

Managing investment construction project in Kazakhstan

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Abstract.The aim is to show junior of project management from where to start and to finish. "MARAI E7 GROUP LLP" is given as an example of application of practical knowledges over theory. This pharmaceutical project has been adapted under the current law of Kazakhstan and some Commonwealth of Independent States (CIS).

Methodology of work amounted to a collective method of Investment- construction stages, even if the results is timeconsuming, it is economically effective and practically useful.

This article applied individual control figures to improve traditional and basic earned value. The approach is very effective especially in the case of managing project at the first time . We focused on stages of construction process with all details. We did not take theory a lot, instead we shared our own experience which is taken from real practice.

The earned value is a leading technique in monitoring and analyzing project performance and project progress. Although, it allows exact measurement of project progress, and can uncover any time and cost deviations from the plan, its capability in reporting accepted level of deviation is not well studied. For this purpose, project time and cost

performance indices of a real construction project were monitored regularly on individual control charts. The results were quite promising, and not only competed well against traditional approaches, but also enhanced team's knowledge of project performance.

The field of application of the results obtained by authors, is to improve the project management, planning construction process saving time and money. The authors' conclusions may be used in the process of teaching in economic disciplines in cycles management, state and local government, statistics.

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Управление инвестиционно-строительным проектом в Казахстане

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Аннотация. Целью является показать неопытным управляющим проектов с чего начинать и закончивать строительство. Компания "Marai ТОО Е7 ГРУППА" приводится в качестве примера применения практических знаний с теорией. Данный фармацевтический проект был адаптирован в соответствии с действующим законодательством Республики Казахстан и некоторые Содружества Независимых Государств (СНГ) в строительстве.

Методология работы составил коллективного метода сбора информации о инвестиционно-строительных этапах. Не смотря на то, что обработка данных занимает много времени, результат экономический эффективен и полезен с практической точки зрения.

В данной работе применяется таблицы для улучшения понимания традиционных и основных базовых знаний. Подход является очень эффективным, особенно в случае управление проектом в первый раз. Мы сосредоточились на этапах строительного процесса со всеми деталями. Мы не брали много теории, а разделили наш собственный опыт, который приобрели в период работы над Проектом фармацевтической компании МАРАЙ Е7 ГРУПП.

Приобретенные знания являются для нас высшей методологией в мониторинге и анализе выполнения проекта и прогресса проекта. Так же методология позволяет точнее измерить прогресса и статус проекта, и может показать режиме реального времени стоимость отклонений от плана, хотя в данной работе способность в отчетности приемлемый уровень отклонения был изучен частично. Для этого, время проекта и показатели эффективности затрат реального проекта строительства регулярно контролируется на отдельных контрольных картах и таблицах.

Область применения результатов, полученных авторами, является улучшение управления проектами, планирования строительства процесс экономия время и деньги. Выводы авторов могут быть использованы в процессе преподавания экономических дисциплин в в управлении циклов, государственного и местного самоуправления, статистики.

The concept of project management

To understand the theory of project management, it is necessary to define its key categories: design and project management. Until recently in our country and abroad under the project will be a set of drawings, in which reflected space-planning, design, organizational, technological and other solutions in various areas of industry and manufacturing.

In the standard Project Management Institute USA (Project Management Book of Knowledge, PMI) under the project is interpreted as a temporary force (action), undertaken to create a unique product or service [1].

In "based on professional knowledge. National requirements competence (NTC) specialists "SOVNET project is treated as aimed time-limited event aimed at creating uniq product or service.

I. Mazur, VD Shapiro, NG Olderogge give the following definition: project - a deliberate, pre-designed and making planned or upgrading of physical objects, processes, tech-nical and organizational documentation for them, material, financial, labor and other resources, as well as management decisions and measures for their implementation [2].

Harold says Oberlander project management skill and the ability to coordinate people, equipment, materials, money, and the sequence of work on the project in time and within the approved cost [3].

According to V.D. Shapiro, project management - a synthetic disciplin uniting special professional knowledge and above [4].

That people are the most valuable resource in project management.

Project Management (project management) - is the management of the process of its implementation. In turn, the project - a set of actions, deeds and actions aimed at achieving the objectives of the project. Thus, the management of the project - is the management of a set of measures, deeds and actions aimed at achieving the objectives of the project.

Projects can vary in the supply, subject area, scope, duration, participation, complexity, influence outcomes and other characteristics. For ease of analysis and synthesis of projects and project management systems can be classified according to different criteria: 1. The class projects are characterized by their composition and structure. Allocate monoprojects, multiprojects and megaprojects. 2. Type of projects depends on the scope of activities in which they are carried out. Distinguish technical, organizational, economic, social and mixed projects. 3. Type of projects is determined by the nature of the subject area. There are investment-building, innovation, research and educational project. 4. The scope of the project characterizes their size, number of participants and degree of influence on the world around us. Projects are divided into small (to 1 million dollars), medium (1-10 million), large (by 10-100 million dollars) and very large (over 100 million). 5. Duration of projects characterizes the duration of their implementation. On this basis the projects are divided into short-term (up to 2 years), medium term (3-5 years) and long term (over 5 years). 6. On the complexity of isolated simple, complex and very complex projects. We would like to share our experience with LLP "Marai E7 Group" company which was established in 2012 for the production of medical devices and more than these theoretical aspects will be applied to it. The class of projects, the company refers to monoproject, the type of project is economic. Type of project is investment and construction, the scale of the project refers to the average because project costs of 2.7 million dollars. Project duration is up to 2 years.

Investment and Construction Project (ICP) - a project for the realization of the full cycle of investment and investment in the construction of the project (from the initial capital investments to achieve the investment objectives and completion of the project provided work).

The prevalence of ICP worldwide placing increased demands for knowledge to manage them. Investment and construction projects include the construction of buildings, roads, bridges, houses, theaters, parks, stadiums, airports, factories, space centers and many other facilities. Investment and construction projects include a set of interrelated actions - from idea to completion of the project.

Phase of the life cycle of investment and construction project may differ from the total project life cycle. In general, the life cycle of the ICP consists of four main phases:

1. Initial phase: pre-feasibility study of ICP; a permit for construction of the facility. 2. The main phase engineering surveys; contracts; design of the facility; construction of the facility. 3. The final phase: the facility to operate; sale of the object. 4. Phase warranty - performance warranty.

Managing Investment Construction Project (ICP)		
The first team	Subsidiary of the team	Consultants
<ul style="list-style-type: none"> • The project team • Technical support • Team responsible for the delivery, • Engineering Group, • quantity surveyors, economists • Other 	<ul style="list-style-type: none"> • Administrator • Secretariat • Security • driver of the vehicle • couriers • cleaners • others 	<ul style="list-style-type: none"> • lawyers, • real estate professionals, • auditors, • technologists and others

Fig. 1. ICP team

We believe that, in practice, having given the governance structure of the ICP (Figure 1) will be clear

who belongs where personnel who work in the short and in the long run, what you need specialists for consultation

This structure of work derived from practical examples. Was applied in the LLP "Marai e7 Group" and we proved this does work. We think in Kazakhstan and other CIS countries due to the similarity laws Figure 2. be relevant. In Western countries, a group of works is not much different just because of legal restrictions, but the term "project management" came to us from the West, and they have since the mid-1970s has structural scheme of its project management ISP.

Figure 2. shows 6 stage that assist any owner and manager before, after and during construction process. This information is very helpful especially for junior and unexperienced managers. All construction steps are clearly explained and divided into 6 levels.

Development of ISP.		
1. Development of feasibility studies.	2. Technical project.	3. Development of construction documents
4. The choice of the management company and organizations for construction and installation works.		5. Obtaining a building permit.
Perform construction activities		
1. Site preparation	2. Perform basic construction and installation works.	3. Perform engineering works and landscaping
4. Engineering and installation of production equipment and finishing		
Engineering support.		
1. Construction of all intra-engineering networks and facilities	2. External engineering networks and facilities.	3. Provision of transport infrastructure.
4. Contracts for engineering support		5. Telecommunications software.
Installation technological equipment and inventory.		
1. Functional processing equipment.	2. equipment, providing comfortable accommodation or finding people in this facility. FMCG.	3. Furniture.
4. Inventory, contributing to quality service.		5. FMCG
Commissioning		
1. Commissioning of engineering equipment.	2. Commissioning of the process equipment.	3. Commissioning of buildings and structures.
4. Commissioning of telecommunication systems.		5. Commissioning of transport infrastructure.

<u>Acceptance of the facility.</u>		
1. Preparation of all executive documentation and the object as a whole.	2. The work of the working committee.	3. Elimination of the comments of the working committee
4. State Commission.		5. The transfer of all executive and design and estimate documentation to the customer. the beginning of the operation of the facility.

In Kazakhstan, in order to save money on construction businessmen decide to build full construction process by theirsels. Which leaves all responsibility and risks to him. The issue that they might get is low quality construction works. Therefore, finished construction business project as a result might have building with crack, leak, no leaks, etc. there is no guarantee quality work. To fixed happened issue additional money would be spend. If a problem is detected with a construction period of legalization, state agencies will not be issued for the operation of the relevant documents. Moreover, the problem with the construction will be revealed in the process of production and operation, due to such errors in winter heating costs, electricity will be more. Well, if the problem is serious, then production stops, and wages will have to pay anyway, so enterpreneur losts his profit. We suggest to separate stages and trust to contractors by making strong agreement with responsibilities, so all risk will be passed to the construction company. As a project manager you should control and keep all construction process in your hands. Furthermore, project manager must know basic construction steps such as : 1. Start. 2. Land works. 3. Piles. 4. 5. grillage foundation. 6. frame. 7. Wall. 8. Indoor and outdoor openings. 9. roof. 10. floors. 11. Electrical installation work. 12. plumbing. 13. wall decoration. 14. facades. 15. ending. Basic knowledge of construction works will be following every project manager in all business tasks.

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Қазақстанда инвестициялық және құрылыс жобаларын басқару.

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Тірек сөздер: құрылыс дәрежелері, инвестициялық және құрылыс процесін басқару, жобаларды басқару, ТМД, Қазақстан.

Аннотация. Жұмыстың мақсаты фармацевтикалық өнеркәсіп өндіруші ЖШС «Marai E7 GROUP» компаниясының тәжірибесімен бөлісу арқылы тәжірибесіз жоба бастықтарына ғимараттарды құруды қай кезендерден бастап және аяқталуды үйретеді. «Marai E7 GROUP» компаниясын теориялық тұрғыдан емес, тәжірибелік тұрғыдан алып инвестициялық құрылыс кезендерді кестеге бөліп талдануы. Бұл фармацевтикалық жоба құрылысына Қазақстан Республикасы мен Тәуелсіз Мемлекеттер Достастығы (ТМД) заңдарына сәйкес бейімделген болатын. Жұмыстың әдістемесі инвестициялық және құрылыс кезендерінде туралы ақпаратты жинау ұжымдық әдісі болып табылады. Деректерді өңдеу ұзақ уақыт алу болғанына қарамастан, нәтижесі тиімді және көрінісінде практикалық тұрғысынан пайдалы.

Бұл жұмыста біз дәстүрлі және іргелі базальқ білім түсіну жақсарту үшін кестені пайдаланылады. Тәсіл, әсіресе алғаш рет жобаларды басқару жағдайда, өте тиімді болып табылады. Біз барлық егжей-құрылыс процесінің кезендерін барлық бағыттарды көрсетеміз. Алған білім жобасының өнімділігін және жобаның барысын бақылау және талдау, біздің ең жоғары әдістемесі болып табылады. Тек әдістер жобаның барысы мен мәртебесін дәл өлшеу мүмкіндік береді, осы зерттеуде ауытқу қолайлы деңгейін есеп қабілеті зерттеу бөлігі болды. Бірақ, жоспардан ауытқу нақты уақыттағы құнын көрсете алады. Осы мақсат үшін, нақты құрылыс жобасын және құны тиімділігін уақыты үнемі жеке бақылау диаграммалар мен кестелерді мониторинг жүргізіліп отырады.

Авторлардан алынған нәтижелерді қолдану, жобаны басқару жетілдіру болып табылады, құрылыс жоспарлау процесі уақыт пен ақша үнемдейді. Авторлардың қорытындылар басқарушы циклдарды, мемлекеттік және жергілікті басқару, статистика, экономикалық пәндерді оқытудың пайдаланылуы мүмкін.