Time management – models and techniques for application

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Abstract—The purpose of the authors with this article is to present the time management. The authors present the models and techniques for application in time management. The authors of this article are analyzing the "ALPEN" technique, the Eisenhower principle, the Pareto principle, ABC - analysis and Mind – maps. All that models and techniques, using to the time management, can help for optimal and effective utilization of time by the associates in the organization.

Keywords-time management, models, techniques for application

I. INTRODUCTION

The phrase "time management" is not correct on its own account. Through its usage there was created the impression that time can be managed. But the resource "time" isn't subject to management because it is a constant. All people, irrespective of their activities, have only 24 hours a day at their disposal. Despite this fact it is possible for time planning and organizing to be accomplished so that more activities may be done in limited time. That is the reason for the concepts "selfmanagement" and "self-organization" to be frequently met in the specialized literature and they contribute for the explanation of the phrase "time management".

The purpose of the current paper's authors is to present particular models and techniques for application which assist for optimal and effective utilization of time by the associates in the organization.

II. FEATURES OF THE PHRASE "TIME MANAGEMENT"

The question "What is time management?" is put often. It is justified because the phrase is incorrect. Time can't be managed: you could take the batteries out of the watch, the alarm clock could break down, but time will still function. More important is what can be done with time. What do the associates do, how motivated they are, how enthusiastically and purposefully they live and work.

The important is the subjective sense of time. And it can be expressed through the factors motivation, concentration and clarity. According to the author S. Schimanski, instead of the phrase "time management" more accurate is the phrase "management of the resource time" [1].

Everything has to be structured, to be under control, every minute has to be planned. These were features of the classical time planning which can be seen in the organizer notes full of tasks of every organization's associate.

In the contemporary conditions, with the Internet existing, there are other abilities necessary to the associates. On the foreground there is the creative side – the ability to multitask, to endure great tension.

When the workday is not sufficient for all the planned activities to be completed the fault often lies with the poor time management.

The new time management requires from the associates over flexibility, elastic change of fast compared to slow tempo as it is with the heart beat – sometimes rapid and others slowed down. In order that this challenge should be mastered currently there can be used classical means like calendars with schedules or time planning notebook, but certain techniques and models can be applied for optimal and effective time utilization.

For the current research the authors consider it necessary for some facts to be pointed out which disturb the associates from their time planning and organization.

III. MAIN FACTORS DISTURBING THE ASSOCIATES

There are main factors that disrupt the associates' workday rhythm, dictate ineffective way of work and frustrate the focused actions for problem solving. Some authors H. Rühle, V. Sartorius, M. Armstrong discern the following five main factors:

- **Phone** it interrupts the job or the conversation and as a result they have to be started over. Many calls lead to performing of direct activities in some other area. The interrupted tasks require more time for compensation later. Self initiated telephone calls are also an obstacle for completion of current tasks when the business partner doesn't answer the call.
- **Colleagues and visitors** they are an obstacle when they appear unexpectedly or the conversations continue longer than expected because the business partners were not prepared or didn't have more time at their disposal.
- The associates they disturb the manager when not working independently, ask questions about every detail or delegate back their tasks.

- The contact with the **direct manager** is also a potential for interrupting the associates' current activity. The manager requires immediate answers, gives new tasks, changes the priorities, conducts brief meetings.
- The meetings it is necessary for them to be conducted during the work process. But they become an obstacle when they are poorly organized or unprepared, pass ineffectively or are too prolonged. Or when they are concluded and no decision was arrived at and new meetings on the same topics are pressing. [2], [3], [4].

It is impossible for all the factors that disturb the associates' work to be foreseen or eliminated. Sometimes there are possibilities contained in the disruption: the phone call which disturbs the associate from his immediate work could contribute for a new client; the associate who interrupts his boss's work with a question could direct his attention towards surmounting a mistake.

It is necessary in the current paper for the fact to be pointed out that sometimes the obstacles and interruptions on the work place serve a higher purpose: a necessary pause, personal contacts, information exchange. On that account the factors disturbing the associates shouldn't be perceived only as a problem, but also as opportunities. They can be made use of so that information can be received, relations to be clarified, or contact to be strengthened.

The different personal features which define the work style are also of substantial importance in time management. According to the author H. Rühle there exist the following work styles:

- Bureaucratic;
- Chaotic;
- Dynamic;
- Balanced.

In Table I [3] there are presented the features of the separate work styles.

 TABLE I.
 FEATURES OF THE WORK STYLES [3]

Work style	Features	
Bureaucratic	The perfectionists in the good sense of the word are well organized and exact. They like details and delegate tasks reluctantly, because they think they can perform them better.	
Chaotic	They are spontaneous and flexible. They have the ability to surprise and can express their strong sides in mastering crisis. They are prone to inexactness, non-conformity and sometimes can irritate the others.	
Dynamic	They suffer the syndrome "there's no time". They always strive to multitask. They can't wait or rest and are always tensed and feel responsible. They show marked competition behavior.	
Balanced	They lack the pathological hectic and the fighting spirit. They balance more between their own needs and the environment's requirements.	

In order that the listed above obstacles should be overcome and the associates should complete more tasks different time management models and techniques could be used.

IV. TIME MANAGEMENT MODELS AND TECHNIQUES

In the specialized literature there is great variety of models and techniques for time planning and organization. In the current paper the authors present jut some of them, but not underestimate the others.

The individual methods and techniques have undergone a historical development and have been perfected. There can be conditionally discerned four stages in the time management techniques and methods:

- First stage marking tasks and activities connected to people and resources. In this stage the researchers tried to answer the question "What should be done?"
- Second stage there are schedules attached to particular tasks and activities. Thus the question "When?" is being added.
- **Third stage** there are defined purposes, strategies for their completion and tasks well planned in time. Here lies the question "How can the task be completed?"
- Fourth stage the stress fall on the emotions, sensations and moods of the individual. It is necessary for a balance to be achieved between understanding and accepting the strategic purpose and priorities. The questions on this stage are "Why, how, what and when?" [5]

It is necessary to be emphasized that the fourth stage is directed not only to tasks and activities, their organization and the individual, but towards achieving of balance between reason and emotions too.

A. The "ALPEN" technique

It is very effective in short term purposes completion. The abbreviation comes from the words: **A**–**Activity**, **L**–**Long**, **P**-**Priority**, **E**-**Extra time**, **N**-**Note**. In Table II [3], [6], there are schematically presented the steps that can be undertaken when using the "ALPEN" technique.

TABLE II.THE "ALPEN" TECHNIQUE [3], [6]

Technique	Steps	
Α	Listing the tasks that should be completed.	
L	Defining the time for the tasks' completion.	
Р	Evaluating the importance (priority) of every task.	
E	Foreseeing of time buffers for unexpected and spontaneously emerged tasks. 60% - planned, 20% - unexpected, 20% - spontaneous.	
N	Noting of all the tasks in a notebook by priority and term of completion.	

B. The Eisenhower principle

"The Eisenhower principle" model relates to the concepts "important" and "urgently". They are key concepts in the evaluation of all tasks not only in the professional but also in the personal sphere. With the concept "important" is connected everything good for the professional or the personal development in a long term. The concept "urgently" describes everything that is expected to be completed by someone. From the definitions it becomes clear that it is possible for the tasks to be restructured thus so they don't become urgent. From "The Eisenhower principle" are known four categories of tasks classified according to the concepts "important" and "urgently":

- A-category includes all important and urgent tasks which should be personally completed and are not to be deferred. They should be completed according to the schedule and qualitatively.
- **B-category** includes the important but not urgent activities. These tasks could be completed in proper, preliminarily chosen time. It is necessary to be pointed out that the B-tasks as important as the ones from the A-category. But they don't remind of their importance on their own account and thus are frequently missed or deferred. For that reason the B-tasks should always be planned and be related to a completion schedule.
- C-category includes the urgent, but not important tasks. It is possible to dispense from the tasks for expedience and delegate them to another associate in the collective.
- **D-category** includes tasks neither important, nor urgent and can be crossed out from the list.

On Fig. 1 are schematically showed the four categories tasks.

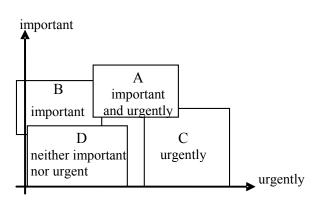


Figure 1. Categories of tasks by Eisenhower

The Eisenhower model can be applied in the goal planning. It is useful for the delimitation between important and urgent tasks and increases the efficiency in their completion.

The associates make mistakes when completing the tasks in the last moment which means the domineering tasks are positioned in square **A**. In order that the associates are calmer and to reduce the risk from making mistakes they should focus on the important tasks, foresee them and complete them in due time – tasks from square **B**.

C. The Pareto principle

The Italian economist and sociologist Vilfredo Pareto formulated a rule in the end of the 19th century that in known in sociology as "the 80-20 rule". The Pareto principle relates to the idea that by completing 20% of the job there could be achieved 80% of the benefits from the whole job.

The principle 80/20 can be also used in time organizing which increases the effectiveness of the individual as well as that of the organization. The substantial in the Pareto principle is that in the time management the associates should concentrate on those 20% which are most important. These 20% create 80% of the results and that is the reason they should be clearly defined and the associates should concentrate on them.

With the assistance of the Pareto analysis there could be:

- defined the problems;
- graphically presented the results so the most important problems can stand out from the general background.

On Fig. 2 [7] with the help of the Pareto diagram are presented the delays for work grouped by reasons.

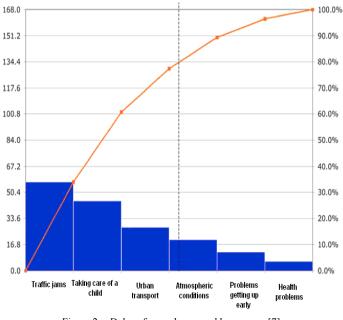


Figure 2. Delays for work grouped by reasons [7]

Through the Pareto diagrams there could be achieved identification of the problems on which the associates work. They help for attaining greater effectiveness, reducing the expenses and resource saving.

D. ABC – analysis

Directly related to the Pareto analysis is the ABC-analysis. Through it there are classified levels of concepts in three groups:

- **A** very important;
- **B** moderately important;

• **C** – with limited importance [8].

The **ABC**-analysis helps for the critical 20% to be defined in which the efforts should be focused in order that the work could be improved.

The application of the ABC-analysis in the time management could be used for evaluation of the tasks according to their number, importance and time needed for completion. In Table III there are schematically presented the evaluated tasks according to the ABC-analysis.

TABLE III. EVALUATED TASKS ACCORDING TO THE ABC-ANALYSIS

Number of tasks	Importance	Time needed
A - tasks	Important tasks	65 %
B - tasks	Moderately important tasks	20 %
C - tasks	Unimportant tasks	15 %

E. Mind maps

The mind maps are a useful model which is applicable in creative thinking. They were introduced by the Canadian psychologist Tony Buzan for the mind associations to be examined that play a substantial role in all mind functions. As a result of the conducted examinations it was proved that the mind's productivity could be increased 3 to 5 times with the help of the mind maps model [9]. The model could be applied in the problem analysis and event planning when they should be viewed from different aspects. On Fig. 3 [10] there is presented a model of a mind map for environment protection.

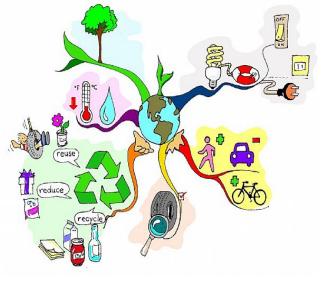


Figure 3. Model of a mind map[10]

The advantages of the mind maps model refer to:

- encouragement of creative thinking;
- aid in generating more ideas;
- summarized presentation of large amounts of information;
- reflection of the associations which rely on key words and images.

CONCLUSIONS

From the presented features of the phrase "time management" and the conducted analysis of the models and techniques the following conclusions could be drawn:

- 1. Planning and organization of time are important factors for achievement of goals, tasks and a balance between reason and emotions in the associates.
- 2. The main factors which are an obstacle for the associates' work could be viewed not only as problems, but as preconditions for achieving a higher goal in the organization.
- 3. The application of the presented techniques and models contributes for effective time management.
- 4. Every successful system for time management should provide opportunity for analysis of actions, priorities, experience and feelings of the associates and in this manner coordination will be achieved between individual actions and motivation for goal achievement.

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