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Transport and Telecommunication Institute, Lomonosova 1, LV-1019, Riga, Latvia*

DEVELOPMENT OF REQUIREMENTS TOWARDS BUSINESS BY ITS PARTICIPANTS AS LIMITATIONS APPLICABLE TO INDIVIDUAL PARAMETERS OF COMPANY'S PERFORMANCE

Rostislav Kopitov, Irina Pyasecka

*Transport and Telecommunication Institute
Lomonosova 1, Riga, LV 1019, Latvia.
Ph: +371 67100585. E-mail: rkopitov@tsi.lv
Ph: +371 26548763. E-mail: Pjasecka@inbox.lv*

Preparation of a set of balanced requirements from the part of possible business participants is based on the fact that, when commencing commercial operations, it is necessary to choose exactly such limitations that would reflect their clear connection with the company's operational peculiarities. Such limitations represent conditions of varied nature that apply to the business in question, for example: the volume of tax payments, loan interest, social requirements, etc. It is necessary to perform analysis of interrelations that exist between the selected limitations from the point of view of their influence on initial, interim, and final results of the company's performance. All this creates fear prerequisites for developing a multi-level system of definition of objectives aimed at facilitating reliability of the business. In this case, the business should be treated as a system consisting of several elements (the company, the state, banks, other companies, population) that interact with each other and have a common goal; on the other hand, each of these elements is seeking to achieve its individual goals. A criterion of the objective achievement level is the value of the business, and the objective – maximum satisfaction of the owners' interests under existing limitations per maximum amount of requirements set by other participants. With such definition, the value represents an opinion of interested business players about capability of the company's management to efficiently manage the company's operations.

In this regard, the objective of the present research is development of clear requirements towards business acting as limitations applicable to individual parameters of the company's performance, such as income, operating profit, profit before tax, etc. for each participant. This would allow shareholders obtain comprehensive information in order to make strategic decisions and see how such decisions affect the company's value.

The choice of a value management method is rarely determined with a clear understanding of preset requirements for which precise limitations are established. Most frequently, such choice is affected by fashionable value management tools. Besides, each new mechanism brings along not only understanding of limitations but also introduces multiple deceptions. In such cases, considering estimated needs of the participants, it is advisable to research unrecognised situations that might distort the balance of the company. Thus reasons of existing problems are detected. [5] Therefore, prior to launching actual activities, methodological approaches to studying the fair reality and searching efficient managerial solutions are brought to perfection on the basis of studies focusing on expectations of potential participants interested in the business. [3] Thus, upon setting the limitations necessary to elaborate estimated requirements that would take into account problem situations and threats, the general manageability of the company increases. As a result, when non-standard situation that might distort the balance of the company occur in practice, previously substantiated actions are taken to neutralise potential threats. In this way planned recovery of the company is triggered. It is noteworthy that the decisions made are studied and information related to such decisions is processed and accrued. All these prepares are the ground for suggesting new executive requirements and limitations, approval of objectives and results, adjustment of business processes, which, in its turn, facilitates improvement of the value methodology application practice.

Key words: *business value, cash flows, requirements of participants, limitations*

1. Assessment of Results Based on Dynamic Normative Standards

Each company should possess certain financial potential before it starts operating, which would serve as a basis for achieving the set objectives. According to the chart showed in the Picture 1, possibilities of execution of the company's technological cycle processes are assessed in certain time periods. In this way the strategic assessment of a current condition is performed. Tracking the change of conditions in its dynamics allows analysing final results of each process. These results should be assessed with application of specific instruments that would prove practicability of establishing the company and would determine efficiency of application of its financial potential.

According to this chart, the key steps related to assessment of the company's operational results will be explained one by one.

Various methods for proving sustainable development of the company may be used depending on the detailed elaboration level and on availability and depth of the informational background. There are no unified methods at present though.

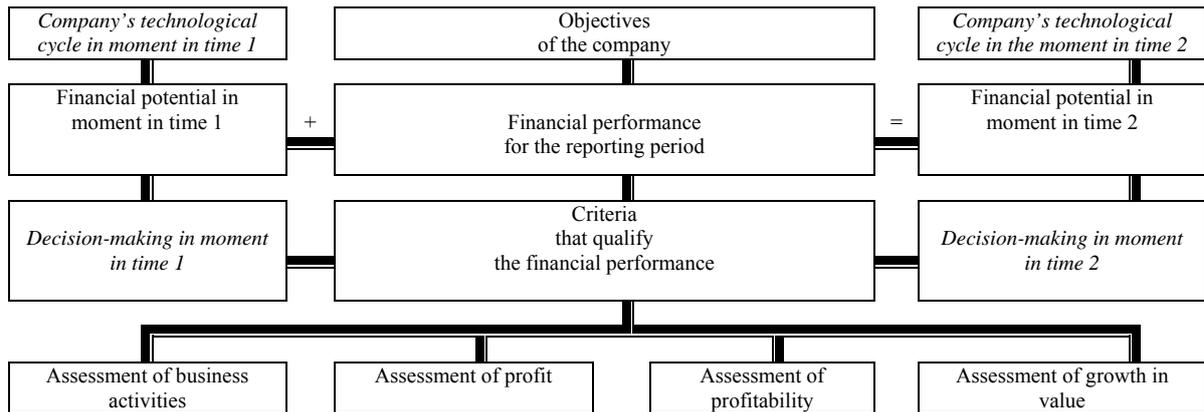


Fig.1. Chart of assessment of financial performance in the process of adjustment of the company's financial potential

2. Business Activities as Source of Approval of Key Indicators of Business

The company's business activities need research in its process of dynamic development considering the preset objectives, the prepared economic potential, and expansion of the target markets for the company's products. Here two definitions of the term “business activities” are possible, and the task of assessment of the company's functioning results on the basis of a dynamic indicator system will be solved according to these definitions. In a wider sense, business activities represent a comprehensive set of actions aimed to promoting the company in the capital, labour, and goods markets. In a more narrow sense, the term of business activities should be considered from the view point of values of multiple coefficients where such values would reflect current industrial and commercial activities. The chart on the Picture 2 shows that in a quantitative sense the assessment of business activities is performed in three aspects.

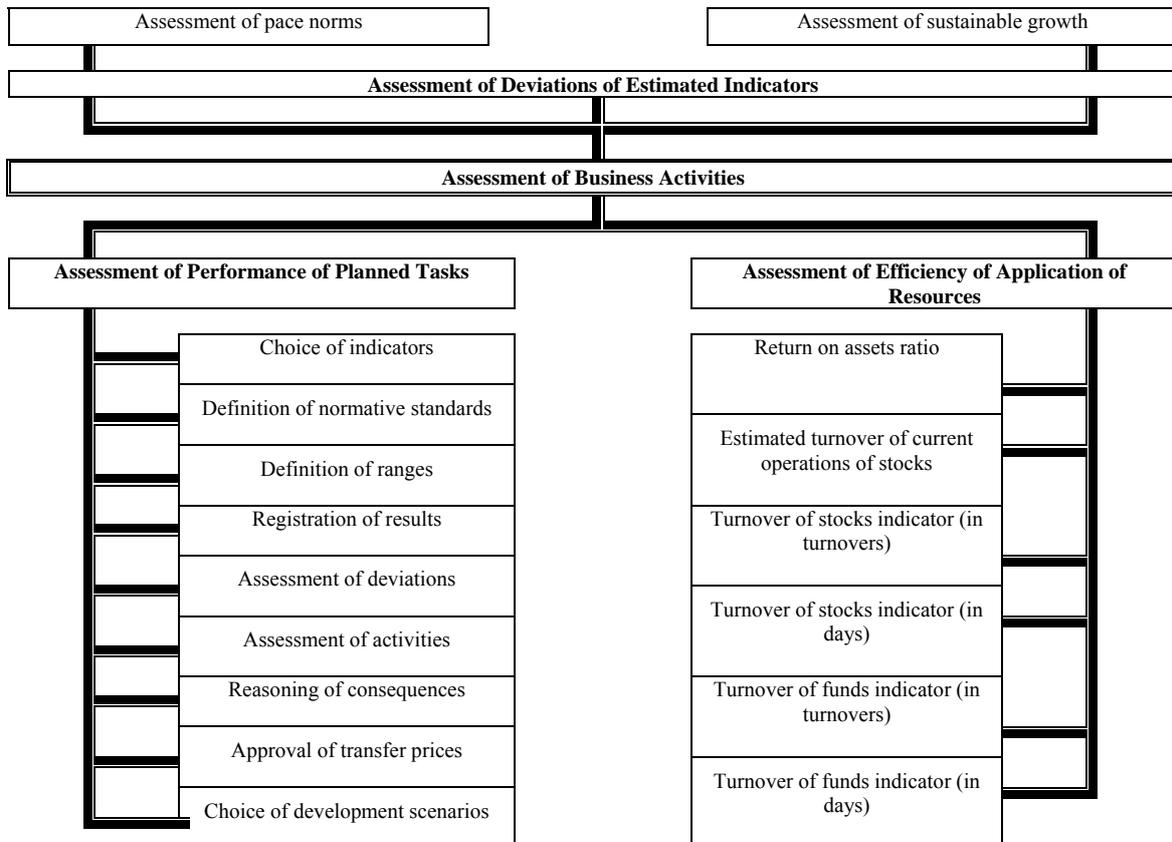


Fig.2. Structural scheme of the assessment of business activities

First, the degree of plan execution is assessed based on the selected indicators and preset deviations. On the first stage, the indicators that would reflect the specifics of the industrial operations and match the technological cycle modes are selected from the existing variety. For each indicator, estimated values, internal industrial reference points (acceptable ranges of deviations), and normative standard ranges that define the sequence of registering indicators and their possible growth pace are determined. Then after a controlled period has expired, the analysis of the indicator deviations of the actual values and the parameters that contribute to their occurrence from the estimated values takes place. When researching estimated and actual results, special tools should be developed, which would allow assessing performance of various structural units and responsibility centres.

The next stage of assessment of the business activities should aim at analysing the company's operational dynamics. The situation in this aspect of research is described by absence of unified assessment methods. Main reasons for their absence are difficult in determining preset ranges while calculating deviations and contradictions of the models for detecting the factors that affect the deviations. However, in general terms, the following system of inequalities can be applied for analysis of dynamic changes of different conditions of the business:

$$100\% < T_c < T_r < T_p < T_v, \quad (1)$$

where:

- T_c - the pace of changes of the total capital advanced to the company's operations;
- T_r - the pace of changes of the sales volume;
- T_p - the pace of changes of the profit;
- T_v - the pace of changes of the value.

The inequalities (1) represent a modified golden rule of the company's economy because they reflect the correlation between the pace changes of the business key indicators in a most desirable way. These inequalities should be analysed from the left to the right. The first inequality represents an increase of the economic potential by increasing the assets. This the company's scale of operations increases. The second inequality shows an increase in return of funds invested in the company as the sales volume increases at a faster pace than that of the economic potential. The third inequality indicates that the profit increases in an outstripping growth rate due to a cut in production costs, optimisation of the technological process, and improvement of relations with other business participants. The fourth inequality determines sensitivity of the value to its key factor including to all aforementioned pace indicators. The sensitivity parameter shows to what per cent of the company's value would grow or decrease in case of increasing a factor by 1%. The advantage of this approach is that it can serve as a basis for bringing differently sized factors to a unified ground that represents a non-dimensional share. This ensures a possibility of comparability of assessments of influence of factors with different economic content on the value. Analysis of pace indicators not only allows performing business improvement but also decreasing uncertainty of business at the same time raising its sustainability.

Assessment of sustainability of the business allows managing improvement of deviations of the manageability factors based on the value. Such improvements aim at eliminating discovered reasons that disturb smooth performance of a process. The decision on improvement should be made provided that economy of its implementation would exceed the costs for eliminating a reason comparable in time. As a reasonable argument to decision making growth of the added value is used.

Apart from the inequality system, this block of research also includes the sustainable economic growth ratio SGR [2]:

$$SGR = \frac{P_r}{P_n} \times \frac{P_n}{S} \times \frac{S}{A} \times \frac{D + E}{E}, \quad (2)$$

where:

- P_r - growth of undistributed profit for a current period (the net profit amount reinvested in the company's development);
- P_n - net profit of a current period (available for distribution among the company's owners);
- A - the company's assets (net balance);
- S - estimated sales volume;
- D - borrowed capital;
- E - own capital.

The first factor indicates the company's dividend policy. The second factor represents profitability of sales. The return on resources is determined according to the third factor. The fourth factor presents the financial leverage ratio. By means of the formula (2) one can account the pace of changes in each of the four factors. This allows realising the logics behind performance of the main factors, giving quantitative interpretation of their influence, and understanding what factors and to what extent should be mobilised to raise the company's development efficiency. Thus tasks of the strategic nature are solved thanks to correct application of the economic tools that allow decreasing the share of dividend payments, improving the technological and industrial process, and finding beneficial loans. Finally, all this dramatically affects the performance research by applying the dynamic normative standard system.

3. Profit as Basis for Developing Requirements towards Business Parameters

Treating profit as the difference between income and expenses of the company a multiplex profit calculation is performed during segregation of expenses. Besides, the multiplex nature should be considered in order to track interests of the business participants. For example, the gross profit value should exceed the relatively permanent costs (interests of the administration). Alternatively, the earning before interest and tax deduction is a significant indicator for credit institutions as it represents the company's capability to pay interest for the issued loans. The indicator of earning before tax and mandatory payments allows considering state requirements, etc. In this regard, a necessity occurs for each participant to develop clear requirements represented by limitations applied to individual parameters of the company's performance, such as income, operating profit, profit before tax, etc. This would allow creating fair criteria for assessing business reliability. While assessing interests of the participants, important conclusions are made regarding sustainability of the company's development. The presented chart of differentiation of costs is universally applicable and, naturally, cannot foresee all situations. In practice, companies face a necessity to operate in specific conditions where multiple deviations from standard conditions occur. Therefore, it is crucial to move from accounting approaches to patterns of preparing a dynamic profit norm at a specific company. This can be achieved after certain economic grounds have been elaborated and adopted.

4. Profitability as Platform for Modelling Requirements

Nowadays there is a wide range of profitability ratios. All these indicators are of compound nature. In practice, to analyse profitability ratio such formulas are used that include expressions brought to the simple view. Despite the seemingly simple calculations many managers and experts make wrong decisions when use indicators of this class. The result of such wrong decisions is incorrect interpretation of the economic essence of the ratios. Sometimes conclusions are made according to a simplified ratio calculation algorithm ignoring the contradictions that occur while applying the compound form. In order to interpret the notion of profitability correctly it is necessary to clarify the following definition: “Profitability ratios represent a particular case of efficiency indicators”. This indicator is a relative figure that weighs the obtained effect with the resources (or costs) that were involved to achieve this effect. Its numerator will always include absolute value that indicates the result of the activities measured in the monetary form. The denominator in the cost terms resources or costs are used. In case of the profitability indicator the nominator uses profit as the effect indicator and for the denominator the capital (as type of resources) or sales income (relevant to the costs) is selected. Depending on what the profit is weighed with, there are two groups of profitability ratios. The first group is represented by investment profitability ratios. The second group is represented by sales profitability ratios. The modelling process is implemented by sequential preparation of financial flows according to the net profit calculation pattern. In this case, the prepared cash flows are distributed between the company and business participants interested in its performance. Own and borrowed funds are invested in the company's assets, which would later ensure yield income. After deduction of current expenses, the operating profit remains and will later be distributed among the creditors (interest), the state (taxes), and the shareholders (dividend). It is also required to individually assess the assets, long-term investments, own and borrowed capital as resources.

5. Value Growth as Tool for Setting Limitations

The process of creating managing the company's value represents a crucial outcome of the managers' activities. The transition to the value principles includes implementation of two aspects. First

of them is execution of a structural rearrangement of the company. The second key element is for the management to apply the value approach after such rearrangement. In this case, a certain sequence of actions should be taken:

- to carry out re-orientation of the planning system;
- to assess the results of operations per value index for the shareholders;
- to assess the system of material remuneration per value index for the shareholders;
- to establish relations with investors on the value basis.

Having performed these steps one can decrease the existing gap between potential and actual possibilities to create the company's value. As a result, the company's performance is normalised and the value management process becomes a part of decision-making. However, only correct management will allow raising the management efficiency by performing a range of smaller rearrangements. Usually such efficiency has a higher level that cannot be achieved through a complete reorganisation.

To determine the value of business one can employ the cash flow summans: net profit, depreciation deductions, increase/decrease of turnover capital, increase/decrease of capital investment, and increase/decrease of long-term indebtedness. Each of the summands depends on other indicators. Therefore, considering interests of the business participants, one can determine the parameters that should be taken into account for establishing the limitations. The Table 1 provides information based on which the maximum limitations applicable to the business participants' requirements are defined.

Table 1. Setting limitations applicable to the business participants' requirements

No.	Interested Business Participant	Key Indicator	Calculation Formula	Limitation
1.	Supplier	Income	$VC = MC + W + M$	$CT < (R - EBIT - D - M - W)$
2.	Borrower/ Creditor	Earning before interest and tax	$EBIT = R - CT - M - D - W$	$Kb < \frac{(EBIT - EBT)}{B}$
3.	State	Earning before tax	$EBT = EBIT - B * Kb$	$\tau s < \frac{(R - CT - M - D - EBIT)}{Emp * Wav} - 1$ $\tau < (1 - \frac{P}{EBT})$
4.	Employee	Salary	$W = Emp * Wav * (1 + \tau s)$	$Wav < \frac{(R - CT - M - D - EBIT)}{Emp * (1 + \tau s)}$
5.	Manager	Net profit	$P = EBT * (1 - \tau)$	$Bemp < P - d - Pk$
6.	Owner	Undistributed profit	$Pk = P - Bemp - d$	$d < P - Bemp - Pk$

where:

- EBIT - Earning before interest and taxes
- EBT - Earning before taxes
- P(PRt) - Profit
- Pk - Capitalised profit
- D(Si) - Depreciation
- T - Income tax rate
- M - Other expenses
- Emp - Number of employees
- W - Salary of employees with social payments
- Wav - Average salary of employees

- Kb - Rate for attracting of funds
- B - Debt amount
- D - Dividend
- CT - Production cost of materials
- R - Revenue
- τ_s - Corporate social tax rate
- τ - Income tax rate
- Bemp - Motivation of employees
- VC - Variable costs
- MC - Material costs

Values of the preset limitations are attuned to the value growth upon measuring its sensitivity towards such limitations. A certain range is determined for each indicator depending on changes to the value.

6. Preference of Costs Compared to other Indicators

In order to find out advantages or disadvantages of certain indicators against other, it is necessary to carry out their paired comparison [1]. Besides, one of the two indicators is expressed through the other. Then various alterations to the system of conditions of the business in question are modelled. Each alteration is assessed from the viewpoint of its perception by each of the indicators. For example, the made alteration was registered with both the first and the second indicators. In such situations, there are no advantages. However, if an assumption is made that an alteration in the condition of the business is detected by the second indicator and is not detected by the first indicator, a conclusion can be made that the second indicator is preferable. This is related to the fact that with the help of the second indicator it is possible to encompass a larger number of conditions if compared to the first indicator. It is noteworthy that the system of indicators preference proof, which is under discussion, will only be based on the economic interrelations existing between them.

Results of presenting the main indicators from the 23 key business indicators through cost are showed in the Table 2.

Table 2. Presentation of the key business indicators through value

No.	Indicator	Formula	Preference Proof
1.	Income	$PV = \sum_{t=1}^N \frac{S_t}{(1+d)^t} + \sum_{t=1}^N \frac{Dept_t + I_t - EX_t - \Delta WCap_t - \Delta FA_t}{(1+d)^t}$	Proved
2.	Profit	$PV = \sum_{t=1}^N \frac{PR_t}{(1+d)^t} + \sum_{t=1}^N \frac{Dept_t + I_t - \Delta WCap_t - \Delta FA_t}{(1+d)^t}$	Proved
3.	Profitability of sales	$PV = \sum_{t=1}^N S_t \times \frac{NPM_t}{(1+d)^t} + \sum_{t=1}^N \frac{Dept_t + I_t - \Delta WCap_t - \Delta FA_t}{(1+d)^t}$	Proved
4.	Profitability of own capital	$PV = \sum_{t=1}^N E_t \times \frac{ROE_t}{(1+d)^t} + \sum_{t=1}^N \frac{Dept_t + I_t - \Delta WCap_t - \Delta FA_t}{(1+d)^t}$	Proved

where:

- $Dept_t$ - Depreciation payments
- I_t - Growth of long-term indebtedness
- $\Delta WCap_t$ - Growth of turnover capital
- ΔFA_t - Capital investments
- EX_t - Expenses
- D - Discount rate
- S_t - Estimated sales volume
- E_t - Own capital
- NPM_t - Net profit per unit
- PR_t - Profit
- ROE_t - Profitability of own capital

The performed proofs reflect the dynamic results of the company's performance. However, creation of one compound criterion based on other indicators might result in wrong identification of the business condition in practice. This is usually linked to the fact that the comprehensive nature of a criterion causes certain "noise" in the data that are used for decision-making. As a result, individual indicators may contradict each other. Besides, situations are possible when too much value is assigned to a minor indicator. In such cases, it is necessary to develop a system of dynamic normative standards. The essence of this system is that one should step back from the traditional approaches typical for informational structures and aimed at measuring levels and growth paces of the indicators. Instead, one should manage the procedure of the growth pace, which is established based on certain ranges of indicators. In other words, a certain order should be fixed for each of the normative standards within the dynamic normative standard system. Such order would allow the indicators subject to measuring and control to follow each other so that the company's operating mode facilitated implementation of certain actions, which, in this case, would be fixed through the preset indicator.

Thus, during the process of creating the dynamic normative standards, it is crucial to select such indicators at the beginning that would show a clear relation with the company's operating mode. Moreover, such indicators should not be compound. Assessment of the indicators should be carried out according to the preset frequency of observations and registration. Analysis of the relations existing between the selected indicators should be performed in terms of their influence on the initial, intermediary, and final results of the company's operations. Assessment of influence of indicators of the initial (first) level on the intermediary and final results is obtained in the process of sequential creation of indicators of next levels.

When proving preference of the cost criterion compared to the other six key indicators, 23 indicators, which to a certain extent determine the company's various operating modes, were involved. All these indicators affect the value. Moreover, the majority of these indicators may be allocated to the category of the indicators that provide basis for developing a dynamic normative standard thanks to company's functioning specifics. Research of these indicators allows assessing the requirements set towards the business by all its possible participants. At the end, these requirements may be brought to a set of limitations applicable to specific modes of the company's operations. Such limitations represent conditions of various types that apply the business under discussion, such as: tax payment amount, loan interests, rent rates, social requirements, etc. all this creates fair prerequisites for developing a multi-level scheme of sequential measuring of business indicators. Preparation of the scheme is made according to the step-by-step detailed breakdown principle based on the ascending drafting technology "bottom-up". Besides, each level of the scheme fixes the normative growth of each indicator during the detailing process. Apart from the preset margin, the ordinal number or a normative range of a specific indicator is fixed. This ensures that any element of the developed scheme will have its normative range of movement that allows determining the place where the controlled indicator might change within the complete set.

Thus the limitation-oriented drafting where problematic situations are included increases general manageability of the company. In cases when extraordinary situations occur in practice with a tendency to distort the company's balance, earlier grounded actions aimed at neutralising potential threats are taken. This triggers planned recovery of the company. It is worthwhile noting that the made decisions should be studied and information related to them is processed and accumulated. All this serves as a ground for setting new executive requirements, approving objectives and results, correcting business processes, which, in its turn, would facilitate improvement of the practice of applying the methodology that has been discussed in this article.

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