

STRATEGY-ORIENTED APPROACH TO PROJECTS AND THE QUESTION OF PROJECT SUCCESS*

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In accordance with the traditional approach to strategy implementation strategies are implemented through business plans that are elaborated on yearly basis. The turbulent changes characteristic to the operational environment of the organisations during the last decade prompted the need for a different approach. Accordingly, the project-oriented approach to the organisational strategy and the strategy-oriented approach to the projects have evolved. These revealed that the long-term success of the organisations depends on successful projects. Central to this paper is to highlight the fundamental role of the organisations as project clients in this respect. According to the findings of an interview-based research the author points out their tasks that are of vital importance in order to achieve project success.

Keywords: organisational strategy; project-oriented approach; strategic objectives; project formation and management; time and cost constraints; the question of project success

The main objective of this paper is to highlight the need for the active role of project client organisations and the underlying strategy-oriented approach to projects and project management in order to achieve project success. Successful projects are the building blocks to implement change in an organisation in order to realise the strategic objectives set by the organisation (Cleland 1994).

For the sake of better understanding the interrelationship between the strategy-oriented approach to managing projects and the successful project implementation, first we consider the role of projects in the organisations, then reveal the strategy-oriented project process. Based on these topics different dimensions of the phenomenon of project success is discussed, followed by introducing the tools that provide linkage between strategic objectives and projects. This linkage makes the starting point for project clients to fulfil their fundamental roles in order to achieve project success. These client tasks are discussed, based on an interview-based research program, in the following part of the paper. Finally a few lessons and implications are concluded.

* This paper is partly based on a summary of earlier studies of the author, see Görög (2000a, 2000b, 2001).

The main objective of the paper is underlain by a strange paradox. The growing number of the more and more sophisticated project management devices is coupled with the growing number of project failures. Hence are approaches, tasks and other considerations in the centre of this paper, instead of giving some quantitative analysis of different success factors.

1. ROLE OF PROJECTS AND PROJECT MANAGEMENT IN THE ORGANISATIONS

Managing an organisation, especially a business-related organisation, is a multifacet phenomenon. Management should devote efforts to the daily operations of the organisation, i.e. efforts are devoted to “doing the things right”. At the same time, management should consider the possible future of the organisation, i.e. efforts are devoted to “doing the right things”. In order to make the desired future state of the organisation achievable, there is need for projects and project management. Thus, management efforts should be devoted to “doing the right things right” (O’Bray 2000) in order to implement changes or transition regarding the daily operation of the organisation.

Nowadays both academics (Cleland 1994, Rozman 1998, a. o.) and professionals agree that projects are the means of achieving organisational strategic objectives. This approach to projects should influence the approach to managing them. Consequently, there is need for project-oriented strategic management on the one hand, which implies that organisational strategies should encompass the associated projects as well. On the other hand, there is need for strategy-oriented project management, which implies that projects should be initiated and implemented in accordance with the strategic objectives of the organisation. All in all, due to the accelerating environmental changes, the phenomenon of strategy-oriented project management has become of vital importance.

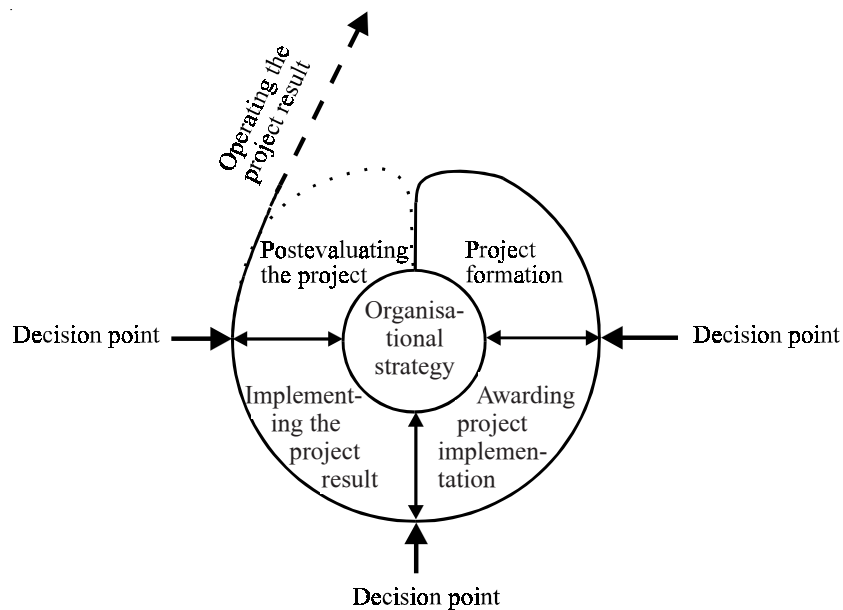
This outstanding role of projects and project management makes clear that:

- Instead of dealing with single and isolated projects, a net of interrelated projects is to be implemented within a given organisation.
- Depicting of the project cycle should reflect the strategy-oriented approach to projects and project management. Thus the project cycle should encompass, as a project phase, the transformation of strategic objectives into project ideas, and a postevaluation phase when the completed project is to be analysed from the point of view of the underlying strategic objectives.

Society and Economy 24 (2002)

2. THE STRATEGY-ORIENTED PROJECT PROCESS

This new approach to projects and project management necessitates rethinking the traditional project cycle describing the project process (Thompson 1981, Walker 1989). The project cycle that can be attributed to the above-mentioned approach is a circle-like model (Görög – Smith 1999). As a conceptual frame, it encompasses the activities of the project process enhancing exploration of the essential process interrelations characteristic to project implementation. At the same time, the cycle reveals the critical decision points as headstones in the project process. As can be seen in *Figure 1*, the organisational strategic objectives are at the centre of the process, that is, the strategic objectives comprise the core, so the process of achieving them makes the implementation of a certain project necessary. The project process represented by the figure returns to the strategic objectives at the end of the cycle. While the project cycle goes on, the monitoring of, and matching with the strategic objectives become necessary, especially foreseeing the critical decision points.



Source: Görög (2000a).

Figure 1. The strategy-oriented project cycle

Society and Economy 24 (2002)

The cycle breaks the entire project process into the following main activity phases:

- project formation
- awarding
- implementation
- postevaluation

Project formation is the first phase of the process in the project cycle, during which strategic determination of projects is primary. This project phase comes through in overlap between the scope of strategic management and project management. The demand for a certain project result (e.g. a new information system or a new organisational structure, etc.) is motivated by the necessity of achieving the strategic objectives set before. Out of the possible great number of different project ideas, prefeasibility studies, then detailed feasibility studies can help the decision-maker to identify the most suitable project option for achieving a certain strategic objective. In this way the latter activity leads directly to the first critical decision point in the cycle. The awarding phase starts with formulating project implementation strategy, i.e. allocation of responsibilities and risks between the project client and the contributor(s) that risks and responsibilities are associated with the implementation phase of the project process (Görög – Smith 1999). The responsibilities and risks to be allocated here are identified in connection with the primary project targets, i.e. the expected project result as a whole (completeness, operability, quality, etc.), and the time and cost constraints of implementing the project result.

Responsibilities and risks are different by nature, thus project implementation strategy utilises different means to allocate them. Types of payment (price-based, cost-based, target-based) determine the risks associated with the implementation costs, while types of contract (traditional, turnkey, management) determine those responsibilities and risks that are associated with the expected project result as a whole, as well as those that are associated with the entire duration time of the implementation phase. Making a decision on the payment and contract types in a given project is decisive from the point of view of achieving the primary project targets set during the project formation phase. As a corollary, making decision on project implementation strategy is critical from the point of view of achieving strategic objectives. In a broad sense, project implementation strategy encompasses selecting certain types of tendering procedures and the occasionally implied prequalification procedures as well. Both tendering and prequalification procedures should be used in accordance with the outcome of making decisions on type of payment and contract type.

Society and Economy 24 (2002)

The activities carried out during the implementation phase are determined by the workflow needed to achieve the desired project result. When a project is not so well quantifiable (e.g. redesigning the organisational structure) or it involves a number of possibilities for ramifications that are not foreseeable during project formation (e.g. a research and development project), the need to make decisions during implementing the project arises. In such a case, implementable project result in accordance with the organisational strategic objectives is only likely if the alternatives arising at certain points are matched with the underlying strategic objective. Otherwise, the external contributors may successfully influence the decisions according to their own interests. Thus, they can draw the expected project result away from the client's objectives.

Once the completed project result is accepted at the end of the implementation phase, it should be integrated into the daily operation of the client organisation. At the same time, postevaluation, the last phase of the project cycle can start. Postevaluation is considered to be the learning process of project management. On the other hand, postevaluation concentrates on evaluating the operating project outcome in order to assess how much the completed project is in accordance with the organisational strategic objectives based on the primary project targets, especially the expected project result, which were set during the project formation. Depending on the nature of the strategic objectives, the associated analyses can be conducted in a short period of time, but sometimes it can only be carried out over a long period, and based on probability calculations.

3. UNDERSTANDING PROJECT SUCCESS

Given that projects and project management are the means of achieving organisational strategic objectives in order to ensure long-term success for an organisation, there is need for understanding the project success in a wider sense.

The traditional approach to project success is based on matching the primary project components, i.e. cost, time, performance and/or quality of the completed project result with the predefined values. Accordingly, the project implementation is considered to be successful if the predefined values of the primary project targets have been achieved. Consequently, when the completed values are worse than the predefined ones, the project is considered a failure.

From the point of view of the strategy-oriented project management, however, the above-mentioned approach to project success looks narrow in outlook. Must the project be necessarily considered a failure if it results in a different project outcome than the predefined one or if it suffers from time and cost overrun?

Society and Economy 24 (2002)

The question is whether the completed project has contributed to achieving organisational strategic objectives on the one hand, and whether the project is accepted by those who have some vested interest in the given project on the other hand. Thus, another facet of understanding the phenomenon of project success is matching the project with the underlying strategic objectives. A good case in point could be a research and development project that results in a new product. Let us suppose a company operating in the pharmaceutical industry that wants to keep the leadership position in the field of introducing new products into the market (strategic objective). They have initiated a research and development project aiming at developing a new medicine. The completed project has resulted in the predefined medicine, though the project has suffered from serious cost and time overrun. Nevertheless the project has been considered successful since it has contributed to achieving the underlying strategic objective.

The third facet of understanding project success is the attitude of the interest groups (project stakeholders) toward the project. Taking into consideration this attitude in the course of the project implementation could be of vital importance. A case in point could be an information system project that has been introduced in a commercial bank. The project has been completed in accordance with the predefined primary project targets and it looks to contribute to the strategic objectives of the bank set before. In the course of operation it turned out that the users of the system (the bank-clerks as an internal interest group) were reluctant to use the system, moreover they exaggerated the initial operational problems and communicated them to the bank clients. As a result, many clients of the bank, especially individual account holders, moved their accounts to the competitor banks. All in all, the project has been considered as a failure because of neglecting the hostile attitude of an important interest group in the course of the project. (Cleland 1994 considers the project stakeholders in detail.)

4. TOOLS FOR PROJECT SCOPE DEFINITION TO PROVIDE LINKAGE BETWEEN STRATEGIC OBJECTIVES AND PROJECTS

Gido and Clements refer to a study initiated and performed by Jiang, Klein and Balloun (1996) that “was conducted to test the importance of certain factors that were believed to be critical to project success” (Gido and Clements 1999, p. 63). The clearly defined project scope was at the top of the ten most important factors. An interview-based research program carried out in Hungary (briefly introduced in section 5) also buttressed this outcome. The following approach to project scope definition was developed by the author and it has been published in detail both in English and Hungarian.

Society and Economy 24 (2002)

Projects should meet the requirements of the organisational strategic objectives. In every case while implementing a project, an organisation carries out its strategic objectives, and the completed project result becomes part of the daily operation of the client organisation. It necessitates that the first step in realising the strategic objectives should be the transformation of strategic objectives into projects. From the point of view of the strategic objectives there is need for new operating functions and/or definite new goals that are to be manifested and materialised in the project result in order to achieve a certain strategic objective, i.e. to achieve the desired change. The desired functions and goals can be realised by utilising different function vehicles and means. Thus, the project scope definition should be based on the functions to be performed by the desired project result and/or on the concrete goals to be achieved by the completed project. However, during the project implementation the functions and/or the project goals themselves are not implemented. Instead, those means that make the individual functions operable and/or make the concrete project goals achievable are implemented. These considerations necessitate that first the function and/or goal structure of the expected project result should be planned, then planning the structure of function vehicles and/or the means of achieving the desired project goals should come to the forefront. In this way one can define the scope of the expected project result or the different options of the expected project result.

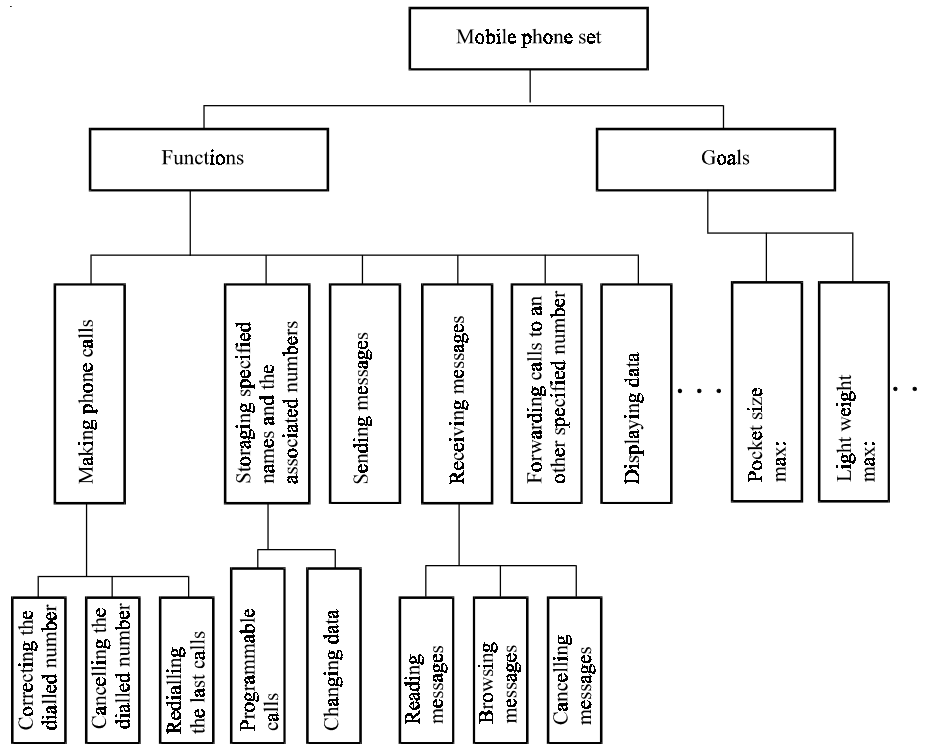
In order to make the time and cost constraints of the expected project result definable, there is need for planning those activities that accomplish the function vehicles and/or the means of achieving the project goals. This effort results in an activity structure by means of which resource allocation can be carried out and, as a corollary, cost estimation (cost constraints) and time planning (time constraints) of the project implementation become possible. The activity structure, many times referred to as work breakdown structure, is well known from literature (e.g. Knutson – Bitz 1991, Webb 1994). In this way, all three of the primary project targets (or the possible primary targets of the project options) can be identified in accordance with the strategic objectives defined in the project.

These three structure plans could be referred to as project structure plans. These tools, especially the first two of them, provide the basis for a better project scope definition since this way not only the possibly necessary means are considered but the underlying functions and/or concrete goals as well.

Figure 2 illustrates a possible function/goal structure of a mobile phone set development project.

These structures are hierarchically built systems, and one can find the desired project result (or a possible option of this latter) in its entirety or in many cases the strategic objective to be achieved by the project at the top. In the function/goal structure there are bigger groups of functions and/or project goals, known

Society and Economy 24 (2002)



Source: Görög (2000a).

Figure 2. A possible function/goal structure of a mobile phone set development project

as sub-functions and sub-goals. When the structure of the function vehicles and/or the means of achieving project goals are considered, in the third line of the hierarchically built system the main groups of function vehicles and/or the main groups of the means are found that form the main function and/or goal groups of the function/goal structure. Either in case of the function/goal structure or in case of the function vehicles/means structure, breaking down the main groups can be carried to the level of the elementary functions/project goals on the one hand, and to the level of the elementary function vehicles/means on the other hand.

Planning the above-mentioned project structures is not necessarily carried out in a strict sequential order. It could occur many times that achieving certain desired functions and project goals is hampered by the available function vehicles and means. In such a case the function/goal structure should be redesigned taking into consideration the availability of the function vehicles and the means. All in all, it is well known that the final versions of the previously mentioned project structures are outcomes of an iterative work-process.

Society and Economy 24 (2002)

5. THE FUNDAMENTAL TASKS OF PROJECT CLIENTS TO ACHIEVE PROJECT SUCCESS

Bearing in mind the necessity of the strategy-oriented project management and taking into consideration the multifacet nature of the project success, now an attempt is made, based on the experiences gained from a research programme, to sum up the most fundamental tasks of a project client that are indispensable to achieve project success. The underlying interview-based research program was initiated at the Management Development Center (now Budapest School of Management) of the Faculty of Management and Business Administration of BUESPA (Budapest University of Economic Sciences and Public Administration). The main objective of the research was to identify the basic reasons behind the frequently occurring time and cost overrun that are characteristic to project implementation not only in Hungary, but all over the world as mentioned by Berce (1998) and Flemming and Koppelman (1998). The research program was completed at the beginning of 2000 achieving the predefined main objectives.

At the same time, the results of the research have clearly buttressed what Cleveland (1994, p. 93) stated: "Project owners cannot leave to others the responsibility for continuously measuring the success of the project, even experienced project management contractors and constructors". Thus, project clients have to fulfil a few fundamental tasks in order to achieve project success, and to achieve long-term organisational success by means of projects.

In the course of the research nearly one hundred project managers and general managers were interviewed from different industries who dealt with different kinds of projects. In this way it was possible to consider the client's tasks in a more general context, avoiding the traps of an industry-specific, or a project-specific approach. In the frame of the research program projects from different industries such as food industry, hotel-restaurant industry, power generation and power distribution industry, pharmaceutical industry, oil industry, telecommunication industry, motor industry, chemical industry, electronic industry and banking were analysed especially.

Regarding the project scope, construction projects, structural engineering projects, software development projects, information system projects and so-called management change projects were encompassed. The project client companies were mainly multinational companies operating in Hungary, headquartered in Hungary, but owned by non-Hungarians and medium-sized national companies.

When the following fundamental tasks of the project clients will be considered, the author is going to mention examples briefly without specifying the name of the company or the project in question.

Society and Economy 24 (2002)

Proper scope definition of the expected project result and a full-scale analysis of the possible project options in the frame of feasibility studies are decisive. One of the most reliable tool for starting project scope definition is the function/goal structure of the expected project result. Considering this structure that might be depicted based on the underlying strategic objectives, one can define those means that constitute the project result needed. Neglecting the function/goal structure, and instead, starting the project definition with defining possible equipment, may be misleading. A telecommunication company started to implement a management information system project without making clear the required functions and the specific goals to be manifested in the project result. After spending a few hundred million HUF they realised the considerable difference between the capability of the software package and the required functionality of the desired project result. The company stopped the project and started to redesign the project scope. A huge part of the costs occurred till that point was waste of money. A year later the same company initiated a trouble-ticketing system project, started the project scope definition with making the required functions of the system as clear as possible, and the implementing the project has resulted in success.

Matching the primary project targets, especially the scope of the expected project result, with the organisational strategic objectives. This matching could be decisive at the critical decision points in the project cycle. At the same time, it might be also very important at the milestones of the project implementation in case of a novelty and complex project that could imply ramifications regarding how to proceed with the project.

Matching the scope of the expected project result and the associated time and cost constraints with strategic objectives is of vital importance for a company operating in a turbulent environment. In such a case the strategic objectives might alter, consequently there could be need for modifying or cancelling projects under implementation. A company, being in the hotel-restaurant industry, started a hotel construction project. Because of the changing consumer demands they partly modified their business strategy roughly in the middle of the project. The project was completed in accordance with its original scope within the predefined duration time and cost. Because of neglecting the necessary modifications regarding the project scope, the utilisation rate of the hotel is less than 30%. Thus, the project could not contribute to achieving the company's strategic objectives.

Formulating such a project implementation strategy in case of an external project (selection of contract type and payment type, and the associated tendering and prequalification procedures) that is in accordance with both project characteristics and client characteristics. Selecting the proper type of contract and payment is also decisive in case of an external project since in this way those

risks and responsibilities are allocated between the project client and the external contributors that are associated with the primary project targets.

A company, operating in the automobile industry, decided to construct a new showroom-service building complex. They wanted to utilise the potential advantages of a traditional contractual arrangement, thus not only design and construction were separated, but the construction phase was also splitted up into five parts. This solution looked reasonable based on the project characteristics.

At the same time, because of lack of both experience and expertise, the project client was not able to co-ordinate the contractors' activity. The project has been completed both over the budget and over the predefined duration time, while the client, believing in miracles, advertised the future service possibilities all through the original construction period. The situation resulted in loss of potential consumers.

Marketing the project, both the project result and the implementation process itself, for the possible internal and external interest groups (project stakeholders). Previously an example was given regarding the importance of a certain internal interest group. Now an other example will be presented. One of the biggest problem of a power generation company is to solve planting the nuclear wastes. They have strategies and project ideas regarding this matter, but the company has not been able to implement the project yet. None of the local communities wants to accept the project, among others because of the weak project marketing efforts.

Proper integration of the completed project result with the operating process of the entire organisation. This is also an important fundamental task of a project client since this is the series of steps that makes transforming strategic objectives into daily operation complete. A company in the oil industry initiated and implemented a new project support system in order to make its multiproject-based operation more managable. After having completed the project, the management tolerates using the old system. As a corollary, the new system has not become part of the daily routine of the company, i.e. the completed project result did not contribute to achieving the underlying strategic objective.

6. CONCLUSIONS AND IMPLICATIONS

The previously considered strategy-oriented approach to projects and project management and the fundamental tasks of the project client organisation imply the related conclusions as well. Instead of listing them again, a few, say, rules of thumb are to be mentioned that should be born in mind as basics for the sake of

Society and Economy 24 (2002)

better fulfilment of the client tasks to ensure project success. These are derived from, and reinforced by the results of the research mentioned earlier.

- Avoid using routine-like and uniform solutions. Projects are different on the one hand, and the capabilities of a project client organisation could also be different relative to a given project. Thus, it is reasonable to apply those project management tools and methods that suit best the nature of the project and the capability of the project client. These could have outstanding importance in case of an implementation strategy and the project organisational arrangement.
- Introduce and apply such a project control system that has the capability of anticipating the possible deviations as well, highlighting the potential modification or cancellation of the project. The project control system should encompass both timely completion and costs simultaneously.
- Develop and maintain a project culture embedded in the organisational culture, involving the shared values of the team members. Project culture contributes to developing and maintaining the required team-spirit.

Finally, as one of the most important implications, I would like to emphasise the responsibility of both science and education. The management science and the management education generally pay attention only to two areas, namely operations management and strategic management. Needless to say that both of them are important. The first one is necessary to manage the daily operations (production, services, etc.), while the second one is to consider the future potentials of an organisation. Beside these two disciplines incomparably less attention is paid – either in management science or in the course of management education – to the question of managing projects that are to surmount the desired future state of an organisation. The above hiatus is filled in by such a managerial attitude that takes the different project management devices into consideration as panacea hoping that all the problems occurring in case of a project can be solved if a certain device is used. The only thing – in my opinion – that could be considered to be a panacea in this respect is the craftsmanship regarding managing projects, which craftsmanship enables those who are responsible for project implementation to use the management devices in an efficient way.

For the sake of better understanding let us draw a parallel. In order to produce some product there is need for technology, tools being in line with the technology and – among others – human resources that possess the craftsmanship. By means of this craftsmanship people engaged in the production process can use the tools and operate the technology in order to get the desired end-product. Those who do not possess the required craftsmanship regarding the production process, including utilising tools and technologies, will produce substandard goods. Com-

Society and Economy 24 (2002)

paring the production process to the process of managing projects, one should say that most of the project management devices (e.g. network planning, project management software packages, etc.) can be considered to be tools while the project management methodologies can be considered to be the technologies. Appropriate tools and right technologies alone cannot assure a good quality product. Thus, relying only on project management devices and methodologies while neglecting the project management craftsmanship will result in time and cost overrun, and many times it leads to a project result that is different from the desired one. In other words, the above situation leads to substandard project implementation.

In this way, serious problems could occur in the course of project scope definition and implementation (see the related case examples in the previous section) when the required project management craftsmanship is neglected, and instead of this craftsmanship people who are responsible for managing projects tend to rely on project management devices alone. Nevertheless the temptation is big enough to follow the latter way since the project management tools and technologies can be made marketable with ease (by means of advertisement) while the project management craftsmanship is, at most, teachable, and teaching this profession is not so easy.

There is no doubt that the project management craftsmanship can be gained mostly through “learning by doing”. It does not mean inevitably that the required craftsmanship should be learned to the company’s own cost. Nowadays modern project management is not a collection of so-called “add on” techniques. Thanks to the strategy-oriented approach to projects, project management is more and more considered to be a distinct management discipline that has a methodologically based knowledge. This knowledge, since it is neither industry-specific nor project-type-specific, can be taught either at universities or in course of in-company training programmes. In this way the period of “learning by doing” can be shortened to a great extent. This type of knowledge, of course, encompasses the proper use of project management tools and technologies as well.

Possessing the above-mentioned project management craftsmanship is of vital importance for each kind of organisation. The capability to change depends to a great extent on this craftsmanship. This capability is one of the most important pledges of the long-term competitive advantage (Gaál 2000), moreover, sometimes it is the pledge of further existence. Projects implemented with serious time and cost overrun, and resulting in different from planned outturns could divert an organisation from its course towards being fitted in with the changing operational environment.

Society and Economy 24 (2002)

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Society and Economy 24 (2002)

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