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Projects management in organization on the selected example

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ABSTRACT

Purpose: In this paper stages of project management taking into consideration many useful tools and methods were presented. The quality management in the project, the risk estimation, costs of the project realization and many others were discussed. The analysis of project management of an element using in an automotive industry was carried out.
Design/methodology/approach: In this article classification of the projects was presented. The stages of project management and relations among them were discussed. The special attention was given for selected elements of project management in a selected enterprise.
Findings: The team formation, tasks of a manager and a leader of the analyzed project were shown. The methods of quality control in the project and process of the risk management were presented. Moreover methods of time management and costs planning of the project were discussed.
Research limitations/implications: Many undertakings cannot be realized without earlier plans. It is very important in case of big projects. The correct planning and a proper project management bring many advantages for organizations.
Practical implications: Very often project management is separated only in a planning stage what doesn't bring an expected effect. To prevent this it is necessary to creation of tools containing necessary conceptual, planning, implementation and control actions.
Originality/value: In this paper indicated that the analyzed project was proper managed. Following stages of the project were carried out carefully. In this project many modern methods of project management were used. These methods eliminate threats which can lead to errors in the project realization.
Keywords: Project Management; Project Quality Management; Project Risk; Project Costs

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1. Introduction

The projects management is in the present world the important field of management which provide managers of many tools and useful techniques in the realization of a large, unique tasks. The developing processes such as political changes, unemployment, large technological progress etc. cause that organizations have to find the different, better way to stay on the market. The survival in so stormy surroundings is possible thanks to quick problems solving, that is why the activity of organization increases the quantity of realized tasks to the projects form. Because of that modern business management is defined as "management by projects" and it includes all fields of workings. Finding of something what will distinguish the organization from the competition is an aim of such management. Undertaking of

the project realization it is not a problem, the problem is to project finish in a suitable time and within determined budget. This requires a perfect management. The project closure, according to scheduled and costs with achievement of planned targets leads to obtainment of considerable profits for organization. The time, cost, resources, quality and project scope are the basic parameters which can be controlled by the project management. Through suitable layout of these parameters, the enterprise saves the time and money.

In the majority of enterprises there are a lot of projects carried out. This results from the need of differentiation of produced products. The project allows to reach the assumed target apart from enterprise's branch and size [1].

The realization of several projects simultaneously leads to the necessity of coordination of their correlation and cooperation of engaged people.

2. Classification of projects

The projects one can classify in various ways, according to target, degree of complication, object of workings and phases of the project preparation and implementation, etc. This classification allows to easier methodology for the project selection [2]. Schema of the projects classification presented in Figure 1. Types of projects according to theirs sizes were presented in Table 1.

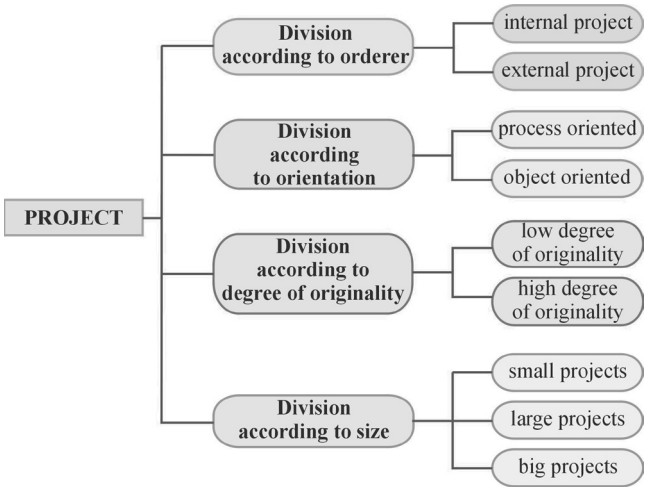

Fig. 1. Schema of projects classification [2]

Table 1.
Types of projects according to theirs sizes [2]

Types of projects	Number of project team	Labour demand	Project cost (mln DEM)
Small projects	<6	<0.4	<0.1
Large projects	6-50	0.4-50	0.1-10
Big projects	>50	>50	>50

3. Projects management

The project notion is defined as an individual or common undertaking which is planned and designed to reach the concrete target [3]. So the project is a method which allows to pass from an idea to working and makes possible designing of various stages in this process. The project is a product of a common working. This marks that projects have various features [4]:

- possessed target, that is exactly specified tasks which will let to achieve definite results,
- reality, because their aims have to be possible to achievement, and this marks the necessity of consideration of needs, human and financial resources,
- limitation in time and space - the projects have beginning and termination and they are implemented in specified place and context,
- complexity, because they require of skills of planning and implementation and they are connected with commitment of various partners,
- originality, because the projects are an adequate answer for the customer needs, and they are also connected with uncertainty and the risk.

The projects management is defined as a planning, organization, monitoring and control of all aspects of the project and motivating of persons engaged in the project to achieve the targets of the project according to established time limit, costs and the realization criteria [5].

Every project has its beginning, realization period and termination (Fig. 2). However the project management it is not only a determination in what phase the project is actually. It also raises a questions and workings which should be undertaking and it determines what possibilities one dispose. Four phases of the project realization one can distinguish:

- project conception,
- planning,
- implementation,
- termination.

Fig. 2. Definition of the project management [6]

The specified requirements and parameters are attributed for every project. They are determinants of the project success. One can distinguish following project parameters [7]: scope, quality, costs, time and resources.

All parameters are correlative, that is why equilibrium among them decides about success or defeat of the project.

The scope of the project determines all the tasks which have to be realized during the project and also the tasks which can be omitted. So the scope demarcates the limits of the project. The scope of the project should be elastic with the possibility of introduction of corrections during its realization [7].

The proper quality management makes possible monitoring of tasks progresses in the project, immediate detection of mistakes in assumptions and their modification, in order to achievement of

larger advantage both for contractor and customer. Two categories of quality occur in every project: quality of product and quality of the project management process.

The costs are expressed in monetary units and specified in the project budget form. This is one of the most important parameters deciding about a success of the project, because the result of the project profitability depends on dependence between receipts and expenditures [7].

The orderer determines the deadline of the project realization. The costs of the project can increase or decrease with elongation or shortening of this time. That is why the very important aspect is an effective usage of time on the project realization The realization time is established on the beginning of planning. It is keep rigidly to the end of the project.

The resources are divided on:

- capital resources,
- human resources,
- technological resources
- and information resources.

They are limited into their quantity and durability, so we should plan from outside their use or gaining. This relationship was graphically presented on a triangle of project management (Fig. 3). The time means the period of the project realization, cost - this is the total budget and resources mean all resources which are usage during the project realization [7]. The internal part of the triangle characterizes range and the quality of the project.

Fig. 3. Schema of a triangle of the project management [3]

Every project is a dynamic, still evolving process (Fig. 4). The one of the methods which shows the most important features of a life cycle of the project is based on 6 functions to which it refers during the project realization:

- project selection,
- planning,
- realization,
- control,
- evaluation,
- termination.

In the aspect of projects management there exist 3 standards worked out by: PMI (Project Management Institute), IPMA (International Project Management Association) and OGC (Office for Government Commerce) [8].

PMI is an owner of collection of good practices PMBOK Guide (Project Management Body of Knowledge Guide) - current version 5. This collection of good practices is developed since many years by volunteers from various countries. According to this book the knowledge about projects managing is divided on above 40 processes of projects management. These processes use many techniques and tools. Theirs suitable choice creates the so-called methodology of the projects carrying out. Because of that PMBOK Guide is adopted to very small and very large projects and collects good practices from the whole world, it is very extensive and has about 600 pages. So this standard has its genesis in commercial projects with a special consideration of perspective of the projects manager.

IPMA is the owner of collection of 46 competences which should characterize the manager of the projects - NCB (National Competence Baseline). In contrast to PMBOK Guide standard NCB does not describe processes and techniques of projects management. NCB only gives out what the manager of the project should know. For example, PMBOK Guide describes a method of developed value functioning but NCB states that the manager of the project should know the developed value method without principles of its functioning description. NCB will not also say, how to create the methodology of projects management in the enterprise. It specifies the skills of the projects manager but it doesn't concentrate on the principles of cooperation and communication in the project teams.

OGC this is the agenda of the British Government supporting the shopping process in the public sector of Great Britain. In order to efficiency of the shopping improvement in this sector it developed many standards, for example PRINCE2 (Project in Controlled Environment). So PRINCE2 has its genesis in the public sector projects with a special consideration of the order perspective.

PRINCE2 this is the methodology of the projects managing which consists of 7 processes, tens of documents, techniques and parts. This is an example of concrete scenario of proceeding during the project realization. From all the above mentioned standards PRINCE2 contains the smallest knowledge baggage and one can read it the most pleasantly. This is a textbook showing how to the project carry out according to PRINCE2. In comparison with PMBOK Guide PRINCE2 this is the concrete schema of the projects realization, when PMBOK Guide is the collection of elements from which we have to create the standard which is necessary in the enterprise [8].

According to PMI methodology one can distinguish following components of the project management: beginning, planning, realization and termination of the project and additionally during the project realization - control. These stages create a life cycle of the project (Fig. 5).

In the phase of the project selection one should take a decision concerning of rejection and realization of the project.

In the planning phase there is created an informal preliminary plan on the large level of generality (it is often offer, study of feasibility, examples of implementations and analysis of competitiveness).

This phase is partly agree with the selection phase of the project, because the final decision about the selection of the project is taking in a result of this phase. Then the general plan is elaborated. In this stage a control points called milestones are established and targets and dependences among them are determined.

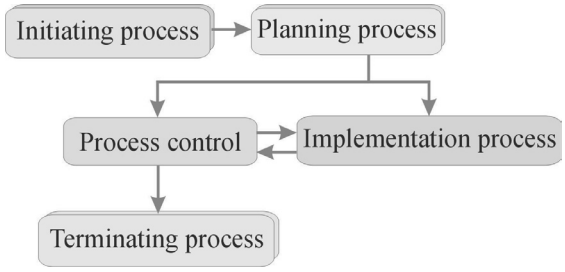

Fig. 4. Schema of correlation among processes in projects management [9]

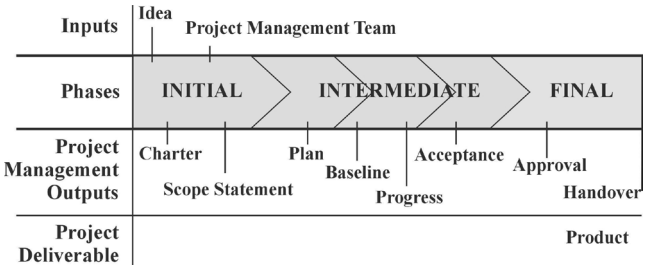

Fig. 5. Typical sequence of phases in a life cycle of the project [6]

In the realization phase everything what was planned is carried out, according to established assumptions, in definite time and with assumed costs.

The phase of the control runs during the whole project by control of its progress, verification what is done according to plan, and management of the possible deflections with settlement of the acceptable range of deflections (management by exception) [10]. The control processes include [2]:

- control of the whole project (complex control),
- control of the changes of the project scope,
- control of schedule,
- control of the project budget,
- control of the quality of the project results,
- collection and information transfer about state of progress of the project and achieved results.

The phase of the project evaluation gives the important information (allows to check the progress of the project; it concerns in a majority of general data etc.).

In the phase of the project termination settlement of accounts is carried out. In this time reports and summaries are made and documentation is archived.

3.1. Project team

Every project has a main manager. This is the person who is responsible for planning of tasks and the project realization management. He is responsible for a success of the whole undertaking. To the most important tasks of the manager belong [5]:

- determination of the organizational structure of the project,
- formulation of the project goals in terms, costs and quality category, and presentation of them for customer to check and acceptance,
- planning of the project realization process, determination of partial tasks, resources planning and settlement of the project team,
- planning and supervision of terms and costs,
- information interchange assurance,
- preparation of important decisions,
- project team control.

The optimum make-up of the projects team gives a high probability on realization of the project to the end with positive result. The persons chosen to the projects team should be characterized by knowledge necessary to problem solution [11]. The members of the team are engaged not only in one project in majority of cases of the projects realization, but in several projects simultaneously. This results from the fact, that they possess the unique skills which are used not only in realization of the one project [7].

The proper communication in the project team is an important element of the project success. The communication is defined as determination of mutual relations among people. The communication includes mutual informing and motivating. It can be divided on [12]:

- intentional and unintentional,
- formal and informal,
- verbal and nonverbal,
- external and internal,
- direct communication, in writing and using technical means of communication.

The communication occurs in all stages of the project management and plays an important role in efficiency of realization of its individual phases. The communication management in the project concerns of creating and archiving of timely and correct studies relating to the project, in order to making theirs available to authorized persons. Transfer data among people engaged to the project, in a correct way, is required to obtainment of intentional results of the project. The form and principles of information transfer and receiving have to be known by all the project team [13].

3.2. Quality management in the project

The quality management includes processes which have to ensure that the project will satisfy the needs for which it was taken. Two categories of the quality occur in the projects management [7]:

- quality of products of the project (product, service, etc.),
- quality of project management.

The methods of the quality management are chosen in such way to ensure all standards and recommendations of the International Organization for Standarization (ISO). The planned realization terms, costs and technologies which are usage during production they are conditioned by aspiration for fulfilment of qualitative standards.

The factors having an influence on the project quality and its products put to the analysis on the basis of [13]:

- quantitative methods (collection of information about the project realization and their analysis). They make collection of information possible, taking into account their analysis,

draw conclusions about diversification of the object in relation to standard and workings having on aim liquidation of these differences are carried out,
- qualitative methods (project quality improvement); they determine both the existing state and factors having an effect on this state, what is used to its improvement. Following qualitative methods are applied [13]:
- brainstorming,
- establishing team priorities,
- "80x20" analysis (80% events result from 20% causes),
- analysis of the project value, by total testing of realization costs and its functionality,
- comparison with accepted standards and quality certification.

3.3. Risk in the project

Every project has such point during its realization, from which there is no return and we can't cancel of this project realization. This point called the risk. One can distinguish four components of risk [14]:
- unfavourable events - threats,
- time,
- probability of threats appearance,
- possible threats effects.

The project manager should make an estimation of every event in respect of the risk. In order to risk elimination or minimization it is necessary to plan an increasing portion of resources in a reserve aspect for unexpected events and problems which have an influence on the project realization. The troubles appearing in the project have a different nature, for example going over budget, higher technical requirements, lack of resources, etc.

Every risk has its own reason, probability of appearance and effects connected with the risk [15-17]. The risk effects are dependent on that in what time an unexpected action appears.

The risk management is a process of identifying, analyzing and accepting of different types of risk and uncertainties, which can influence on the project. The risk management process is composed of [5,18,19]:
- identifying threats,
- analysis of threats effects,
- project risk evaluation,
- reaction planning,
- threat control.

The one of the most popular tools using in enterprises and also in the projects is a method called failure mode and effects analysis. In this method three elements of each activity or group of activities are considered:
- analysis of significance of specified problem in the project,
- determination of probability that failure or problem will be unnoticed,
- determination of probability of a given problem appearance.

3.4. Project time management

The time management includes processes guaranteeing termination of the project in a proper time [5]. It contains activities definition which have to be carried out and settlement of relation for the sequence among activities (Fig. 6). The time management estimates duration of operations, it deals with a structure and a diagram control.

The actions definition contains identifying and documentation of actions which have to be made in order to products or their elements formation provided in the project. These activities are: task, work, operation. Because of that the work can be divided in one or more activities. The effect of activities definition is a list of all actions which has to be complete.

The settlement of relation for the sequence among operations is the basis of a diagram structure. The sequence of operation can be manually or with the computer programme appointed.

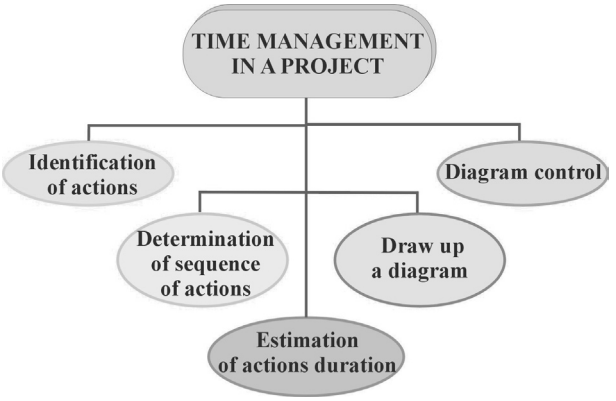

Fig. 6. Time management in the project [9]

The most popular tools for the time planning and diagram of the project creation are [5]:
- Critical Path Method - analysis of time duration and operations costs which belong to the project,
- Gantt chart - consists of tabular and graphical part; in a table are information about: activity name, duration of activity, beginning date of activity, termination date of activity, person responsible for a given activity, resources and costs necessary for activity, etc.; graphical part consists of diagram where axis of ordinates is proportional to axis of abscissa; each action in the project is presented as horizontal field; length of this field determines a task duration, start and the end of a task (Fig. 7),

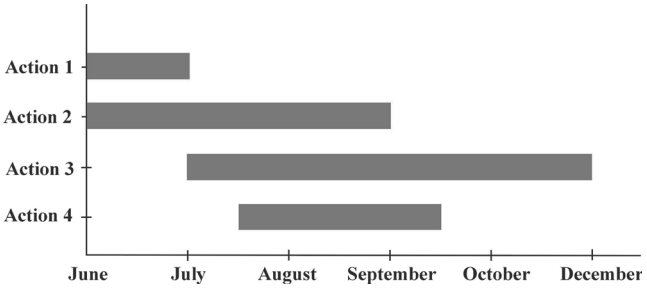

Fig. 7. Exemplary Gantt chart [20]

- Chain planning - consists of a list of activities and relations among them; it makes correction of activities possible, each

activity in the project is described in a table form (Table 2), relations among these activities are presented in arrows form and they illustrate mutual connections.

Table 2.
Presentation of activities in a chain planning [21]

Process number	Responsible person	Process duration
Short process description		
the earliest possible initial point	complete buffer	the earliest possible final point
the latest acceptable initial point	free buffer	the latest acceptable final point

3.5. Project cost management

The project cost management contains determination of the costs of resources usage necessary for actions in the project carried out. The costs are estimated for all resources using in the project. We can distinguish following methods for the cost management:

- estimation methods,
- parametric methods,
- detailed methods.

The phase of the project determines which from the estimation methods one should select [20,22]. In the pre-project phase costs estimations are on the experts estimations base carried out. After beginning of the conception study phase parametric methods are used. In the second part of the planning (main project) the detailed methods are used. Then we have access to the proper documents e.g. specifications, work plans and processes planning or structure project plans.

3.6. Project documentation

The project documentation is divided on technical and administrative part. To the technical part of the project one can classify [2]:

- full specification of the project,
- project documentation set containing working drawings of a given project, divided according to branches,
- materials statements enclosed to every working drawing.

The administrative part are [2]:

- procedures, project instructions and check-lists,
- diagrams,
- cost calculations,
- budget,
- employments schedules,
- appointment reports,
- minutes,
- final assessments.

4. Characteristic of selected elements of projects management

The analyzed project concerns of a production of an element using in an automotive industry.

The orderer passed on the general specification of the project in which he specifies all conditions of the project carried out and conditions of a ready product acceptance. In description of the project organization there were considered:

- requirements concerning of prepared documentation,
- instructions to the project run,
- supervision and participation by the orderer in the project control and method of reporting of actions run,
- schedule of tasks,
- phase of the project and occurring critical points,
- characteristic of deviations from determined goals,
- costs of risk,
- costs settlement.

4.1. Project team

In the organization there are many projects carried out. The coordinator of new projects (projects manager) supervises all projects realized in the analyzed enterprise. His main task is coordination of process of the project realization and actions making possible correct cooperation among the rest of the people engaged in the project, to get satisfactory results and established conditions of the project realization. To indirect tasks of the manager belong:

- open points,
- layout study,
- monitoring and evaluation of the process run,
- trainings carried out,
- realization of the process instructions.

The leader of the project is a person who represents the manager of the project in coordination of the process. His main tasks are:

- drawings and specification creating,
- map of actions synchronization,
- open points,
- study of diagram of the project run,
- determination of layouts,
- verification of dimensions of detail surface,
- strategy of process of failure mode and effects analysis,
- evaluation of project realization run,
- trainings carried out,
- elaboration of packing method and logistics management,
- creation of the project instruction.

The leader of the project is directly responsible before the manager. He should inform the manager about the project run and difficulties appearing during its realization.

To the project team, except the manager and the leader, belong:

- board of directors of the organization,

- manager of the business development,
- quality manager,
- quality engineer,
- production manager,
- process engineer,
- expert of the logistics,
- APQP/IMDS administrator,
- sale and marketing manager,
- engineering manager,
- coordinator for orders and deliveries,
- main book-keeper.

For each task which is connected with the project realization are determined a person or a leader organ and a deputy of a leading person. The deputy is assigned to eliminate a possibility of a lack of a person responsible for a given action.

4.2. Quality control in the project

The main quality determinants of produced detail are: weight, shape of external surface and paint covering. External surfaces are imposed by the orderer and recognized as critical points. The repetition points system (RPS) is used from the beginning of subassembly construction. It is documented during the whole productive cycle of this type of detail. The plan of the repetition points system is a basis of measurements conception and function catalogue, on the basis of which the functional measurement of the product is carried out. In order to the detail weight determination one should measurement on an electric weigher carried out and determine a total weight of the detail. The critical points and detail surface forms are measured on special gauge which is destined for verification of exactly specified detail.

The lacquer measurements depends in the majority of cases on visual control.

4.3. Analysis of the risk card in the projecte

The correct and complete risk description in the plan of the project management has a large influence on the project success. That is why the risk cards are made in detailed manner (Table 3). The great meaning has a study of a plan of results attenuation of the risk appearance or determination of the emergency planning. Then document called review of the project risk is made.

This document possesses selected functions of increase of the probability of success appearance for elements for which a person is responsible.

The tasks, which are priority for elaboration of the risk cards are:

- consideration and identification of possible problems,
- reacting in a proper time on possible and current problems,
- avoidance of critical situations,
- possession of a proper solution if the risk appears.

For every kind of the risk one should analyze the cause of its appearance and result which it will cause. So one should estimate the risk to determine dependence between its influence on the project and possibility of its appearance. Creation of the risk reduction plan is the next, important step in the risk management.

It is created by following instructions:

- settlement of possible causes of threats for the project,
- determination of managing possibilities with the risk,
- determination of potential problems,
- expectation of further results of problem appearance without combating actions,
- determination of an action plan for return to the correct project run,
- collection of information on all possible problems and prevention them,
- collection of suitable information concerning strategies of mitigating of effects resulting from problems,

carrying out of monthly review of the risk management plan.

The risk management process in the project is divided in four steps:

- identification,
- assessment,
- reduction,
- control and monitoring.

The risk assessment in the project is carried out on the basis of formula (1):

$$W_R = P \cdot I \tag{1}$$

where:
W_R - risk coefficient,
P - coefficient of probability of appearance,
I - coefficient of influence on the project assumptions.

Estimation of the probability coefficient is made on the basis of the scale:

- low probability: 0-3,
- average probability: 4-7,
- high probability: 8-10,

In case of influence on the project assumptions coefficient evaluation is made on the basis of influence on: time, costs, productivity, internal and external clients. The total influence coefficient is estimated in the scale:

- low/small (time delays): 0-3,
- average/meaningful (costs increase): 4-7,
- high/large (loss of productivity): 8-10.

4.4. Costs review in the project

The budget is one of the most important documents which has an influence on profitability of the project realization. The preliminary budget is defined during offer question from the client obtaining. The realization time of the budget averages 2, 3 weeks. In this time purchasing department with the project leader costs connected with the project estimate. These estimations are made on the basis of the costs of earlier projects, as also on the basis of the costs recognition of competition on the market.

Table 3.
Exemplary risk card of a process (PFMEA - Process Failure Mode and Effects Analysis)

Risk determination			Risk estimation			Plan of risk reduction	
	Description		Probability of appearance	Influence on progress	Risk value	Plan of effects mitigation	Plan of actions in an emergency situation
No.	Reason	Effect	(0-10)	(0-10)	(1-100)	Description	Description
1	PFMEA not fit to process transition diagram	PFMEA is not complete, it is not presented failure modes and it is not determined preventive actions	4	7	28	Team gather, in the first order prepare a process transition diagram	During preparation, reviewing of PFMEA always have on a desk a correct process transition diagram
2	PFMEA is not complete - lack of analyses of all potential failure modes	Preventive actions are not determined, risk of problems appearance in the future	5	8	40	Prepare PFMEA, make an inspection with a team part	Check who create PFMEA during a process audit, ask a team about internal and external problems, compare the answers with PFMEA
3	PFMEA is not actual, it is not included in documents	Risk of repetition of the same problem in the future	5	8	40	Continuous bring PFMEA up to date, it is obligatory in case of internal problems and clients complaints appearance	Check if PFMEA was changed during a process audit, compare PFMEA with clients complaints, solve internal problems if they exist
4	PFMEA is not made according an instruction (it is not form by teams, failure factors)	APQP requirements are not implemented, preventive actions are not taken, lack of analysis, risk of problems appearance in the future	3	8	24	Always usage FMEA instructions during factors calculations, prepare PFMEA, make an inspection with a team part	Check PFMEA during a process audit and compare with an instruction, clients requirements
5	PFMEA is not directed on main product, process characteristics	Client APQP requirements are not implemented	4	8	32	Always check a risk factor before beginning of PFMEA preparation	Compare risk factors with PFMEA during a process audit

After approval prices and costs by the client, suitable budget is created. The budget of the project is established by each department separately. In the budget of every project 10 to 15% budget surplus is established as the budget reserves. The full budget determines every operation for realization during the project realization and costs currency values. Four positions of these values one can distinguish:

- costs value connected with an operation,
- costs value of operations, for which a client pays,
- costs value of operations, for which an orderer pays,
- profits or losses value of an operation.

The client defrays costs of all machines and devices which are specialized to production of his details. However all machines which can also be used to production of details from other clients have to be an investment of the contractor.

The budget is monthly controlled by the Controlling department. The deviations of real costs from providing costs in the budget are verified. The leader of the project with Controlling department create a report from the budget.

4.5. Documentation review in the project

The most important document in the project documentation is a project book. It describes all basic procedures of cooperation and communication, in all phazes of the project between the orderer and the contractor. The book of the project is created and actualized up to date during the project realization. The procedures which are included in the book of the project are described on the basis of the project realization process. In the individual chapters of this document, description of the present condition of the project is contained. Changes in the book of the project take place after two-sided acceptance. In the book composition are included:

- structure plan of the project,
- reporting,
- specifications,
- history of individual parts,
- cost sheet,
- specification of weights.

Technical documentation and drawings for the project are made according to valid standards of the drawings work. The detail dimensioning is carried out on the basis of the repetition points system (RPS). The technical documentation has to be given and confirmed by the contractor and it should contain:

- general drawing with all layers,
- working drawings with all data (material, weight, etc.),
- list of details and their specifications,
- plan of the repetition points system, measurements methods,
- tolerance study,
- results of ergonomics and safety examinations,
- conception of assembly and disassembly (assembly method and description of assembly sequence),
- production conception,
- calculations and simulations,
- kinematics study,
- bill of materials,
- 3D-CAD model.

Documents creating the project are important in the following order:

- law regulations,
- drawings and 3D models,
- specifications,
- internal technical regulations,
- national and international standards.

5. Conclusions

The projects are the unique undertakings which consist of four main stages:

- determination and organization,
- planning,
- realization management,
- termination of the project.

These basic techniques of project management should be realized linearly, but in the practice planning stage is connected with management of project realization, because information is up to date obtained. From these information depends a correct course of the project realization.

The tasks which were determined in the first stage of the project set a character to a whole undertaking. To obtain in the planning stage assumed targets, time necessary to aims realization one should determine. Next a task diagram is created and the total costs of the project are estimated. The most important things are determination of the project targets, organization of necessary resources and also creation of the project team.

The important role in the project management process fulfils the threats identification, which consists in the risk estimation. All project threats should be identified and monitored. The correct and early risk prediction makes possible the risk prevention or mitigating the effects of the risk.

The driving force of the project is a person who runs the project called the manager of the project, qualified leaders of the project managing the project teams.

The carried out analysis of the project management process in the enterprise allowed to certify that the studied project met an intentional aims. This is a result of correct diagram and costs determination, sharing responsibility, risk and actions to it elimination prediction.

Application of modern methods of project management eliminates many threats which can lead to errors in its realization. This also makes possible easier communication among the client and the orderer and inside the projects team.

The quality of the project realization decides about acceptance or rejection of the project by the client. The expectation fulfilment and general satisfaction of the client from a task realization can cause an order of the next project.

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