

VIRTUAL TEAM MANAGEMENT (THEORY AND METHODOLOGY)

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Summary:

In modern management, *virtual teams* are a new paradigm in theory and management practice. Information and communication technologies are transforming the economy, business and institutions in society. For a long period of the development of management, the emphasis has been on establishing a sustainable environment, hierarchy, traditional roles and routine operations. The intensive market penetration in all sectors of the economy, globalization and the development of the means of information communication require a change in the behavior of the organization related to the growing demands of consumers, shorter product life cycle, technological innovations, political and economic instability. The driving force of these transformational changes are the communication and information technologies. The new opportunities to generate and provide information are changing the way we live, work and think. The requirements increase at every level, from the individual through the team to the global. The unprecedented number of company bankruptcies and corporate mergers in the last few years illustrate a negative trend in modern business. It is characterized by the inability of a number of organizations in various sectors of the world economy to adapt to dynamic changes in the external environment. This necessitates a reassessment of a number of management schemes, which have been considered indisputable so far, and the generation of new starting points and organizational solutions.

In today's global and national economies, risk and uncertainty prevail. In scientific research there are processes of evolution of concepts, change in attitudes and generally accepted truths, which lead to a qualitative development of the accumulated knowledge.

In the business world, the emphasis is increasingly on the need to work in a team on a consulting basis, as a basic factor for achieving a competitive advantage in an environment with a high degree of uncertainty. Teams are a natural addition to the individual initiative and realization, as they involve greater empathy for common achievements. Despite the general recognition of the need for teams in Bulgarian organizational practice, subconsciously this phenomenon is strongly underestimated by the management. This is an insurmountable barrier to the realization of the team potential.

The rapid pace of globalization, the international competition and the development of information and communication technologies require business organizations to apply new management tools and methodologies, through which in a virtual environment to remotely take advantage of the potential of resources, technology and human capital. Virtual teams are the adequate organizational model in a VUCA environment and constant pressure for change.

The monograph identifies the types of teams in management. The essential characteristics of the organizational models applied in the management practice are distinguished - working group - team - self-managing working team and virtual team. The focus is on *virtual teams*. The key organizational prerequisites and elements related to the design and operation of *highly efficient* virtual teams from a structural, managerial and process point of view are studied. The main characteristics and properties of the virtual teams (input elements), the factors for effective functioning (social-emotional, technological and managerial processes) and the immediate results of the activity of the virtual teams are analyzed on the basis of modern integration models under the scheme 'input-process-output'. The indicators for team efficiency are specified. The versatile connections in the integrative models most cited in the last 20 years are studied not only at the input, but also in the process of interaction, as well as the ways to achieve balance and cooperation between team members. A new conceptual integrative model for efficiency of the virtual teams is substantiated. It is a kind of synthesis of the existing theoretical models. In the

matrix of the 'input-process-output' model, a different way to convert the input and output factors into working processes is offered, which is much more difficult to achieve in a virtual team environment than in the traditional hierarchical structure. The aim is to find a common theoretical and methodological basis that unites the fundamental models for efficiency of the virtual teams.

The strength and synergistic effects of virtual teams are a direct result of the following unique characteristics:

- Virtual teams include individuals with additional skills (technical, functional, interpersonal, cognitive and social), develop unique cultural attitudes and empathy for specific common goals, approaches and methods; therefore, have more resources, ideas and energy;
- Virtual teams maximize the potential and minimize the individual weaknesses. E-leadership balances work and interpersonal processes, providing a focus on immediate results;
- Virtual teams generate alternative solutions as they offer more perspectives for the realization of the defined goals;
- Virtual teams share the triumph of success and the burden of loss. Jointly shared responsibility encourages sincere empathy and reinforces the sense of empathy;
- Virtual teams are individually and mutually responsible for achieving the goal;
- Virtual teams multiply the effects for the realization of strategic company goals and objectives.

In more specific terms, the following main conclusions can be drawn from the theoretical and methodological characteristics of the models for efficiency of virtual teams studied in the monograph:

- Virtual teams do not arise spontaneously (ad hoc), but are a direct result of the sustainable evolutionary changes in the established management models, methods and practices. The modern business world is facing a real metamorphosis, which requires further adaptation of individuals, leaders and organizations.
- Virtual teams are complex socio-technical systems, which, in the process of design and operation, are influenced by different categories of factors - both external to the team (organizational environment and culture, available IT technologies) and internal such as coordination, communication, collaboration, skills for working with IT applications, etc.;
- Virtual teams are dynamic systems, in which the degree of influence of a factor changes over time. For example, IT skills are critical, but the team members acquire them over time and their influence on the team efficiency diminishes;
- Socio-emotional, work and management processes are fundamental factors that directly affect the efficiency of virtual teams. The conceptual model examines, based on the dynamic theory of systems, the interaction between direct and reverse compensatory connections and the synergistic-multiplicative and integrative effects deriving from it;
- None of the analyzed models yet examines the impact on the work processes of a team member, if he participates in parallel in other virtual teams;
- The studied models are conceptual, but have not been validated with empirical data.

The monographic study summarizes the basic concepts, identifies the key prerequisites, regularities, mechanisms and processes associated with the design and operation of highly efficient virtual teams. Emphasis is also put on the ways to achieve balance and cooperation between the team members.

The team perfection implies the presence of a number of characteristics. In the first place

is **competence**, i.e. the members of virtual teams must have the abilities, knowledge and skills, delegated authority, experience and technical know-how to perform the work. An efficient team is composed of individuals, who adequately apply all key competencies in an effort to achieve the specific common goals. When these are insufficient or lacking at all, risk and frustration follow.

In the second place are **clear common goals** and **measurement of results**. Highly efficient virtual teams formulate their main goal with a high degree of specificity and develop empathy for it. In principle, the management identifies the goal of the team, but the choice of means is the responsibility of the team. All members must share the same understanding of the goal, and then they must specify it in terms of the measured results.

In the third place is the **commitment to common goals**. Understanding the goal is an important condition, which guarantees that the individuals know the direction in which they need to work, but truly efficient teams go a step ahead. Their members are committed to the goal, which motivates them to make extra efforts. Dedication is a function of the convincing purpose. The participants who perceive the team goals as something extremely important are able to subordinate their personal interests to those of the team. As a result, they derive unequivocal benefits in the form of emotional (psychological) satisfaction, accumulated experience and financial incentives.

A very important prerequisite for the efficient functioning of virtual teams is the **supportive environment**, which finds specific expression in the **framework of the organizational infrastructure adapted for the purpose** (processes, structure and systems). The team is a small organization positioned in an environment of functional units and departments. Its performance (results) is directly dependent both on the implementation of activities - physical, technical, cultural, social and functional and the

provided resources, information and logical support. When designing and building virtual teams, the following main interrelated factors of the internal environment are analyzed:

- *Corporate strategy and culture* - create organizational identity and psychological connection between members of virtual teams by integrating cultural and stereotypical differences;
- *Technological and communication structure* - information systems are a special integrated indicator for overcoming the paradox of virtuality, which includes database management centers, computer and communication networks and regulatory systems;
- *Non-hierarchical structure* - creates prerequisites for team-based work (readiness to share information, cooperation beyond the organizational boundaries, empowerment of employees);
- *Structure of the work processes* - identifies the logical connections between the activities, necessary resources, roles, responsibilities and time to achieve the team goals;
- *Leadership support* - guarantees resources and helps to recruit individuals with the necessary qualities and competence;
- *Adequate motivational systems* - a balance is needed in stimulating individual and team-based results;
- *Knowledge management and continuous training of team members* in order to build additional skills such as effective interaction and communication, cooperation at all organizational levels, adequate focus on current and priority tasks

Finally, efficient teamwork requires a combination. It refers to the coordination of plans, efforts and rewards with the strategic goals of the organization. The specific goals of the virtual teams must correspond to the organizational ones, and the individual goals - to the team ones.

In result-oriented virtual teams, the individuals:

- Reach general agreement on the objectives, methods and means for achieving the agreed final results;
- Put the team goals above the individual goals;
- Are aware of their roles and share responsibilities;
- Develop additional skills (including cognitive and social);
- Are tolerant to the mistakes of others;
- Are open to new ideas, different perspectives and risky projects;
- Make decisions based on a real evaluation of the proposals, regardless of the status of the one who proposes them.

Although there is no guaranteed algorithm for designing effective team structures, the monograph identifies the following guidelines:

- Formulating valuable and challenging SMART goals (specific, but in the context of the strategic priorities of the organization), directly oriented towards the realization of high results and standards of performance;
- The selection of team members should be based on competence and potential for acquiring new knowledge and skills, not on a personal basis - no team is successful, if the individuals do not have the necessary qualities to achieve the goals and specific work tasks;
- Establishing rules and norms of behavior (code of ethics and morals), directly related to the discussions, confidentiality, analytical approach, orientation to the final result, and not to the perfection of the implementation of the activities, the constructive conflict and the common contribution;
- Adequate information provision of the team - information is a major resource for virtual teams. It enables the team members to respond to changes in the external environment by redefining the common goals or improving their overall approach.

- Improvised informal virtual interactions - create a sense of ‘reality’ in the relationships and prerequisites for the team members to realize their full potential by demonstrating high creativity and generating non-standard solutions. In this way, they learn to use conflicts constructively and naturally share their skills and information with other team members;
- Using the power of feedback (positive and negative), recognition and motivation. Periodical analyzes of the performance of virtual teams are extremely important for the development of their competencies;
- Identifying key levers to stimulate team and individual satisfaction, which are key activators of successful performance.

The ability of virtual teams to adapt to new ways of working is one of the key determinants of effective teamwork. In this regard, the role of the leader is fundamental, as he must design the training in the virtual structures and through his behavior create an environment of psychological security, motivation to acquire new skills and competence.

When we talk about reforms and business development in Bulgaria, we often fall into repetitions by quoting the same problems, solutions and ultimately results. For one reason or another, a large part of the business organizations in Bulgaria move to a ‘fictitious’ existence at some point, and then face the challenges of the Bulgarian economic everyday life, especially in the context of the global economic crisis. Some of them are strongly pressed by the conditions of the market environment and the inability to cope with its challenges. Others continue to function to cover the cost of ‘existence’ of their owners. Of course, there are such who achieve success and sustainable development in their field of activity. Yet, the difficulties remain and do not go unnoticed by any organization.

Virtual teams are also a challenge, but of a completely different nature. They lead to a qualitatively new model of interaction and thinking in Bulgarian organizations, creating

preconditions for dealing with difficulties and logically - higher results. Quality and change - two key characteristics that can be carriers of development for Bulgarian organizations. We should add - perseverance, improvement and vision.

The phenomenon of virtual teams is a new management paradigm in theory, but with proven high efficiency for social practice as a sustainable and flexible tool. It creates preconditions for a unique balance between the business, the technical and social system. The members of virtual teams have the power to modify the technical characteristics of their work and their daily social behavior, which minimizes the costs and maximizes the immediate results.

Virtual teams operate in a complex work environment. The team members are given the opportunity to use different skills, perform interrelated tasks, make important decisions and receive adequate feedback on the results achieved. This combination satisfies the individuals who need independence, responsibility and significant tasks.

The social needs of the participants are clarified in the process of virtual interaction through information and communication technologies. They allow the team members to keep in touch with external groups, as well as to identify the individual attitudes and needs within the boundaries of virtuality, regardless of whether they stem from the nature of the activity. On this basis, the team members structure the technical tasks, assign roles and responsibilities, regularly seeking information on issues related to the nature of the work.

The approach to the functioning of virtual teams is evolving. It focuses on *intangible aspects*, such as processes and results, roles in the economic environment and the impact on individuals.

The philosophy and principles of virtual teams are not a universal tool by which to transform the business in one day. However, they are an exceptional factor, an indisputable advantage that cannot and should not be overlooked by any organization. It is a matter of managerial foresight to spread the model of virtual teams in the Bulgarian social practice. Perfect (target-adaptive) virtual teams achieve brilliant results with ordinary people, who, however, have irresistible attitudes and intrinsic motivation to improve work and interpersonal processes.

This may be difficult, but it is not impossible.