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Investment Management Activities of Commercial Enterprises

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ABSTRACT

Real investment is investment in specific, usually long-term project and is usually associated with the acquisition of real assets. The current company can invest in new equipment to expand production, because the additional profits from additional sales are making such investments attractive. You can also invest in the renovation of worn and obsolete equipment to improve efficiency of cost. Here the rationale of the investment is to reduce production costs. Investments can also involve significant costs for promotion of products on the market in order to increase the number of sales, and thus commercial profit from the greater volume of activity. Investment planning is the projections of the most effective investment of financial resources in land, production equipment, buildings, natural resources, product development, securities and other assets. Investment planning is a strategic and one of the most complicated tasks of enterprise management. During this process it is important to consider all aspects of economic activities of the company ranging from the environment, inflation, tax treatment, status, and prospects of market development, the availability of production capacity, material resources and ending with the project's financing strategy.

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1. INTRODUCTION

Investments are a set of long-term expenses of financial, labor and material resources to increase savings and profit. Objectives of investment management: expanding their own business through the accumulation of

financial and material resources; the acquisition of new businesses; diversification through the development of new business areas.

From the point of view of actions, investments are divided into: initial investment, investment for expansion, re-direction of available funds for the purchase of new fixed assets, investments to replace fixed assets, investment diversification, etc.

The main objectives of investment analysis are:

- Determining the need for investment resources.
- Identify possible sources of financing and consideration of the issues of interaction with investors.
- Assessment fees for the source.
- Preparation of financial estimates of investment efficiency taking into account the repayment of borrowed funds.
- The development of a detailed business plan of the project for submission to a potential investor.

Undoubtedly, the implementation of a number of basic rules allows you to plan future investment most effectively. Before you make a decision about investments, it is important to define the problem to be resolved as a result of its implementation.

In most cases, there are several ways of achieving the objectives of the investment and it is important to determine the optimal path in the beginning of the planning.

Most of the investments are independent from each other. This means that the choice of one investment does not stop to pick any. However, there are circumstances in which investment projects compete with each other in their goals, for example, in the case when one considers the two possible ways of solving the same problem. Such investment projects are called mutually exclusive.

The other type of investment consistent for costs committed in addition to the original investment. Any investment in buildings and equipment usually contain additional future costs to maintain them in working order, improvement and partial replacement in the next few years. Such future costs should be considered at the first stage of decision making.

The success of long-term investment depends entirely on future events and their uncertainties. It is not enough to assume that past conditions and experience will remain unchanged and will apply to the new project. Here can help thorough analysis of changes in individual variables such as sales volume, prices and cost of raw materials, etc. Such analysis helps to narrow the range of future mistakes.

Investment process is always associated with risk and the longer the project and the timing of his return, so it is riskier. In this regard, when making decisions you must consider the time factor. Does not require proof that the ruble gained today is worth more than a ruble received a year later. In order to more correctly estimate future revenues from investment activities require a method to transfer the relative values of these future flows in value today (Martensen & Mouritsen, 2013). For such a transfer in economic analysis, there are special mathematical methods, allowing to define the future income, taking into account the time factor: the method of compounding and discounting method.

2. MATERIALS AND METHODS

As a theoretical and methodological basis of research were used by Russian and foreign monographs, articles from scientists and specialists in the field of investment process management and innovation of commercial enterprises.

When doing research in an integrated management methods were applied to systematic and logical analysis and synthesis.

3. INVESTMENT PROJECT, BUSINESS PLAN, PROGRAM

The standard form for the submission of the investment project is a business plan. The submission of a business plan may vary in form, but its main contents is the same for all. Taking into account that in countries with developed market economies have accumulated sufficient experience in the field of planning and investment analysis is to neglect the experience would be meaningless. Used today common to all developed countries, planning methods and criteria of evaluation of efficiency of investment projects are the same language, providing dialogue and mutual understanding between investors and entrepreneurs of different countries. These include methods of evaluation of investment projects efficiency of such authoritative international organizations as UNIDO, the World Bank and the European Bank for reconstruction and development.

Common to them is that they are all based on the classical principles of investment analysis based on method of cash flow analysis. Cash flow is income (positive cash flow) and expenditure (negative cash flow) of money in the process of implementation of economic activity of the enterprise.

Introductory Features in the Development of the Business Plan of the Investment Project

Before the development of the business plan of the investment project, a Manager needs to solve the following tasks, each of which is an integral part of the planning process and attract investment (Basovsky & Basovskaya, 2008).

Marketing research to select for the subsequent production of the product or service already on the market, but with a high potential demand, as well as to study the possibilities and ways of market the new product or service.

Conformity assessment of the organizational, professional and technological capabilities with the requirements of the production and marketing of selected products or services. Identify bottlenecks and ways to overcome them.

Identification of potential cooperation partners, key suppliers of raw materials and components, energy, as well as the conclusion with them preliminary agreements on the terms of delivery.

The definition of suppliers of technological equipment and agreements with them the conditions of its delivery.

Preliminary calculation of investment and an assessment of the expected Deposit.

The definition of the type or name specific prospective investors for the project.

The development of business plans dedicated to a large number of foreign and domestic literature, which implies that there is no single, rigid set of standards. However, there are certain guidelines for developers of business plans, independent of the country and sectors of the economy.

Characteristics of Priority Sections of the Business Plan

A business plan should contain the following sections:

1. Summary (review section)
2. General description of the company
3. The products and services
4. Marketing plan
5. Production plan
6. Management and organization
7. Capital and legal form of the company
8. Financial plan
9. Risk assessment
10. Application

Although the summary is the first section of the business plan, write it after completing all other sections (Irani, 2010). In fact, summary is an abridged version of the business plan. The volume of the summary should not exceed 2-3 pages (Gabidullina, 2013). Working on a resume, you must remember that its main function is to attract the attention of the reviewer. The summary should contain:

1. purpose of the project
2. very brief description of the company
3. summary of the most attractive points of all other sections with a focus on the positive aspects of the proposed business ideas
4. volume and terms of attracted investments and/or credit resources
5. expected time and the order of return of funds spent

A proper business plan starts with the section “General description of the company”. This section must reflect:

1. principal activities and nature of the company (without detail; more detail, this information will be provided in the following sections)
2. stage of development of the business
3. company profile: company is manufacturing, trading or she is acting or will act in the service sector
4. what and how the company intends to offer its customers

5. where the company located
6. in any geographical limits the company intends to develop
7. what the goals of the business are
8. difference of this company from other companies

The main objective of the section, “Products and services” is the description in a condensed form the characteristics of the goods and services offered by the business. This section should contain:

1. physical description of products or services
2. description of their use
3. attractive of the offered products and services
4. readiness of products or services to market
5. the list of experts or consumers who are familiar with the product or service and can give them a favorable opinion (if such information is available).

The section on marketing is one of the most important parts of a business plan. The purpose of this section is to explain how prospective business intends to influence the market to ensure the sale of goods (Chan, Nickerson, & Owan, 2007). The marketing plan can be presented in different ways depending on the type of business and complexity of the market. However, in any business plan in one form or another should be reflected the following aspects of the marketing plan:

1. determination of demand and market opportunities
2. analysis of competition and other factors impact on the development of this business
3. description of the marketing strategy of the company (i.e. you should explain how you intend to use the tools of marketing, including marketing strategies, advertising and promotion, pricing, sales incentives, etc.)
4. the results of market research
5. forecasts of sales volumes.

Written section must be in an accessible form. While working on this section, it should be remembered that the investor and/or lender is primarily interested in the viability of the project, i.e., in other words, whether the enterprise to achieve success on the market. Therefore, it is necessary to show convincingly that the proposed products or services have a market. Special attention should be paid to the analysis of competitiveness of the enterprise. It is advisable to bring a list of the main competitors, noting their strengths and weaknesses, used to assess their level of technology and their marketing strategy, if possible their share in market turnover, and how they can react to the appearance on the market of a new competitor.

It should be borne in mind that the degree of maturity and details of the marketing section of a business plan depends primarily on whether the enterprise is just starting out or expanding its activities, and whether the organization of production of new types of products and services. Less detailed may be the marketing plan of the company, slightly expanding its presence in the market.

The purpose of the financial section of the business plan is to formulate and present a detailed system of planning, reflecting the expected financial performance of the company. While the financial plan should be consistent with materials presented in other parts of the business plan. For an existing business intending to expand its activities, it is advisable to show financial data for previous years. It is also necessary in a clear and concise manner state all assumptions that were the basis of the submitted projections. Can be viewed in financial terms, several possible scenarios of development of the company.

The financial plan must contain the planned implementation schedule (calendar plan) of work in the project. The schedule should include a list of the main stages of project implementation and financial resource requirements for the implementation of each of them. Planning does not necessarily take place with reference to specific dates, planning can be, for example, indicating the duration in days required to implement each stage of the project, but with reference to the possibility of parallel implementation of different stages (Czarnitzki & Kraft, 2004). For convenience, you can also select a conditional date for the start of the project and further plan the activities of the company with reference to the selected conditional date.

It is desirable to include in the financial plan of several documents, namely: the forecast of sales volumes, plan cash flow (i.e., projecting cash flows), the plan of profits and losses (this document shows how to form and change a profit), projected balance of assets and liabilities of the company (the structure of this document follows the structure of the conventional accounting balance sheet), schedule of achievement of break-even point (the level of sales needed to cover costs at the given scale of production). In addition, the calculation of integral indicators (payback period, net present value, profitability index, internal rate of return) and selected financial indicators.

Can be prepared also additional financial data reflecting the contribution of individual types of products and services in General, the results of operations of the company. In addition, it is possible to include in the financial section of the business plan of the special topic, reflects the financing strategy of the company, answering it on such issues as: how much money is necessary? where, in what form and on what terms they planned to? when can we expect full recovery of investment and income on them? For myself, the entrepreneur should, as possible to understand the details of this section. Depth study of this topic may be different depending on the requirements of specific funding sources. Part of the materials may be placed in the application.

4. METHODS OF EVALUATION OF INVESTMENT EFFICIENCY

The process of managerial decision-making of investment character is the evaluation and comparison of projected investment and future revenues. As we compare the figures relate to different points in time, the key problem here is the problem of their comparability (Rylov, Shkurkin, & Borisova, 2016). You can treat it differently depending on the existing objective and subjective conditions: rate of inflation, the size of the investment and generated receipts, horizon of forecasting, the skill level of the analyst, etc.

Methods used in the analysis of investment activity can be divided into two groups:

- (a) based on discounted estimates;
- (b) based on accounting estimates.

Consider the key ideas underlying these methods.

Method of Net Present Value

This method is based on comparison of the value of the initial investment (IC) with a total sum of discounted net cash revenue generated by it during predicted term. Because the cash flow is distributed in time, it is discounted using a ratio r set by the analyst (investor) independently based on the annual percent of return which he wants or can have on the invested capital.

For example, it is forecast that the investment (IC) will generate over n years, the annual income of P_1, P_2, \dots, P_N . The total accumulated amount of the discounted incomes (PV) and net present effect (NPV) are calculated respectively by the formulas:

$$PV = \sum_k \frac{P_k}{(1+r)^k}$$
$$NPV = \sum_k \frac{P_k}{(1+r)^k} - IC$$

It is obvious that if:

NPV > 0, project should be taken;

NPV < 0, project should be rejected;

NPV = 0, the project neither profitable, nor unprofitable.

When forecasting revenues for years, so you need to consider all types of income, both industrial and non-industrial nature, which may be associated with the project.

So, if at the end of the project period, the planned flow of funds in the liquidation value of the equipment or release of part of working capital, they should be taken into account as income of the relevant periods.

If the project involves not a one-time investment, and the sustained investment of financial resources in a period of m years, then the formula for calculating NPV modified as follows:

$$NPV = \sum_{k=1}^n \frac{P_k}{(1+r)^k} - \sum_{j=1}^m \frac{IC_j}{(1+i)^j}$$

where, i is the projected average inflation rate.

The calculation using the following formulas manually is very time consuming therefore, for easy application of this and other methods, based on discounted estimates developed by the special statistical tables in which the tabulated values of compound interest, discontinuous multipliers, of the discounted value of the monetary unit, etc. depending on the time interval and the values of the discount factor.

It should be noted that the NPV forecast reflects developments in the economic potential of the enterprise in case of acceptance of the draft. This indicator is additive in the temporal aspect, i.e. the NPV of different projects can be summarized. This is a very important property, which distinguishes the criterion of all others and allowing to use it as your primary in the analysis of the optimal investment portfolio.

The method of internal rates of return.

Under rate of return investments (IRR) understand value of factor of discounting at which the NPV of the project equal to zero:

$$\text{IRR} = r, \text{ wherem } \text{NPV} = f(r) = 0.$$

The calculation of this factor in the analysis of efficiency of planned investments is as follows: IRR reveals the maximum allowed relative level of costs that may be associated with the project. For example, if the project is fully financed by commercial Bank loans (Ilyaschenko & Chinakhov, 2012), the IRR value shows the upper limit of acceptable level of Bank interest rates, the excess of which makes the project unprofitable.

In practice, every company finances its activities, including investment, from a variety of sources. As payment for the use of advance in the activities of the company the financial resources it pays interest, dividends, fees, etc., i.e. bears some reasonable costs PA maintenance of their economic potential. Measure of the relative level of these costs can be called the “price” of the advanced capital (CC). This figure reflects the enterprise a minimum return on the invested in his work capital, its profitability and is calculated by the formula weighted arithmetic mean.

The economic meaning of this indicator is as follows: the company may make any decisions of investment character, the level of profitability of which is not below the current value of the CC index (or the price of the source of funds for this project if he has the target source). It compares the IRR rate calculated for a specific project, the connection between them is.

If:

$\text{IRR} > \text{CC}$ – the project should take;

$\text{IRR} < \text{CC}$ – then the project should be rejected;

$\text{IRR} = \text{CC}$ – the project neither profitable, nor unprofitable.

The practical application of this method is complicated, if the analyst lacks a dedicated financial calculator. In this case, applies the method of successive iterations using tabulated values discontinuously multipliers. For this purpose, the tables are selected, two values of the discount factor $r_1 < r_2$ so that in the interval (r_1, r_2) the function $\text{NPV} = f(r)$ changed its value from “+” to “-” or “-” to “+”. Next, apply the formula:

$$\text{IRR} = r_1 + \frac{f(r_1)}{f(r_1) - f(r_2)} \cdot (r_2 - r_1)$$

where, r_1 – value tabbed discount rate at which $f(r_1) > 0$ ($f(r_1) < 0$);

r_2 – value tabbed discount rate at which $f(r_2) < 0$ ($f(r_2) > 0$).

The accuracy of calculations is inversely proportional to the length of the interval (r_1, r_2) , and the best approximation using tabulated values is achieved when the minimum length of the interval (equal to 1%), i.e. r_1 and r_2 is - next to each other the values of the discount factor satisfying the conditions (in the case of function changes the sign from “+” to “-”):

r_1 – value tabbed discount rate, minimizing the positive value of NPV index, i.e. $f(r_1) = \min_r \{f(r) > 0\}$;

r_2 – value tabbed discount rate that maximizes negative NPV index, i.e. $f(r_2) = \max_r \{f(r) < 0\}$.

By interchanging coefficients r_1 and r_2 same conditions are written for a situation where the function changes sign from “-” to “+”.

Payback Period Method

This method is one of the most simple and widespread in world registration-analytical practice, does not involve an interim order receipts. The algorithm of calculation of payback period (PP) depends on the uniformity of the distribution of projected investment income. If income is distributed evenly by year, the payback period is calculated by dividing expenditure by the amount of annual income due to them (Kobersy, Barmuta, Muradova, Dubrova, & Shkurkin, 2015). When receiving a fractional number, it is rounded upward to the nearest integer. If the profit is distributed unevenly, then the payback period is calculated by direct counting the number of years during which the investment will be repaid the cumulative income. The General formula for calculating the indicator of PP has the form:

$$PP = n, \text{ in which } \sum_{k=1}^n P_k > IC.$$

Some experts in calculating the PP is still recommended to take into account the time aspect. In this case, the calculation of the cash flows discounted at the index price of the advanced capital. It is obvious that the payback period increases.

The indicator of payback period of investment is very simple in calculations; however, it has several disadvantages that must be considered in the analysis.

Firstly, it ignores the effect of income the latest periods. As an example, consider two projects with identical capital costs (10 million rubles), but a variety of projected annual revenues: project A – 4.2 million rubles for three years; project B – 3.8 million rubles for ten years. Both of these projects during the first three years of recoupment of capital investments, therefore from the position of the given criterion they are equal. However, it is clear that the project would be much more profitable.

Secondly, since this method is based on undiscounted estimates, it does not distinguish between projects with the identical sum of cumulative incomes, various distribution on years. So, from the perspective of this criterion the project and with an annual income of 4000, 6000, 2000 thousand rubles and project B with an annual income of 2000, 4000, 6000 thousand rubles equal, although obviously the first project is preferable because it provides a large amount of income in the first two years.

Third, this method does not have the property of additivity.

There are a number of situations in which the use of a method based on the calculation of the payback period of the costs may be appropriate. In particular, this is a situation where the company's management is more concerned with solving the problem of liquidity and not profitability of the project – most importantly, that investment has paid off and as soon as possible. The method is also good in a situation when investments involve a high degree of risk, so the shorter the payback period, the less risky is the project. This situation is typical for industries or activities that are characterized by a high probability of fairly rapid technological change.

Method of Profitability Index

This method is essentially a consequence of the method of net present value. The profitability index (PI) is calculated by the formula:

$$PI = \sum_k \frac{P_k}{(1+r)^k} / IC$$

It is obvious that if: $R_1 > 1$, then the project should be taken;

$R_1 < 1$, then the project should be rejected;

$R_1 = 1$, the project neither profitable, nor unprofitable.

Unlike the net present effect, the profitability index is a relative indicator. Because of this it is very easy when choosing one project from a number alternative, having about identical values NPV or at the acquisition of the portfolio with the maximum total value of NPV.

Method of Calculation of Efficiency Coefficient of Investments

This method has two characteristic features:

- first, it does not assume discounting of indicators of the income;
- second, the income is characterized by net profit PN (retained earnings minus contributions to the budget).

The calculation algorithm is extremely simple, and that determines the wide use of this indicator in practice: the coefficient of efficiency of the investment (ARR) is calculated by dividing the average annual net profit of PN on the average value of the investment (the coefficient is taken in percent).

The average size of investment is by dividing the original amount of capital investment by two if it is assumed that at the end of the implementation period of the analyzed project, all capital costs will be written off; if allowed the presence of residual or salvage value (RV), its rating should be excluded.

$$ARR = \frac{PN}{\frac{1}{2} \cdot (IC - RV)}$$

This rate is compared with the coefficient of profitability of the advanced capital, which is calculated by dividing the total net profit of the enterprise for the total amount of funds advanced in its activity (a result of average balance net).

A method based on the coefficient of efficiency investments, also has some significant disadvantages, mainly due to the fact that it does not consider the temporal part of the cash flows (Chueva et. al., 2016). In particular, the method does not distinguish between projects with the same amount of annual profit, but varying amount of profit for the year, as well as between projects with the same average profit, but generated for different numbers of years, etc.

5. CONCLUSION

Investment management is a unique set of principles and methods for the implementation of managerial tasks, which are included in the basis of all investment activities of the company.

Due to the basic aspects of management usually are planning to increase the enterprise's competitiveness, economic growth and development.

To these basic aspects include: the desire for a higher rate of development in all spheres of the enterprise; the desire to maximize the expected profit of the company as in specific areas, and the enterprise as a whole; providing maximum liquidity of the investment and the reinvestment opportunity; generate the necessary amount of financial resources; interventions to expedite investment decisions.

One aspect of successful development of society and the state in General to be a proper regulation of capital investment. Most of the processes related to the field of very necessary for all business entities. This is primarily to refer to organizations, enterprises, individuals and legal entities and, of course, to the state.

It is for this reason investment management requires a serious approach with the use of complex systems and principles for effective implementation of the whole process. To achieve the perfect effect management, is to do a preliminary analysis of the market situation, to wisely use the available capital and to distribute it properly.

References

- Basovsky, L. & Basovskaya, E. (2008). *Economic evaluation of investment* (1st ed., p. 241). Moscow: Infra-M.
- Chan, T., Nickerson, J., & Owan, H. (2007). Strategic Management of R&D Pipelines with Cospecialized Investments and Technology Markets. *Management Science*, 53(4), 667-682. <http://dx.doi.org/10.1287/mnsc.1060.0676>.
- Chueva, T., Niyazova, G., Metsler, A., Shkurkin, D., Aznabaeva, G., & Kim, L. (2016). Approaches to the development of endowment funds in Russia as an instrument of mixed financing of the social sphere. *International Review of Management and Marketing*, 6(1), 261-266.
- Czarnitzki, D. & Kraft, K. (2004). Management Control and Innovative Activity. *Review of Industrial Organization*, 24(1), 1-24. <http://dx.doi.org/10.1023/b:reio.0000031361.27597.7c>.
- Gabidullina, G. (2013). *Model-methodological tools for the study of socio-oriented investment solutions for power utilities* (1st ed., p. 23). Ufa: Ufa State Aviation Technical University.
- Ilyaschenko, D.P., & Chinakhov, D.A. (2012). Investigating the influence of the power supply type upon the weld joints properties and health characteristics of the manual arc welding doi:10.4028/www.scientific.net/MSF.704-705.608.
- Irani, Z. (2010). Investment evaluation within project management: an information systems perspective. *Journal of The Operational Research Society*, 61(S6), 917-928. <http://dx.doi.org/10.1057/jors.2010.10>.
- Kobersy, I., Barmuta, K., Muradova, S., Dubrova, L., & Shkurkin, D. (2015). The System of the Methodological Principles of Management of Enterprise Development. *Mediterranean Journal Of Social Sciences*, 6(3S4), 25-30. <http://dx.doi.org/10.5901/mjss.2015.v6n3s4p25>.
- Martensen, A. & Mouritsen, J. (2013). Prioritising investments in marketing activities to improve business performance. *Total Quality Management & Business Excellence*, 25(5-6), 582-601. <http://dx.doi.org/10.1080/14783363.2013.799329>.
- Rylov, D., Shkurkin, D., & Borisova, A. (2016). Estimation of the probability of default of corporate borrowers. *International Journal Of Economics And Financial Issues*, 6(1S), 63-67.

