

PERSONAL PERFORMANCE EVALUATION ANALYSIS FOR THE CORPORATE GOVERNANCE CODE IMPLEMENTING

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ABSTRACT:

The authors proposes in this column a brief overview of the concept of a fully designed software application that aims to implement the Personnel evaluation at all levels of medium- large financial investment company or investment fund.

Here they are stressing the importance and the details with the help of concrete formulas and algorithms of the state of the art technology and concepts on how to assess personnel of the Investment Funds in practice and what the benefit of challenges of this application implementation might be.

Key Words: Corporate Governance Principles; Management and Organizational Performance Evaluation; Scoring Assessment; Performance Indicators; Corporate and Personnel Performance Assessment

1. INTRODUCTION

The activity within a company also on those related to financial services is always divided into directly and indirectly productive activities, the compartments indirectly productive acting as support and being directly linked to the directly productive departments in accordance to their attributions.

The separation of directly and indirectly productive activities has different shades in the specialized literature; however the easiest criterion to emphasize is the one of quantifying methods for the results of the effort made in order to achieve the financial goals and for the strategic development of the company.

In terms of risk management, the directly productive departments can identify and manage a large variety of risks by the usual methods specific to the company's activity while the indirectly productive departments are only exposed to the operational risk, as the only type of risk that can be quantified within these departments (IT, Legal, Financial Accounting, etc.)

There are, however, some areas of the indirectly productive departments in charge of financial investments (the Financial - Accounting Department for example) that are exposed to other types of risks beside the operational one, but these are exceptions that can be treated individually and oversee a risk management that covers this operational risk segment as well.

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On the other side of the definition of an indirectly productive activity, we may group all those activities and structures of a company which are intended to minimize the internal and external operational risks, to ensure communication with the customer / shareholder etc., to provide a good degree of transparency and to implement the Corporate Governance Code, to ensure communication and compliance with the obligations toward the financial and governmental control bodies, to assist the management in order to achieve the performance objectives from the point of view of conformities etc.

2. FREQUENCY OF EVALUATIONS – PERSONNEL EVALUATIONS

The evaluation calendar is set by the company management at fixed time intervals and has the following structure:

- annually: performance index, knowledge test; evaluation and self-evaluation layout
- biannually: performance index, evaluation and self-evaluation layout
- quarterly: performance index, self-evaluation layout
- monthly: self-evaluation layout

Given the frequency of these assessments during the first phase of up to three months from the implementation of the application for the Corporate Governance Code evaluation, only self-evaluation procedures will be performed.

Once, several data have been collected and the filing system is put into service for setting statistical functions for monitoring and the construction of baselines / benchmarks, several types of assessments will become available, thereby biannual evaluations will be carried out instead of the annual one during the first 12 month from the launch.

3. PERSONNEL PERFORMANCE ANALYSIS FOR DIRECTLY PRODUCTIVE DEPARTMENTS

Given the directly productive activity considered within a financial investment company, the employees of the Investment department (ID) are those whose performance should be evaluated within the activities carried out throughout a predetermined period as stated in paragraph 2. (year / quarter / semester / month)

In order to make a more objective assessment where we are able to keep track of the majority of factors that can influence the performance of this department, it is necessary to set standard patterns or basic variants for measuring the performance at the level of each employee.

The basic formula on which this evaluation is founded is the one close to the calculation of productivity in the case of directly productive personnel from other types of companies with diverse profile, following to further define the framework for the application of this formula with the representation exemptions, exceptions, limitations and constraints for the obtained results.

This material presents only the variants used without commenting the extremes that may occur beyond the regular framework of the company's functionality and the investment climate in which the company operates.

The Formula of the performance evaluation Indicator for a flow, process, activity, etc. is given by the ratio:

$$(A) \text{ Performance} = \text{Obtained result} / \text{Resources used}$$

The higher this ratio, the higher the employee productivity.

The same formula applies in the case of an employee performance evaluation, the sum of performance contributions of each flow resulting as the performance value of the respective flow; the same applying to expenditure per flow and per employee participating in the flow implementation.

By extrapolation this may be induced throughout the whole activity of an employee for a fixed duration usually determined for one year.

Particular cases argue that the ratio is:

- over-unity, it means that the employee is productive; the higher the ratio the greater the productivity.
- sub-unitary: with an unproductive result in which the maintenance expenses for this employee do not cover the income obtained in its directly productive activity.

The terms used (at the employee level by extrapolation) represent, at the flux level and, respectively, at the employee level:

$$\text{Resources Used} = \sum_{k=0}^n \binom{n}{k} \text{Cost per employee involved in the performance of the flow}$$

$$\text{Obtained Results} = \sum_{k=0}^n \binom{n}{k} \text{Financial Results Obtained}$$

upon the closing of the implementing of the analyzed flow

The Obtained Result is also called labor productivity but in this case specific to an investment company we assimilate it with the creation of financial performance and we consecrate it with this term.

Given that the financial results are quantified only if the flow / the investment project is completed in the first phase, only the evaluations of the investment projects that have short periods (3-9 months) may be based on this formula.

In this case the proposed assessment will disregard the financial result of the current investment and the evaluation can be made only by measuring the loading time performance

of the employee (after creating the reference benchmark of the newly coded activities: a period of 3-6 months of data achievements.

For the symmetry of the exhibited knowledge, labor productivity is given by the formulas:

$$(A1) \quad W = Q/T \text{ or } t = T/Q$$

where:

- W - labor productivity;
- Q – production output;
- T - total labor time consumption;
- t - labor time consumption on the product unit.

In the specific case of a financial company we have the Financial Performance Indicator (FPI) given by an employee at project level or closed flows as given by the formula:

$$(B) \text{ FPI} = \text{Employee contribution to the project closing NAV} / \text{Total loading time for project accomplishment}$$

For an employee belonging to an indirectly productive department, this indicator has a similar structure that will be explained in the following paragraphs.

"Project accomplishment load time" means the time used by all employees involved in the implementation of that project (T) as noted in formula (A1)

The FPI expresses in its essence the efficiency of the project (contribution to project profitability) during the holding period (short, medium, long term), also considered the period of implementation of the flow with all three stages (Initiation, Execution, Completion)

Holding period = Duration of the implementation phase < Total employee Loading Time in the accomplishment of the institutional project from the moment when it started to its termination by transactioning its assets

The total employee loading time, shows us how long the employees have been involved to accomplish performance for the fund.

The employee's contribution to profitability of the project is given by the weighted average or contribution at the plus value of its implemented part of the project and where further the accomplished project profitability is brought to the final annual profitability of the investment company.

Within a Flow there are three phases: Initiation / Execution / Completion.

Any investment project may have one of the following options:

- Initiation / Execution / Completion (completed cycle)
- Initiation / Execution / Completion + abandonment in the middle of one of these steps (interrupted cycle)
- Completion (short cycle for the projects already started and under monitoring)

Normally it can be questioned how to determine the contribution of each project / investment to the company's financial profitability.

If we consider all projects / investments in force on 30.06.2014 (e.g.), it cannot be held that the company's NAV increased / decreased in the same proportion due to them, because they have different implementation duration (some were initiated 1 month ago, some 2 years ago, etc.) and different holding structure / performance parameters.

The point of departure and underpinning of this approach is that a contribution of a project can be considered to affect the company's NAV positively or negatively only after the final closure of the investment project, when the profit and losses are accounted.

The steps specified further are designed to establish the following indicators:

A. The objective accomplishment degree

In the case of the employee - level based performance scoring we have two methods that can be used to implement the assessment:

- the evaluation based on the absolute figure (currency) or weighted contribution (expressed in %) to the assessment of the total PNR (Project Net Return) over a given period (expressed in %)
- scoring and rating - based evaluation.

Both assessment types a. and b. in their absolute form have in common the accomplishment / non-accomplishment scenarios of the investment objective, that has to be achieved.

In this model the scoring rating - based method is proposed.

The objectives to be achieved have the following performance thresholds in their carrying out:

- achieving performance above the proposed objective
- achieving performance at the level of the threshold proposed as objective precisely as defined
- failing to achieve the proposed performance level up to xx% less than the threshold proposed as objective where the xx% negative deviation will be as determined by the management.

From these three scenarios, we find the following situations / options that can be applied in the assessment (as scoring marks or absolute performance percentages) and values of the Fulfillment degree of the Objective:

- i. the failure to meet the predetermined objective within the limits of xx% due to:
 - 1. The abandoning of the project because the reasons that are determined by relation:
 - a) external: other priorities - opportunities recommended by the leadership / shareholders (scoring points = 1)
 - b) internal: loss of the initial opportunity: the initial opportunity was not analyzed correctly (scoring points= 0)
 - 2. The improper performance of the substantiation of the investment implementation analysis because of reasons that are of:
 - a) external nature: due to validated but incorrect data sources, extreme of stock market volatility or the lack of performance of the investments environment that impacts the macroeconomic and sectorial performance indicators due to extreme events (scoring points = 1)
 - b) internal nature: due to the lack of analysis substantiation based on poor documentation, incorrect understanding of data or primary analysis or other causes (scoring points = 0)
- ii. the accomplishment of the preset objective exactly at the level it was defined at (scoring points = 2)
- iii. the accomplishment of the set objective above the level it was defined at (scoring points = 3)

One can also question that point i/1/b is similar to i/2/b as views of a faulty analysis.

The difference is that i/1/b is an analysis of opportunity while i/2/b is a project analysis, once the opportunity was chosen as project theme.

Opportunity is considered as a result of an imbalance in the capital market that may last a shorter or longer time depending on the reference conditions. The ability to detect an opportunity remains, as such an opportunity until its implementation (the time of initiating the transaction) available at point i/1/b.

During the implementation of the investment project (of the holding) the (technical, fundamental and quantitative) monitoring analysis is carried out. Point i/2/b refers to this aspect.

B. Degree of Contribution

B1. Establishing the simple Contribution to the implementation of the operational flow and in all intermediate stages of Initiation / Execution and Completion - Implementation

Each of the three phases of a flow requires participation coefficients associated to the personnel involved in the implementation of the investment project.

The easiest method of assessment of the share or quota of participation in the carrying out of the investment project of each employee is given by the loading time that each employee is involved with in the accomplishment of the proposed investment objective.

This is seen best with the simple formula that ignores the complexity of the activity of the employee and considers the flow as a chain of sequential activities where its duration is the amount of loads of each employee as follows:

$$(1) \text{ Flux Duration Total Unitary Time} = \text{Loading Time Employee 1} + \dots + n \text{ Employee Loading Time}$$

We use the term Unitary because the size of formula (1) is strictly measured by time and not by time correlated (as in our case) to the complexity of the project activities.

The employee loading time is deducted from the employee self-evaluation sheet filled in by each employee.

It may occur that at the time of the evaluation (e.g. 30.06.2014) it is most likely to have multiple projects / investments in various stages of implementation.

This may mean that for the one who carries out the analysis (e.g.) the project is marked (in a weighted average expressed in percentage) but for another analyst who makes the implementation subsequently, it will be equal to "0".

In this case, as it was presented in a similar form above, a weighting can be made based on the total time used up to that point in the self-assessment sheet for each employee in relation to the total time used for the implementation of the investment project.

It is natural that the one who has not yet begun to work on the project to have no contribution to highlight and has much less loading time within the investment project, the evaluation being impossible at that point of time.

Reasoning further that many activities are happening simultaneously, in parallel we have the formula:

$$(2) \text{ Flow Duration} = \text{Duration of the Activity of Employee 1} + \dots + \text{Duration of the Activity of Employee } n$$

The Duration of the Activities is measured in hourly fractions (0.25, 0.5, 0.75 – etc. and whole hours) and are based on the date of starting, of commencement of the first stage of initiation of the flow for full flows.

It should be noted that not all participants start on the same day to work on a given investment project. The Duration of Simultaneous Activities is restricted to those activities that are simultaneous in the strict sense of the word, having the clear role to determine the weights of participation of employees in the investment project throughout its development, that enter and leave earlier and later being irrelevant to this context.

The investment project is always characterized by a starting date and a closing date.

The measurements for determining the weights and contributions are taken only between these dates:

Commencement - Early stage - Completion stage closing date

with the specifications set up to that moment.

This measurement is made within the software application by detecting all the activities that take place simultaneously and have an identical or different registration code in the Self-assessment sheet (according to the properly coded job descriptions).

Once the total execution time is measured on the flow and the time is recorded in the Self-assessment sheet, the simple temporal weighted average that each employee has completed within the flow implementation can be determined, dividing the time inferred from the self-assessment in the project at the total performance time of the flow to the valuation date:

$$(2.1)\% \text{ participation} = \text{Self-Assessment Time} / \text{Flow Duration Total Unitary Time}$$

B2. Determining the contribution to the implementation of the project as a function of complexity of the activity carried out

Like in formula (2) we apply the factor of complexity in calculating the flow duration evaluation:

$$(3) \text{ Flow Duration (complexity f.)} = (\text{Duration Activity1 Employee1} + \dots + \text{Duration Activity n ... Employee1}) \times \text{Complexity Degree 1...} + \dots + (\text{Duration Activity1 Employee1} + \dots + \text{Duration Activity n ... Employee1}) \times \text{Complexity Degree 2...} + \dots + (\text{Duration Activity1 Employee1} + \dots + \text{Duration Activity n ... Employee1}) \times \text{Complexity Degree 3...} + \dots + (\text{Duration Activity i Employee n} + \dots + \text{Duration Activity j ... Employee n}) \times \text{Complexity Degree k}$$

where:

- n = 1... n no. of employees
- j = 1... j no. of activities
- k = 1, 2, 3 degrees of complexity (1 = low c., 2 = average c., 3 = high c.)

The share of participation of each employee in this activity flow or all annual activities flows is based on the self-assessment sheet as in the first case (B1).

In this way one can determine the contribution based on the time load and complexity of the activity of each employee to implement and complete the project in the three stages of

development and in the same time the contribution of each employee to the final result held in the investment objective.

The complexity of each activity is assigned and standardized with scoring points from 1 to 3 by the investment chief / administrator in consultation with the fund management and the HR service.

The participation weighted average is the same as resulted in formula 2.1.

"Financial performance of the investment" is the term that describes the performance of an investment project after its completion and, respectively, accounting the profit / loss in books.

"Time spent finalizing the investment" is the term that refers to the period from monitoring the investment project to its conclusion and is the time counted for preparation, for the closing of this specific investment project.

C. Contribution Coefficient for special situations

There are cases in which the role and contribution of the analyst / directly productive personnel should be made more visible in each step along the implementation flow so that in formula (B) we have to add the special assessment cases when differentiating more the specific of the activity of employees and the flows which they are engaged in, thereby determining the degree of contribution based on criteria with a higher degree of variability.

The evaluation criteria after the participation contribution in the investment project added to formula (B) are further differentiated by the following classifications:

- a) The stage in which the investment project is at the time of the assessment (Initiation, Execution, Completion)
 - i. New Project, always composed of all three stages
 - ii. Project already initiated
- b) Project Type Coefficient: Efficiency / Liquidity degree of the investment objective (M):
 - i. Historical Holdings – Ultra Liquid: scoring points: $m1 = 1$
 - ii. Liquid Holdings: scoring points: $m2 = 2$
 - iii. Holdings with very low Liquidity or closed: scoring points: $m3 = 3$
- c) Impact Coefficient: Impact of the outcome person's attributions on the proposed investment project, in correlation to job attributions (N):
 - i. Transactions; scoring points: $n1 = 1$
 - ii. Risk Management; scoring points: $n2 = 2$
 - iii. Investment Analysis; scoring points: $n3 = 3$

Using the assumptions in points (b) and (c) transposed in the case of formula (B)

We obtain the general performance formula (4) as a function of the level of participation in the Project Net Return (PNR) depending on:

- The fulfillment degree of the Project or the Stage in which the investment objective is and the performance is assessed (in which stage exactly the evaluation is made)
- The weighted average participation depending on the complexity of the tasks
- The Investment Project Type (M)
- The impact of the tasks on the results of the proposed investment Project (N)

$$(4) \text{ PI (direct productive) } = \text{Degree of Implementation of the Project} \times \text{Complexity Weighting Average} \times M \times N \times \text{PNR}$$

$$\text{PNR} = \text{Revenues obtained at the completion of the Project} - \text{Project Implementation Costs}$$

(in some cases the PNR can be expressed as a percentage otherwise in currency)

It is to be noted that the evaluation of the PI - Performance Indicator is computed for a time period which is recommended to be exactly specified.

The methodology for calculating the Implementation Degree of the Project has the following representation:

$$(4.1) \text{ Project Implementation Degree (\%)} = 1 - \text{Project's Current Stage (\%)}$$

(with sub-unitary representation)

Here we have the following cases:

- a) The current stage where the project is = 0 => new project => The Implementation Degree of the Project to be implemented is 100%
- b) The stage where the project is less than 1 but greater than 0, the Project Implementation Degree is a weighted average of several implementation stages determined by the project manager / Chief Investment Officer as how much of this project has already been carried out in the same way based on formula (4.1), following to determine how much of the project is still necessary to be implemented.

In this latter case (b) we have the following remarks within the evaluation:

- In continuation of point b.) the project manager / CIO will have to define the degree of complexity at the level of various activities. Normally they are predefined but additional works can occur, specially those which do not have the complexity degree fully determined.
- The employees who no longer participate in the next stage of the project implementation will be evaluated empirically for the contribution to the performance, being no quantitative data on the load, contribution, complexity etc. for this phase of the project

- The employees who begin or continue to implement the project will begin accounting the time and current activities in the Self-assessment sheet and in this case they will be assessed as having the contribution on the part of the performance related to the share of the project to be implemented.

Personnel Performance Analysis for Indirectly Productive Departments

The Performance Calculation of the Personnel of the Indirectly Productive Departments is similar to that of the directly productive departments with the mentions:

- the sum of coefficients of the contribution of the indirectly productive departments PNR is 100%
- every employee is not evaluated by its own contribution to the variation of the PNR on projects before and after the closing of a procedural flow but is rated with the degree of contribution of the entire department at the PNR variation before and after the closing of the flow

$$(5) PI (indirectly productive) = \text{Objective Completion Degree} \times Pip \times \text{Weight Average of projects Complexity degree} \times PNR$$

Where Pip is the coefficient of Indirect Productive Personnel contribution (PI Contribution = Performance Indicator for Contribution) of the department on the Net Return (PNR) for all investment projects and activities.

$$(6) PNR = K_{direct,productive} \times \text{Direct.Productive Contribution} + K_{Indirect, productive} \times \text{Indirect.Productive Contribution}$$

$$K_{indirect,productive} + K_{direct,productive} = 100\%$$

Kip and Kdp shall be determined from the total loading time on the amount of departments (Directly Productive + Indirectly Productive) being calculated similar to formula (2)

There are five IP1 IP5 .. Indirectly productive departments:

$$(6.1) PI \text{ Total Contribution to the PNR} = Kip1 \times CIP1 + \dots + Kip5 \times CIP5$$

$$(6.2) Kip1 + \dots + Kip5 = 100\%$$

1. Economic - Accounting
2. Legal - Monitoring
3. IT
4. Relation with Investors & Governance
5. Audit & Internal Control

In a similar case the contribution weights of each department as a function of complexity (Kip 1 ... 5) etc. are determined as in the previous case from the degree of loading of the self-assessment sheets.

4. BIBLIOGRAPHY:

Ruth Wageman – Columbia Univ. & George Baker – Harvard Univ. – Incentives and Cooperation – The Joint effect of Task and Rewards Independence on Group Performance – The Journal of Organisational Behaviour Mar. 1997 pg. 138 – 139

Standard & Poor's Corporate Governance Scores - Criteria Methodology and Definition – July 2002
McKinsey and Co: authors: Tim Koller, Marc Goedhart, David Wessels Valuation: Measuring and Managing the Value of Companies, University Edition, 5th Edition (Wiley Finance)

Vicky L. Sauter - Univ. of Missouri – St. Louis: Professor of Management Information of Systems - Decision Support Systems for Business Intelligence

Knowledge-Based Systems - Rajendra Akerkar Professor/Senior Researcher, Western Norway Research Institute