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COMPLEXITY OF MATRIX ORGANISATION AND PROBLEMS CAUSED BY ITS INADEQUATE IMPLEMENTATION

SLOŽENOST MATRIČNE ORGANIZACIJE I PROBLEMI UZROKOVANI NJENOM NEADEKVATNOM PRIMENOM

ABSTRACT: *Matrix organisation model is a sophisticated structure intended to combine both the efficiency and effectiveness of the functional and the product/service/customer/area dimensions. From the moment it was introduced in practice, this organisational architecture was accepted with enthusiasm, because it represented a complex organisational response adequate to the conditions which most of the companies in the world have been facing since 1970s. Although matrix organisation is not a novelty, it is still a controversial model of organisation design. The aim of this paper is to provide a deeper insight into the causes and effects of organisational misfits which appear in the implementation phase of three-dimensional matrix organisation, as well as to offer some practical recommendations for managers on how to improve their capacities for successful management of complex matrix organisation architecture in their organisations.*

KEY WORDS: *matrix organisation, organisational complexity, organisational design*

JEL Classification: M10, M19

APSTRAKT: *Matrični model predstavlja kompleksno organizaciono rešenje čijom primenom se istovremeno postiže efikasnost i efektivnost organizacije putem kombinovanja funkcionalne i proizvod/ usluga/ kupac/ područje dimenzije. Od trenutka kada je uveden u praksu ovaj model organizacionog dizajna je prihvaćen sa entuzijazmom, budući da je predstavljao kompleksni organizacioni odgovor adekvatan uslovima sa kojima se većina kompanija susrela od 1970ih godina. Iako matrična organizacija više nije novina, još uvek predstavlja kontraverzni model organizacionog dizajna. Cilj ovoga rada je da detaljnije objasni uzroke i posledice organizacionog neslaganja koje se pojavljuje u fazi implementacije trodimenzionalne matrice, kao i da ponudi praktične preporuke menadžerima kako da poboljšaju mogućnosti za uspešnu primenu kompleksne matrične strukture u svojim organizacijama.*

KLJUČNE REČI: *matrična organizacija, organizaciona kompleksnost, organizacioni dizajn*

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1. Introduction

Matrix organisation is not a novelty, but it is still a controversial model of organisational design. From the beginning, this organisational architecture was accepted with enthusiasm, since it represented a sophisticated organisational response which appropriately matched the complex and dynamic environment most of the companies in the world have been facing since 1970s. There is no doubt that the previous research in the field of organisational studies recognises that matrix form is not an ideal way to organise the activities of a company. Like any other model of organisational design, the matrix model has its advantages, as well as its disadvantages. One of the main advantages of the matrix model in comparison to other structural models is its high level of complexity, which meets the requirements of complex environmental conditions of the present. On the other hand, a number of examples can be found referring to the matrix model as "an unworkable system that stifles development..." (Larson, Gobelin, 1987: 126), "...a design that produces what might be called organisational schizophrenia" (Ackoff, 1994: 95) and "ingenious in theory but confusing in practice" (Ashkenas, et al., 2002: 120). Extensive literature is devoted to this most important characteristic of the matrix model (Galbraith, 1971; Knight, 1976, Larson, Gobelin, 1987; Bartlett, Ghoshal, 1990; Peters, 1993, Nadler, Tushman, 1997, Kruger, 1997, Jones, 2001, Galbraith, 2002; Bartlett, Ghoshal, 2003). Literature review points to the attempts of establishing a successful matrix that have failed, including renowned companies such as Dow Chemicals, Citibank, Texas Instruments, Xerox and so forth (Bartlett, Ghoshal, 2003:340; Larson, Gobelin, 1987: 126). Therefore, the same complexity that was declared as its highest competitive advantage, in practice proved to be its highest barrier for the successful implementation in a number of companies, outweighing its positive aspects.

The matrix model is a sophisticated structure, aiming to combine both the efficiency and the effectiveness of the functional and the product/service/customer/area dimension. This is achieved by having both functional and divisional forms within one organisational model. Traditional matrix organisation relies on the two-dimensional model, which combines the functional with one of the output dimensions: product, service, customer and area (Burton et al, 2006: 67). Nevertheless, the complexity of modern business environment brought about the development of the three and the four dimensional matrices, when companies simultaneously apply either the functional-product-area dimensions, or the functional-product-customer-area dimensions (Burton et al, 2006: 67). There is no doubt that these complex organisational solutions introduce a number of challenges for those managers who need to implement them in practice. In

this paper we develop the idea that complexity in the implementation of the matrix organisation stems not only from the complexity of matrix organisational structure *per se*, but also from the fact that this organisational model introduces radical changes in several other organisational dimensions, apart from the structure. Following the well-known Miller and Friesen's hypothesis (Miller, Friesen, 1982) that organisational models are, in fact, different configurations of mutually consistent organisational components, we argue that the benefits of matrix organisation cannot be fully accomplished until its logics is completely applied to all organisational dimensions. Organisational dimensions will be analysed using the prominent Galbraith's "Star ModelTM" as the starting point.

The aim of this paper is twofold. Firstly, our intention is to provide a deeper insight into the causes and effects of organisational misfit, which can be created by means of implementation of the three dimensional matrix organisation. Secondly, we intend to formulate constructive conclusions and practical recommendations for managers on how to increase the likelihood of successful implementation of the complex matrix organisational architecture into their organisations.

Our research is based on a case study of one Serbian company. Therefore, at the beginning, we will give the most important information about the company which is the subject of the case. Afterwards, we will point to the problems caused by a high degree of complexity of the three dimensional matrix and its effects on organisational performance. Finally, we will offer potential solutions to the problems identified, along with conclusions and implications for managers; we will also point to the limitations of the paper itself.

2. Research framework

Organisational problems caused by the implementation of the matrix organisational model, and the managers' reactions to those problems were investigated through a case study method. Research methodology was based on the interviews with the managers holding key managerial positions, and an in-depth review of archival data. The company analysed is one of the most renowned in Serbia, specialising in drugs and medical materials wholesale. It supplies approximately 40% of medical institutions in the country with medicines and medical materials. The Company has around 650 employees, mostly highly educated pharmacists.

In terms of its strategic orientation, the Company focuses on the implementation of market segmentation strategy, at the same time widely covering the business area. As the biggest wholesaler of medicines and medical equipment in the country, the Company is trying not only to cover the entire territory of the country with a wide assortment of medicines, medical equipment and supplementary healing remedies, but also to cover all the target groups of customers. Because the requests of different market segments differ significantly depending on the territory, customers and products, the Company has adjusted its marketing mix so as to correspond to each individual segment. The necessity to vary the supply in order to meet the three criteria mentioned, imposed the need to build an appropriate organisational structure. The only organisational model that fully supports such widely defined and sophisticated market coverage is the three-dimensional matrix structure.

The Company applies the three-dimensional matrix organisation, which means that the most important organisational processes (supply, logistics and sales) implement the following principles in terms of the division of labour and authority:

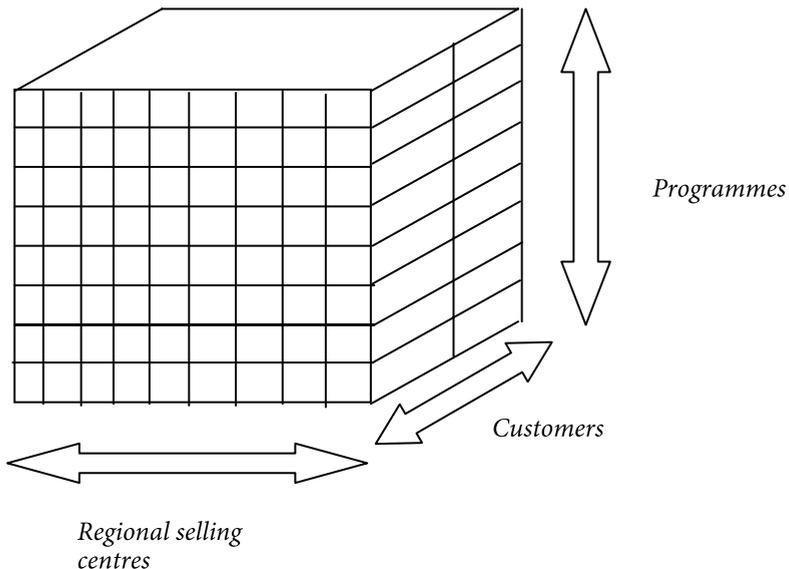
Customer principle. At the time of this research, it was a holding company consisting of four dependent companies. One of the four legally existing companies constituting the Holding was not active at the time of this research, but it was planned that it should develop its business activities. Another one focuses on logistics, undertaking both inbound and outbound logistics. The remaining two companies specialise in selling goods to different target groups of customers: one of them sells medicines and medical equipment to medical institutions that are financed by the State Health Fund (SHF) exclusively, whereas the other sells medicines and medical equipment to the customers who are self-financed. Those medical institutions which are financed by the State are also state-owned, while those which are self-financed are mostly in private ownership. What complicates the whole matter is the fact that some customers are partly financed by SHF and partly self-financed.

Area principle. Sales activities of the Company are the responsibility of nine regional business centres. The sales-force of the Company is in these business centres, which are led by regional managers. The regional business centres have a significant role, not only in the regional sales, but also in the supply and the management of stocks and logistics, since they control the processes listed above, being in charge of the dynamics of purchases and sales.

Product principle. All the products in the Company's assortment are categorised into eight groups of products, according to the similarity principle, and entitled as

”the programmes”. Four of these product groups (so-called ”big programmes”) are highly developed and, in a way, represent the core business of the Company; the remaining four (so-called ”small programmes”) are new programmes in non-core business areas with unpredictable future development. The programmes are managed by programme managers. They have tasks and responsibilities in the process of supplying goods, managing stocks and providing sales.

Figure 1: The three dimensional matrix of the Company

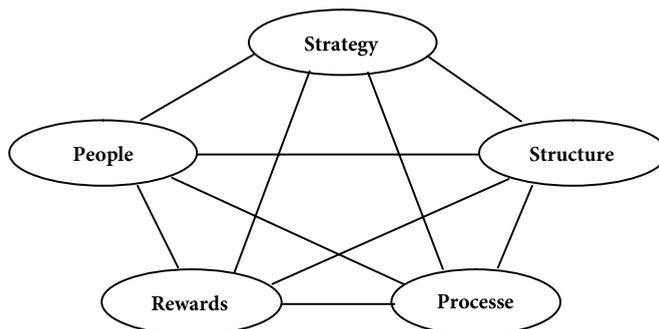


Along with these basic structuring principles, by means of centralising certain business functions, the Company employed an additional principle as well. By means of centralising certain functions, the Company achieved leverage in its structure. The functions centralised are typical infrastructural functions, such as finance and accounting, information systems, human resources and procurement. The centralised procurements involve negotiations with suppliers and the technical component of the purchasing process, whereas the assortment and the quantity of orders are defined and determined by the regional managers, the product managers and the directors of the companies themselves.

The analysis of the organisational problems caused by the three-dimensional matrix was performed using the well-known Galbraith’s “Star ModelTM”. Galbraith identified five important elements of organisation: strategy, structure, processes, people and rewarding. The logics underlying the “Star ModelTM” is

that organisational design should align (1) strategy – strategic vision identifying sources of competitive advantage, (2) organisational structure – role, authority and reporting structure, (3) organisational processes – teams, networks, and integrative roles, (4) reward system and (5) processes of selection and professional development of the employees within an organisation (Galbraith, 2002; Dunbar, Starbuck, 2006).

Figure 2: The “Star Model™”



Source: Galbraith, J., 2002, *Designing Organisations*, AMACOM

3. Research findings

Using the “Star Model™” in the analysis of the Company’s matrix organisation we identified the problems caused by an inadequate implementation of the three dimensional matrix. These problems can be summarised as follows:

3.1. People dimension

It is frequently quoted that the matrix organisational design creates the phenomenon of “*a two boss employee*” (Peters, 1993; Nadler, Tushman, 1997; Jones, 2001). The implementation of the matrix structure in the Company resulted in formal authority over the selling force of the Company being delegated among the directors of the dependent companies, the product managers and the regional managers. Belgrade’s regional centre was the only one that consistently followed the principles of the three-dimensional matrix. This resulted in a very specific position of the employees in this centre. They were in a position which could be termed as “*a many bosses employee*”. Since the Company’s headquarters are situated in Belgrade, not only were they under the regional manager’s supervision, which was the case with their colleagues in other regional centres,

but also under the supervision of all the product managers, the directors of the dependent companies, as well as the senior managers and CEO himself. This situation occurred as a result of the specific position and the role of Belgrade as a regional centre and the strategic leader of the company. Most problems arose because of the managers' contradictory instructions and because of the fact that the employees were confused about whose instructions to follow. On the other hand, such a situation created "the curtain effect" which enabled the employees to make use of the conflicting and confusing situations by avoiding the obligations and making excuses for not following other managers' instructions.

One of the most important problems is recognised as **a low degree of cooperation and the lack of communication** between the regional business centres. The regional managers tended to be autonomous, which caused the problems with the self-contained behaviour of the regional centres. Instead of benefiting from economy of scope, they were creating their own micro economies, independent of one another and the headquarters. This individualistic approach applied in the regional centres led to the competitive, rather than cooperative, relationships between the regional managers and the employees. According to the principles of the three-dimensional matrix, the employees within the regional centres were to have two bosses responsible for all the centres (the managers of the companies and the product managers) and only one boss, the regional manager, for a separate one. Most employees in the regional centres were not aware of the fact that they had the same supervisors and they regarded the regional manager as the most powerful boss.

One of the problems that could be solved by mutual cooperation among the regional centres was the problem of the lack of employees qualified enough for selling the products of not as developed, but more specialised, "small" programmes. Poor communication resulted in inefficiencies in resource allocation and knowledge transfer. Instead of sharing the employees in a way that would allocate one expert in dental products, for instance, to two or more regional centres, regional managers were more willing to employ one extra person and were trying to form their own experts.

Another problem closely related to the previous one is sharing the **responsibility for development** of the sales-force in the regional centres. Most of the sales representatives in the Company are pharmacists, dentists or veterinarians, not trained for selling during their formal education. The wholesale of medicines and medical equipment in companies such as this one requires highly specialised professionals with the knowledge about the products and trained in selling. Two

main types of development activities are most important for the company's sales-force: training their selling skills and the acquisition of knowledge about the products, the market, and the customers.

Paradoxically, the company was much better at organising trainings in selling provided by external consultants than at using their own resources (the product managers) in order to share the knowledge within the company. The programme managers as experts in a certain branch were the only ones who could inform the sales representatives about the innovations, the new products and the achievements in the field, and who could discuss with a potential introduction of new medicines into the Company's assortment with the sales representatives. However, due to the poor communication between the regional sales managers and the product managers this did not happen in practice. Just like in all the other areas of the matrix implementation, Belgrade's regional centre developed this form of cooperation between the product managers and the sales force. This cooperation was fruitful, so the assortment in Belgrade's stocks was always more innovative and attractive than the assortment in all the other regional centres.

3.2. Processes

Product management. The product dimension proved to be the least developed of all, not only on the interpretative scheme level, but on the structural and the strategic level as well. Not fully aware of their roles, the product managers were supposed to coordinate, integrate and link all the positions involved in the procurement, the sales and the logistics of their products, as well as to take care of the sales assortments by themselves. The product managers did not have a substantial influence on the sales representatives in the regional centres who sold their programmes because they were not able to control the final profitability of the programme they were in charge of. On the other hand, not all the product managers were in the same position. Unofficially, each programme had a different status and consequently, the programme managers had a different influence. Some were more influential and were able to play the role of coordinators, whereas the others were less influential and were forced to fight for the survival of their programmes by selling to the customers directly, skipping the level of the regional sellers. There was a gap between the authority and the responsibilities of product managers. This discrepancy came as a result of the expectations imposed on them, requiring the actions they were not authorised to take. For example, the product managers had no authority to decide on the rewards of the employees, or to sanction them for not completing their job appropriately. Consequently, the coordinating part of their role remained unfulfilled.

Purchase management. All the purchases within the company are centralised, which means that the orders from all the regional centres are collected in a two-week period, then jointly ordered from a supplier and finally, distributed to the regional centres accordingly. As a wholesaler, the Company has to be very efficient in stock management. The problems in the supply process occurred mostly because the orders from the regional centres were not coordinated. Each sales representative from each regional centre sent his own order containing goods he planned to be sold in the following two weeks, separately from the other colleagues' orders. The regional managers were not responsible for controlling orders at all, but, on the other hand, they were responsible for the stock level, so they were fined if the stocks were excessive. All the orders from the regional centres were collected by the information system and the product managers in the Company's headquarters were to check them, determining if they were to be taken or not. During this procedure, the product managers frequently changed the orders, adapting them to the situation on the market, to the terms of payment and to other criteria. Having made these corrections once, they were not obliged to inform the regional managers about the changes, which led to the regional centres ending with goods on stocks they did not order at all; nevertheless they were obliged to sell them.

Managing sales. Companies may have a complex or an inconsistent structure as long as they succeed in keeping it simple for their customers. Customers are not to see the drawbacks and the pitfalls of an inappropriate organisational structure, nor to be confused by it. Due to several faults in the design of the organisational process, this is exactly what happened in the Company. As far as the sales are concerned, the matrix organisational model was not consistently applied for several reasons:

1. The dependent companies' directors and the regional managers shared duties, so that the companies' directors could devote more attention to the selling and to the collecting payments from the most important customers, whereas the regional managers were playing the leading role in a region.
2. In order to avoid the double chain of command, the decision about who would deal with the customers was the question of an informal agreement between the employees holding these positions.
3. The directors of dependent companies neglected the part of their role which required intensive coordination and control of the employees in the regional business centres.

Logistics management. As mentioned above, the logistic activities within the Company are undertaken by one of its companies, specialised in inbound and outbound logistics, as well as in manipulation with goods in the Company.

The logistic problems occurred due to the matrix organisation and the authority given to several managers to determine on the flow of goods. The regional managers' influence on the logistics disregarded the fact that it was not their responsibility. Their influence on the logistics, and, consequently, on the stocks, was manifested predominantly through the orders for re-distributing the goods between the regional centres. Following the business process itself, we may conclude that regional managers were responsible for the costs of stocks and logistics for the buyer, but not for the decisions about whether the goods they did not succeed to sell were to be sent to another regional centre.

The product managers caused problems with their interference with re-distributing the stock when there was a surplus of certain goods in one regional centre and the shortage of the same products in another. The product managers should have played the role of experts to decide on the assortment, but not on the stocks. The directors of the companies had neither the authority nor the responsibility for the logistic processes. Introduction of the third dimension of the matrix into logistics, by involving the directors of the dependent companies, further complicated the whole procedure and resulted in new problems.

Thus, it is quite logical to ask how the directors of the dependent companies, should be responsible for the results if they cannot control the costs of maintaining a certain stock level.

4. Discussion

Relying on the case study, we examined the organisational problems caused by the high complexity of the matrix organisation. We considered strategy to be the starting point, arguing that the changes in the organisational architecture and the behaviour of employees should follow the adopted strategic course. Our findings indicate that the implementation of the matrix organisation requires a thorough preparation of all the organisational dimensions. Introducing changes into the formal organisational structure, represented by the organisational scheme, is the simplest part of the matrix implementation. It is much more difficult to change the way the employees and the managers perceive their roles in the organisational hierarchy. As early as 1990s, Bartlett and Ghoshal argued

that the matrix configuration has much more to do with the structure of mind and far less with the organisational structure (Bartlett, Ghosal, 1990:138-145). It seems that we are still facing problems caused by an inadequate understanding of the matrix. The implementation of the matrix organisation requires committed work and patience in changing other organisational dimensions, apart from the organisational structure. What is more, it requires changing peoples' attitudes towards the organisation and changing their old habits. In addition to this, organisational systems and processes must support the implementation of the sophisticated strategy and the matrix structure. Consequently, the matrix organisation cannot be successfully implemented until it is established in all of the five organisational components: strategy, structure, systems, people and processes.

The complex matrix structure of the Company analysed in our case resulted in the organisational problems and the slack performance. The management showed the lack of ability to manage the three organisational dimensions simultaneously. What happened in the Company is that the matrix organisation was not equally adopted up to different levels in different phases. While it was completely accepted on the strategic level, it was far less accepted on the structural and the psychological level. On the strategic level, there is no doubt that the Company's business has three basic dimensions - customer, area and product dimension, and that the product mix has to be differentiated in accordance with these three criteria. The matrix was well recognised as a type of organisation adequate to the complexity of the Company's business and strategy. On the structural level, the three-dimensional matrix was introduced only in terms of a formal organisational scheme, whereas in reality everything functioned according to the dual matrix. Any further steps into the organisational levels of the matrix dimensions were neglected and abandoned one by one.

It proved that the complexity of the matrix organisation creates problems in its implementation in two ways: through the systems and through the interpretative schemes of both the employees and the managers.

Organisational systems. In order to show its full effects, the matrix organisation requires adjustments in organisational systems, such as planning and control, compensation and information system.

Information system could have been of great help in linking the regional sales representatives with the product managers, but its potentials were not used, despite the fact that the Company is technically well-equipped and that most

of its employees do know how to use the Company's sophisticated software. The information system could support the position of the programme managers. By communicating with the regional sales representatives via e-mail, the product managers could obtain the position of "the virtual boss" and overcome the limitations caused by the geographical distance between the headquarters and the regional centres. However, the information system was adjusted to fulfil the needs of the companies and the regional centres, while the programmes and the issues related to them were neglected.

Planning and control system. The analysis of planning and control clearly indicates that the process of the matrix organisation is not completely developed. During the past three years the Company has made a significant attempt to develop the system of strategic and business planning. The methods and the procedures of the formulation and the acceptance of the strategic and business plans in the Company are developed, as well as the documents which are used in the process of planning and the reports that are used in the process of control. Along with the business plans that refer to the Company as a whole, methods, procedures and documents are developed for the process of planning in the companies and the regional business centres, as well. On the basis of the companies' and the regional centres' business plans, it is possible to plan, measure and control their financial results, revenues, costs, stocks level, and claims. This is not the case with the programmes. Top management can review only the income of each programme, but not the profitability, stocks and claims that refer to the programmes. All this leads to the conclusion that the programmes are recognised as an important segment within the strategy of differentiation, as well as an important segment within the organisation, but not as the units of income, costs, stocks and claims in the system of planning and control. The system of planning and control has to be adapted to the three-dimensional matrix.

Compensation system. The Company has developed a compensation system which involves basic salary and incentives. Basic salary mostly depends on the kind of duties performed and the qualifications of the employees, whereas incentives are mostly based on the results of the regional business centres. Incentives are calculated on the basis of profit, stocks and claims within the regional business centres. The financial results of the Company and its dependent companies, as well as of the programmes, do not influence employees' earnings in any way. The Programme managers and the directors of the dependent companies had no financial instruments to influence the employees' behaviour and to make them follow their instructions.

The results of our research imply that when the implementation of the matrix organisation is not followed by appropriate adjustments in organisational systems, managers' ability to manage two or three dimensions of organisations decreases seriously and the potentials of the matrix organisation cannot be completely verified. What may happen is that, due to the collision between the three-dimensional structure and one-dimensional systems, all positive sides of the matrix are annulled.

Interpretative schemes. The second group of problems refers to the incapability of management of a company to use the matrix potentials in everyday work because of the lack of changes in their interpretative schemes. The management of a company is simply unable to view the company from all the three aspects, and to manage them simultaneously. Within their interpretative schemes, an organisation is seen as a simple organism or as a machine. The simultaneous implementation of the functional and the territorial principles in the organisational process, applied in the Company for years, led to the resistance to the acceptance of the customer dimension and the programme dimension.

Even when they are aware of the presence of these dimensions, both employees and managers do not recognise them as equally important and underestimate them by devoting them less attention within on the top management level dimension in comparison to the territorial dimension. It is surprising, for example, that the programme managers are not invited to the regular top managers' meetings.

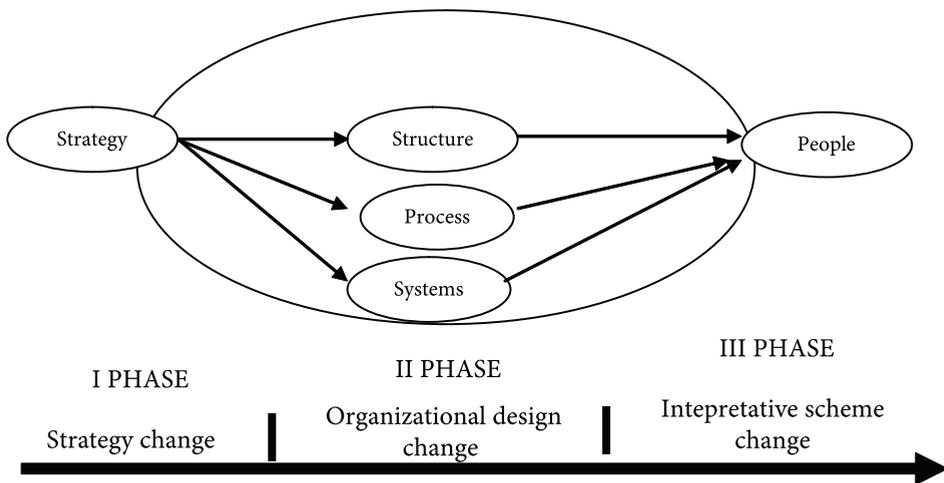
5. Concluding remarks

Relying on the case study, we examined organisational problems caused by the high complexity of the matrix organisation. Our results indicate that the implementation of the matrix organisation requires a thorough preparation of all the organisational dimensions. Introducing changes into formal organisational structures, represented by organisational schemes, is the simplest part of the matrix implementation. It is much more difficult to change the way managers and employees perceive their roles in organisational hierarchy. It seems that we are still facing problems caused by an inadequate understanding of the matrix model. What happened in this case is that matrix organisation was not equally adopted on all organisational levels. While it was completely accepted on the strategic level, it was far less accepted on the structural and the psychological level.

Consequently, it appears that the matrix organisation cannot be successfully implemented until it is established in all of the five organisational components strategy, structure, systems, people and processes.

Relying on the empirical data collected from the case and challenging Galbraith's model (Galbraith, 2002:2), we suggest that a revised model introducing organisational systems as important segments of successful organisational designs should be applied. According to this paper, there are three organisational systems which are considered to be the most important: information system, planning and control system and human resource system (integrating the *people* and the *reward* dimension of Galbraith's "Star Model™"). In addition, a deeper insight into the *people* dimension is suggested including cognitive or interpretative schemes and processes.

Figure 3: Revised model



The results of the research can be summarised in five organisation design rules:

- Rule 1:** The matrix organisational model cannot be successfully implemented into an organisation until it is established in all the five components of an organisation: strategy, structure, systems, people and processes.
- Rule 2:** The implementation of the matrix into different organisational dimensions is not carried out at the same pace. The matrix is implemented on the strategy level first, then on the structure, systems and processes levels, whereas the implementation into the interpretative schemes of managers

and employees is the last to come. As a result, three basic phases in the process of the matrix implementation can be recognised: in the first phase, a strategy is changed; in the second, structure, systems and processes are changed and in the third, managers' and employees' interpretative schemes are also changed (see Figure 3).

Rule 3: Since the matrix implementation is a dynamic process, which requires sufficient time to be undertaken in each phase, time lag is likely to occur among the changes in strategic, structural and interpretative components of organisation.

Rule 4: If the time lag between implementation phases is too long, organisational inconsistency might lead to a decrease in organisational efficiency. This gap is the main cause of organisational problems in the process of implementation of the matrix organisation.

Rule 5: The problems recognised in the matrix implementation are more obvious in the three- than in the two-dimensional matrices. The gap is more likely to occur when some organisational components include all the three dimensions of the matrix, whereas others rely on only two or, in extreme cases, only one.

5.1 Recommendations for managers

Faced with the problems of implementation of the matrix organisation, companies have two possible strategies of action.

One of them is based on the reduction of the matrix and the complete development of one of the dimensions which remained inadequately developed. This approach implies a decrease in the complexity of the model by abandoning one of the organisational dimensions or by limiting its application to a part of an organisation. Basically, this would imply that a company's management should adjust the organisational structure to their own interpretative schemes and to their own mental abilities in order to cope with the complexity of their organisation.

On the other hand, management can decide on the further development of all three dimensions of the matrix. This strategy requires further decentralization and top managers' higher degree of involvement in the coordination of decentralised parts. Further, top managers need to work both with lower-level managers and employees in order to help them develop abilities to work in a multidimensional environment, as well as to adjust organisational systems and processes to meet the requirements of the three dimensional matrix. This strategy can be undertaken

only with a very strong and consistent leadership from the top of an organisation and with an intensive education of middle and first line managers. In addition to this, the strategy requires simultaneous development of planning and control system, compensation system and information system, in order to make them compatible with the three dimensional matrix structure.

5.2 Limitations of the paper

The main limitation of this work is its nature - a case study analysis. Organisational misfit caused by the matrix implementation in only one company cannot be generalised, even if it is a typical organisation of its kind. The implementation of the basic recommendations of this research in other companies may not necessarily result in the same outcome. We may list a series of specific factors that may have also influenced organisational problems during the matrix implementation described in this paper: the size of the Company, the leadership style, the national culture, the market structure, the nature of wholesale process, the presence of external influences, etc. Nevertheless, we believe that certain implications of the analysis, in a modified form, may still be useful for other companies.

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