEVICES OF THE CORPORATE MANAGEMENT

"Management is the organizational process that includes strategic planning, setting objectives, managing resources, deploying the human and financial assets needed to achieve objectives, and measuring results. Management also includes recording and storing facts and information for later use or for others within the organization. Management functions are not limited to managers and supervisors. Every member of the organization has some management and reporting functions as part of their job." (Hyssom, 2009).

Nowadays, the concept and the roles of business administration and business management are mixed within the construction sector. In the case of construction

small and medium enterprises are usually not separated the two concepts because in the majority of cases the same people are responsible for the theoretical and the practical management of the company. The corporate leader's main role is defining the business goals, setting the strategic directions, reasoning the decisions and making decisions on corporate objectives. The corporate leader's responsible is also commanding strategic change of direction in a well-established case and in the interest of this appointing the required actions. The corporate management is successful if it is a good example and motivation for the employees with charismatic characteristic (Varsányi, 2006).

The management of the small and medium-sized enterprises in the construction industry can be divided into three basic parts:

1) *Operations management: Operations management refers to the administration of business practices to create the highest level of efficiency possible within an organization. Operations management is concerned with converting materials and labour into goods and services as efficiently as possible to maximize the profit of an organization (Investopedia A, 2015).*

2) *Strategic management: Strategic management involves setting objectives, analyzing the competitive environment, analyzing the internal organization, evaluating strategies, and making sure that the strategies are rolled out across the organization (Investopedia B, 2015).*

3) *Project management: The planning and organization of an organization's resources in order to move a specific task, event or duty toward completion. Project management typically involves a one-time project rather than an ongoing activity, and resources managed include both human and financial capital (Investopedia C, 2015).*

A construction investment is a piece of planned works or an activity that is finished over a period of time and

intended to achieve a particular purpose (Cambridge Dictionary, 2015; György, 2012).

The corporate management's first challenge is fulfilling the defined results taking into account predefined limits. The next challenge is using optimally the devices which are necessary to achieve predefined objectives. The application project is an operational process with using reasonable resources (time, money, human, materials, energy, and space). The purposes of this are controlling and managing construction and material procurement in the building industry. Fig. 2 shows the typically tasks of the building industry management.

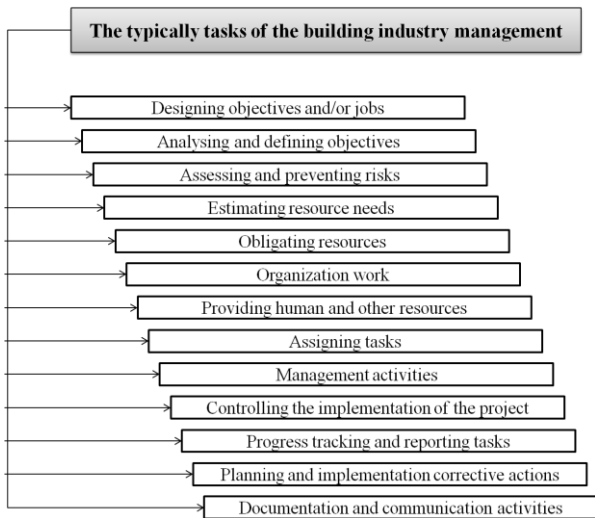


Fig. 2. The typically tasks of the building industry management
 (Based on own database)

In small and medium-sized enterprises in the building industry it is necessary to complete several strategic target tasks concurrently. It follows that usually going implementation of several projects and applications within the examined company side by side or overlaps with each other or successively.

The task of this company's management is deciding the preliminary and final stage of the projects (manager and bursar). Technical collar workers' and manual staff's task is executing the intermediate stages. Fig. 3 shows the organizational structure of this company.

In the company there are linear responsibility and hierarchical system (Fig. 3). The middle management, which can make decisions and control the company, is missing. That's why the manager has to be practical, creative, precise and open.

For the small and medium-sized enterprises' managers the most important things are cooperating with the employees. This company's manager is also a democratic leader who informs the colleagues and involves them to the decisions. He shall seek the opinions of the irrespective colleagues and explains the situations to the non irrespective colleagues.

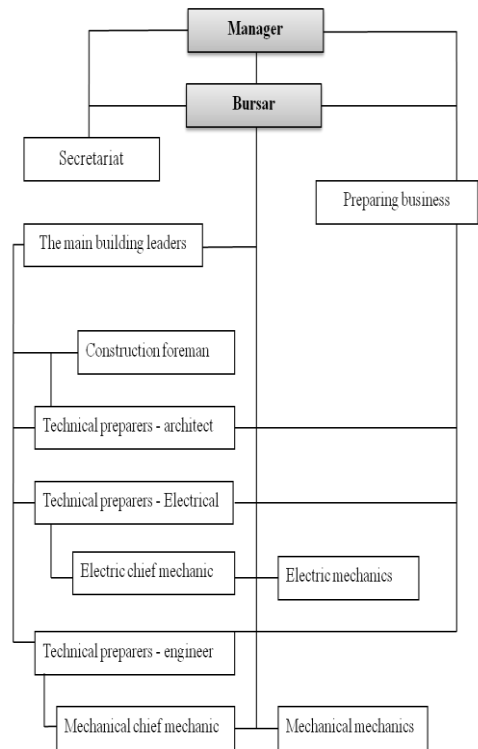


Fig. 3. The organizational structure of the company
 (Based on own database)

„The democratic leadership style is based on mutual respect. It is often combined with participatory leadership because it requires collaboration between leaders and the people they guide. Involves a team guided by a leader where all individuals are involved in the decision-making process to determine what needs to be done and how it should be done. The group's leader has the authority to make the final decision of the group.” (Business Dictionary, 2015; St. Thomas University, 2014; Varsányi, 2006).

Fig. 4 shows two types of management styles in a company.

If a company would like to be successful in the crisis, it can find the middle way between the two types. In this case the management can work together with the employees under controlled conditions and limitations (figure 4). For the small and medium-sized enterprises in the building industry the quality work and compliance with ISO is also very important in the crisis. The corporate management has to keep in mind the quality in all circumstances in the saturated construction market. The number of published tender projects is limited so that's why the well-established quality management system has a very important role in the market competition. This company attaches great importance to maintaining and renewing year by year the quality system

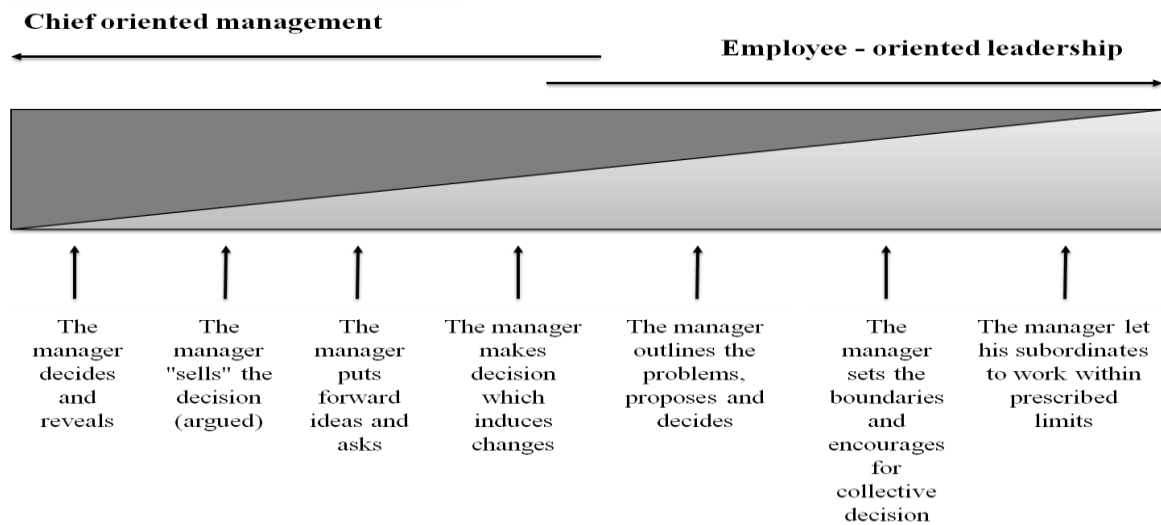


Fig. 4.. Types of management styles
 (Varsányi, 2006)

because it got lots of job because of the KIR-MIR-MEBIR systems.

The existence of a quality management system can output small and medium-sized enterprises in the construction from the crisis. The companies which obtain the certifications have a greater chance to win works because the quality management system is internationally recognized. This system improves the professional standard, increases customer satisfaction, pays attention to the training of employees and uses more economically efficient methods. And it creates a stable deployment of well-trained management leadership for small and medium-sized enterprises in the building industry.

IV CORPORATE MANAGEMENT OF CRISIS MANAGEMENT IN THE CONSTRUCTION INDUSTRY

The company was analysed by us is one of the small and medium-sized enterprises in the building industry.

The economic crisis is a major challenge for the company so it pays great attention mitigating the effects of the crisis. The company didn't increase the number of physical and intellectual workers. Further measures to reduce the effects of the crisis are the following:

- 1) *moved to a common office, thereby*
- 2) *closer cooperation between the preparation and execution, and*
- 3) *more structured operation, and*
- 4) *overhead reduction, and*
- 5) *management's daily contacts with areas.*

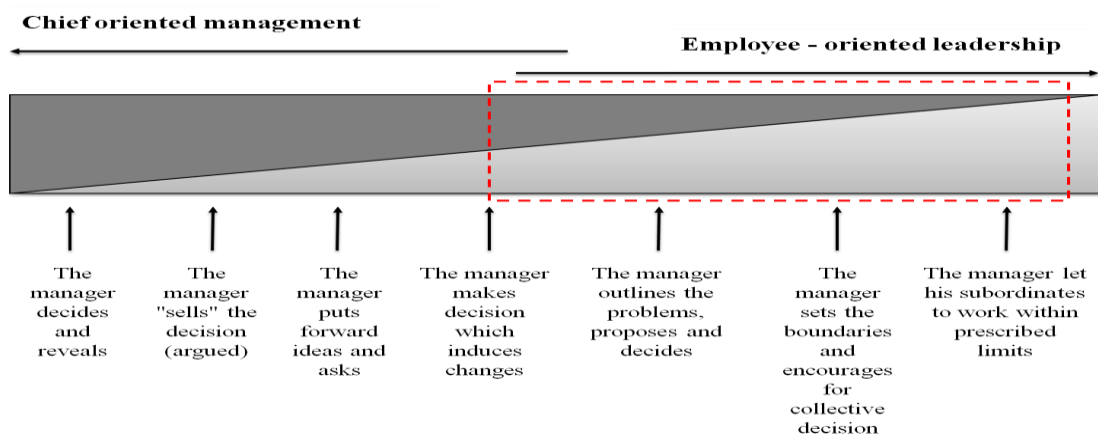


Fig. 5..Types of management styles II.
 (Varsányi, 2006)

The construction of small and medium-sized enterprises should aim the organizational culture based on results. This can inspire the people with internal motivation and personal commitment. Furthermore for the more efficient work this company has to keep our management style in the red zone in Fig. 5 (Szilágyi, 2009).

The efforts manager of the company form mixed style of leadership to democratic leadership style reach can achieve an incentive for employees. The employees are more enthusiastic if the management ask their opinion about the important question affecting their job and their company. Other strong incentive is when the manager praises the valuable contributions and makes public beneficial effects of the common decisions. With this management style:

- 1) *the negative effects of the crisis decrease*
- 2) *workplace performance increases*
- 3) *the quality of work improves.*

This continuously controlled management practices will not allow the crisis to generate irreversible events because of the late response. In this management style it

is necessary to create the middle management next to the manager. The middle manager has to be a good specialist, a good leader and cooperative with the management. Based on these this company changed its organizational structure as follows.

Two leading and controller group was formed next to the manager and the economic manager (Fig. 6). This achieve that the lower-level management tasks were create which had been missing earlier. The blue line shows the main line of control. It can be seen that the manager and the economic manager are controlling all groups, but the communication is bidirectional. The middle management layer in the red zone is in close contact with senior management and the preparatory group. As the company can't employ more people the middle managers are former employees because of the reorganization. In the green zone there are the preparatory groups. These groups' task is taking a contact with the contractors, the chief mechanics, the manual workers and the subcontractors.

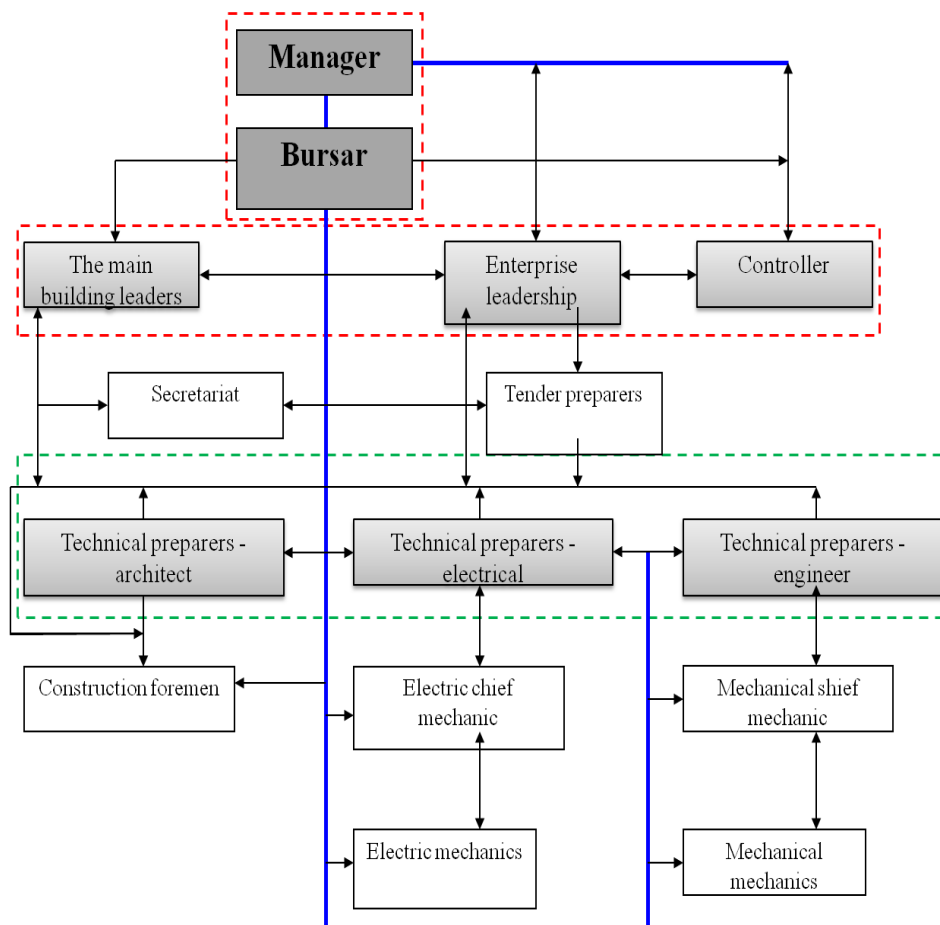


Fig. 6. The company's changed organizational structure
 (Based on own database)

The middle management has to know the human resource needs of projects that in case they need to be

able to intervene. This avoids late payment and unnecessary

extra work paid which is a very significant economic savings for a construction small and medium-sized enterprises. The company leader's tasks are the following:

- 1) *monitoring all existing and new applications*
- 2) *providing contracted work for the company*
- 3) *monitoring of price competition in the construction market of small and medium-sized enterprises*
- 4) *perceptioning the success of tenders*
- 5) *controlling team work.*

The controller provides supportive economic services for the management to the dedicated planning and management. He is coordinating the sub-targets and sub-plans, organizing a future-oriented reporting system, discussing the differences with responsible leaders and discussing the possible appropriate measures.

In addition next to the transformation of the organizational structure it is necessary to transformation the quality assurance system (KIR, MIR, MEBIR). Based

on the experience the company should implement the TQM (Total Quality Management) system.

The concept of TQM: "The continuous process of reducing or eliminating errors in manufacturing, streamlining supply chain management, improving the customer experience and ensuring that employees are up-to-speed with their training. Total quality management aims to hold all parties involved in the production process as accountable for the overall quality of the final product or service." (Investopedia D, 2015). Against the KIR, MIR, MEBIR there are no limitations, obligatory standards points and certification procedure, but there are self-assessment carried out by the company (IdeSol, 2012).

Fig. 7 shows the major principles of Total Quality Management.

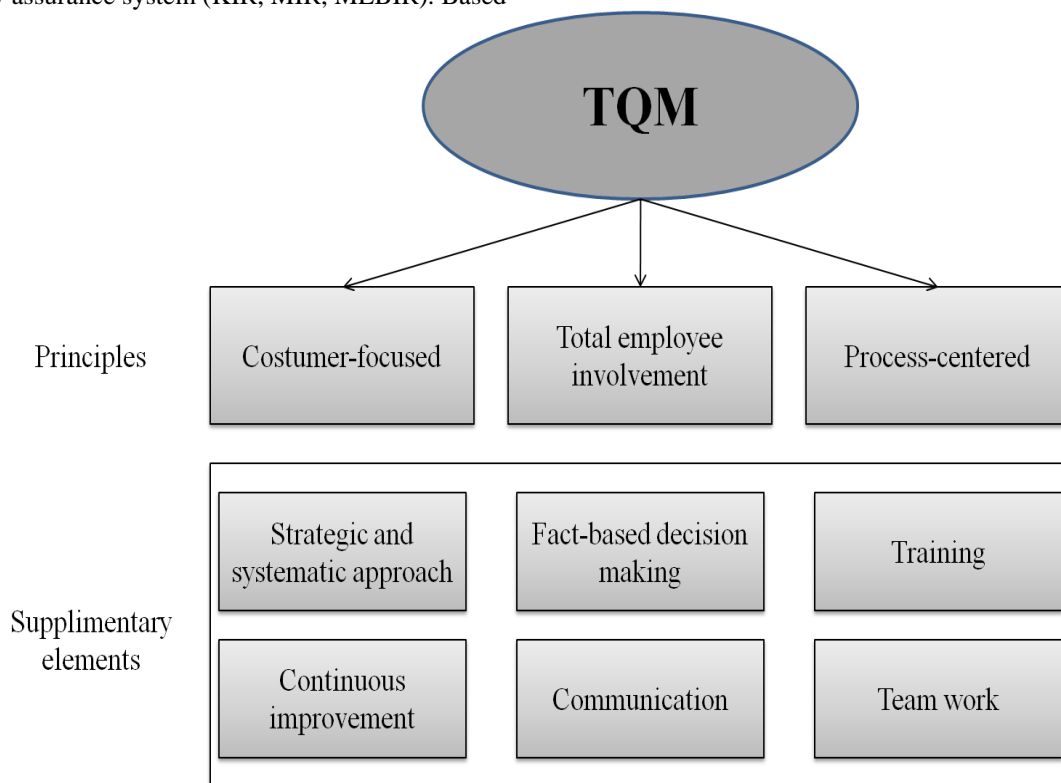


Fig. 7. TQM
(Varga, 2005)

The 5 pillars of TQM show that the company requires the establishment of this system based on progressive changes:

- 1) *creating a suitable atmosphere*
- 2) *user focusing*
- 3) *management based on facts and figures*
- 4) *continuous quality improvement*
- 5) *involvement employees* (Varga, 2005).

Next to the construction of TQM system I would recommend for the construction of small and medium-sized enterprises using Gantt-diagrams and flowcharts in the Microsoft Office Project program as shown in Fig. 8.

„A Gantt chart is a visual representation of a project schedule. A type of bar chart, a Gantt charts show the

start and finish dates of the different required elements of a project. Henry Laurence Gantt, an American mechanical engineer, is recognized for developing the Gantt chart. Gantt charts are useful in planning how long a project should take and helping to sequence the events by laying them out in the order in which the tasks need to be completed. Typically, tasks are shown on the vertical axis, and the project time span is represented on the horizontal axis. Each task has a corresponding bar that shows the time span required for that task. The bar can

be filled in to show the percentage of the task that has been completed. Gantt charts also indicate dependencies, those tasks that are dependent upon other tasks. Today

Gantt charts, as well as functions in popular programs such a Microsoft Excel.” (Investopedia E, 2015).

there are many software applications available for creating

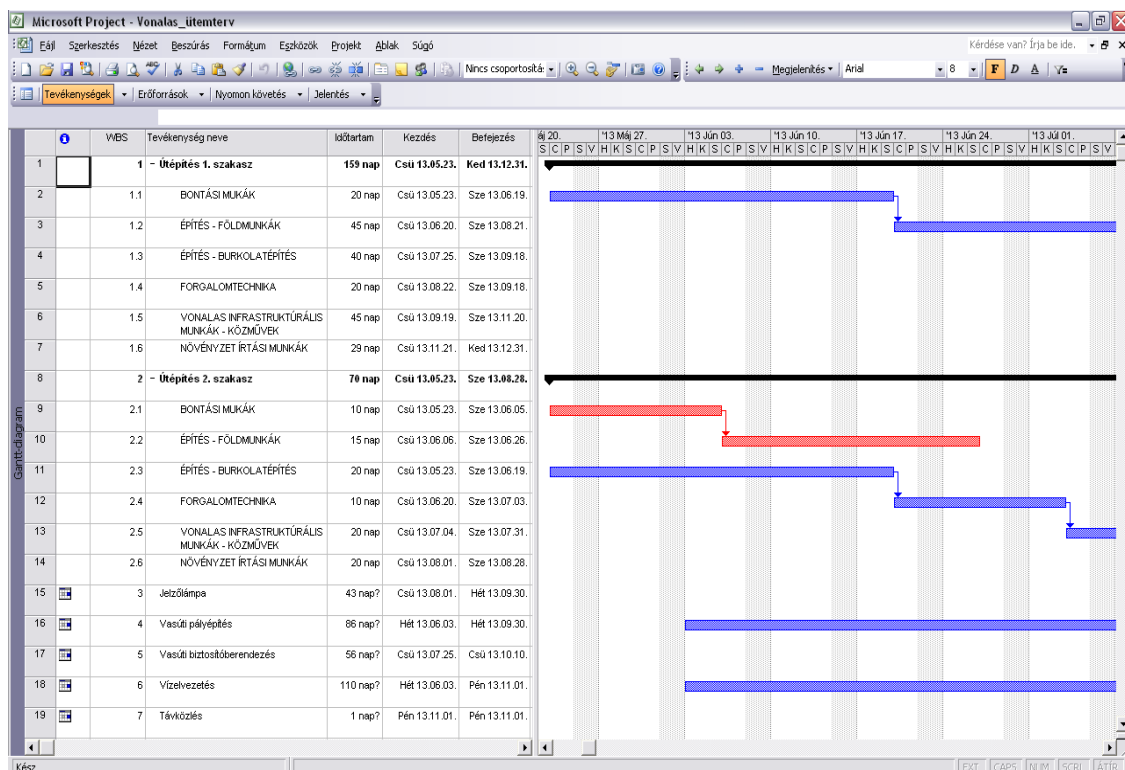


Fig. 8. Microsoft Office Project program
(Based on own database)

IV. CONCLUSION

According to the CSO data, the construction sector is the most affected by the crisis. That's why we examined this sector in our study. We examined a company's activity from 2009 to 2012 to choose those areas or groups which need to be improved.

Our first conclusion was changes can be made in several areas within the operation of the company. I consider the development of a quality management system from KIR, MIR, MEBIR to TQM. Next to the construction of TQM system using Gantt-diagrams and flowcharts in the Microsoft Office Project program is also very important to reach success. It is necessary to create the middle management next to the manager who has to be a good specialist, a good leader and cooperative with the management.

REFERENCES

[1] Business Dictionary (2015): <http://www.businessdictionary.com/definition/democratic-leadership.html>, 2015.09.12 14:01
 [2] Cambridge Dictionaries Online (2015): <http://dictionary.cambridge.org/dictionary/english/project>, 2015.09.12 14:00
 [3] EVOSZ (2011): <http://www.evosz.hu/sajtoszemle/s15.doc>, 2013.03.11, 12:34
 [4] György, Á. (2012): Project management PowerPoint, University of Debrecen http://www.kozbeszerzes.hu/static/uploaded/document/Kbt_2011_01_01.pdf 2013.02.28, 11:39

[5] Hyssom, A. (2009): Management. Kent State University.: <http://www.amyhissom.com/MyWritings/Management.pdf>, 2015.09.12 13:56
 [6] IdeSol (2012): <http://www.idesol.hu/minsegfejlesztes/tqm.html>, 2013.04.22, 10:27
 [7] Investopedia A (2015): <http://www.investopedia.com/terms/o/operations-management.asp>, 2015.09.12 13:58
 [8] Investopedia B (2015): <http://www.investopedia.com/terms/s/strategic-management.asp>, 2015.09.12 13:58
 [9] Investopedia C (2015): <http://www.investopedia.com/terms/p/project-management.asp>, 2015.09.12 13:59
 [10] Investopedia D (2015): <http://www.investopedia.com/terms/t/total-quality-management-tqm.asp>, 2015.09.12 14:02
 [11] Investopedia E (2015): <http://www.investopedia.com/terms/g/gantt-chart.asp>, 2015.09.12 14:03
 [12] CSO (2013): <http://www.ksh.hu/docs/hun/xftp/megy/124/buda124.pdf>, 2013.04.02, 10:11
 [13] Origo (2009): <http://www.origo.hu/gazdasag/valsag/20090909-egy-eve-kezdodott-a-valsag-lehman-brothers-csod-tozsdeimelyrepules.html>, 2013.03.19, 18:30
 [14] St. Thomas University Online (2014): <http://online.stu.edu/democratic-participative-leadership/>, 2015.09.12 14:02
 [15] Szilágyi, B. (2009): The comparative analysis of organizational culture and employee attitudes agricultural enterprises, PhD thesis, University of Debrecen
 [16] Varga, E. (2005): Quality Management, Campus author, Debrecen
 [17] Varsányi, J. (2006): Corporate management. In HEFOP 3.3.1-P.-2004-09-0102/1.0 tender, Széchenyi István University, Győr