MEASURING MANAGERIAL EFFICIENCY: A BALANCED APPROACH

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ABSTRACT

In the paper a balanced approach to management efficiency measurement is proposed. The concept of measuring management function efficiency is presented. Most of the presented measuring instruments are non-financial in nature and are incorporated into a balanced scorecard methodology. The paper proposes weighting for each of five recommended managerial function measures in determining overall managerial performance. The implications of the technique are tested using a sample of Russian firms. The authors argue that the proposed measurement be applied not only in individual firms, but across supply chains.

JEL: L1, M1

KEYWORDS: management efficiency, management functions, balance, firms

INTRODUCTION

A guiding idea for management over the past century has been "If you can measure it you can manage it". Based on that principle a number of measurement systems for various enterprise activities have been devised. Managerial efficiency is usually defined in terms of enterprise efficiency which is not necessarily a good practice. A number of organizations have regularly paid dividends to satisfied owners only to suddenly end up in bankruptcy (Hartley, 2007, in Russian; Rampersad 2006, in Russian). These events demonstrate that shareholder value and annual profits are not sufficient measures of corporate efficiency and point to the need for better measures.

The motivation for this research came from an analysis of large and small Russian enterprise's. This analysis uncovered a number of interesting facts. For instance, some enterprises from the travel, insurance, educational and manufacturing industries presented impressive financial results but it was obvious that the results were biased by personnel acting to improve their own prospects. Some of those companies had competent staff while top-management in a few cases did not have the slightest idea of what was happening in the company.

On the other hand there were quite a few companies whose management was acting totally according to the latest management theories and doing exactly the "right things" (Drucker, 1998, in Russian) that ended up bankrupt or producing negative goodwill. There were also situations which could be described as abnormal market functioning companies. The energy supply industry which is a monopoly in the Russian Federation provides an example. These companies were dealing with unqualified personnel while paying little attention to customer care. They ignored planning and were still profitable even though 1/4 of their customers were not paying for the provided services at all. This situation resulted from government interference in the energy supply industry and the support it gave to certain firms. These, and other, observations led the author to address the issue of appropriately measuring managerial efficiency.

The paper is organized as follows. First a literature review is provided. Next the data and methodology is used in the study is discussed The results section follows. The paper closes with some concluding comments.

LITERATURE REVIEW

Management theoreticians agree that efficiency is a ratio of effect achieved to costs. But authors differ in their views upon appropriate managerial effects. The historical perspective suggests that within scientific management, managerial effect is a raise in employee productivity (Taylor, 1911) while administrative management place emphasis on subordination within a company (Fayol, 1930; Barnard, 1938). The idea of formalization of management occurs within the quantitative management perspective so the managerial effect is measured in monetary units. This proved to be impossible in some cases due to the fact that some quantitative models require unrealistic or unfounded assumptions (Griffin, 1999). In spite of that some researchers suggest measuring managerial efficiency as the ratio of additional profit company from a decision to the cost of the decision (Gorshkova, 2003, in Russian; Egorshin, 2008, in Russian; Vasilyev, Parachina, Ushvitsky, 2006, in Russian). This approach has limited usefulness as the connection between the decision and financial results is not always direct.

The other problem with managerial efficiency estimation is that some modern management theories measure efficiency by only one measuring scale. This point was emphasized by Brogan (Brogan, 2003) who estimates old-time and modern myopia in reference to management performance. The example of such theory is value-based management which emphasizes that the main measuring instrument is shareholder value. Though it is stated that value-based management is to be used in cooperation with balanced scorecard (Asheworth, James, 2006) the empirical data shows that application of the approach resulted in achieving high shareholder value despite the postponed costs it may produce. One must wonder the measurement systems that led Enron to its demise. This and other current crises emphasize the idea of measuring managerial efficiency by more than one scale.

A number of researchers explore the relation between managerial efficiency and different factors that influencing it. For example, Klein (Klein, 2002) finds that more independent board members have higher quality accruals. Huang et al. (2006) examine the relationship between earnings and CEO reputation while Bertrand and Schoar (2003) estimates the influence of management style on managerial efficiency. Demerjian, Lev and McVay (2006) examine the relation between managerial ability and earnings quality and provide mathematical instruments for measuring this relation. There also are works on the relation between managerial efficiency and human capital, (Dawson and Dobson, 2002) and give an instrument for estimating it.

The problem of finding a balance within enterprise's management was first introduced by Norton and Kaplan (2005, in Russian) and was afterwards used as part of consulting projects. The concept was extended by other researches such as Rampersad (Rampersad, 2005, in Russian) and Niven (Niven, 2005, in Russian). The main idea is that both financial and non-financial measures are to be mixed in measuring the efficiency of a firm. Olve, Roy and Wetter (2006, in Russian) provide a mechanism for applying strategic cards to different industries and emphasize the relation between balance and company results. Some issues associated with using balanced scorecard technology for enterprise's efficiency management are introduced by Gershun and Gorsky (2006, in Russsian). Especially the ratio between financial and non-financial indicators within a scorecard and the balanced model used within cultural transformation tools. (Barrett, 1997) estimates the influence of value balance and company success.

DATA AND METHODOLOGY

It is important to measure both enterprise's activity efficiency and management efficiency. If a company is efficient it is not necessary the result of proper company management. As such it is important to separate managerial efficiency from firm efficiency. We argue that the balance approach should be used for management efficiency measuring. To do so we suggest focusing on six issues, five of which are functions of management and the sixth is the results achieved by the company.

The five functions are: planning, organization, motivation, control and coordination. The fifth one was added to represent the importance of executing the previous for in concert. The indicators measuring the fulfillment of each function the percentage of money spent on it relative to the company revenue should be also listed. That amount is to be estimated and should not be exceeded. In order to prevent mistakes the efficiency of each function within the balanced managerial measurement should be estimated by no less than 3 different indicators.

To have a balanced estimation of management efficiency we pay attention to the result of company's activity also measured by more than one indicator. We suggest those indicators be chosen according to the specific features of the company's core industry. For example these could measure the following aspects: profitability, financial stability, market share, liquidity and shareholder value. Also the cost of management should be esteemed as a reference figure.

In Table 1 short-term and long-term planning accuracy are to be estimated by experts who should take into account the macroeconomic environment. For instance under regular circumstances short-term planning accuracy will be considered low if results differ from plan by more than 35%. Motivation quality is considered high when most of employees are satisfied with the job and low is the opposite. The other motivation measuring instrument measures the number of employees whose dominating motivation is as required for quality job performance. The quality control function is considered excellent when a high level of internal clarity is achieved. The dynamics in a quantitative sense of controlled positions is also to be taken into consideration. Finally, the coordination function is deemed excellent if a company produces positive synergetic effects and if the organization reaction to change is adequate.

Table 1: Suggested Managerial Efficiency Indicators

Figure	Group 1	Group 2	Group 3	Group 4	Group 5
Short-term planning accuracy	High	Average	Reasonable	Low	Intolerable low
Long-term planning accuracy	High	Average	Reasonable	Low	Intolerable low
Controllability standard	14 and higher	8-13	5-7	3-4	Less than 3
Management cell fulfillment	95-100%	85-94,9%	75-84,9%	60-74,9%	Менее 60%
Quality of motivation	High	Average	Reasonable	Low	Intolerable low
Motivation function performance (by position correspondence)	High	Average	Reasonable	Low	Intolerable low
Quality of control (by usage of formatted indicators)	Excellent	Good	Average	Satisfactory	Unsatisfactory
Quality of control (by shares of deviations found on different stages)	Excellent	Good	Average	Satisfactory	Unsatisfactory
Quality of control (by internal clarity)	Excellent	Good	Average	Satisfactory	Unsatisfactory
Quality of coordination (by synergetic effect)	Excellent	Good	Average	Satisfactory	Unsatisfactory
Quality of coordination (by reaction to changes)	Excellent	Good	Average	Satisfactory	Unsatisfactory
Share of management maintenance cost relative to total cost	10% and less	10-15%	15-20%	20-30%	More than 30%
Profitability	8% and more	6-8%	4-6%	2-4%	Less than 2%
Working capital to short-term debt	1.01-1.5	1.5-2.0	0.9-1.0	0.8-0.9	More than 2 or less than 0.8
EBIDTA/debt	4:1 – 2:1	2:1 – 1.3:1	1.3:1 – 1:1	1:2 – 1:4	More than 1:4

[1] *that indicator means that every manager has all subordinates he can possibly have according to controllability standard*
[2] *profitability and the other indicators below were chosen for travel agencies market*

In order to provide efficient estimation of managerial functional performance some indicators are suggested. Their values were divided into 5 groups representing the following: Group 1: business with a proper management system, Group 2: business with a somewhat unbalanced management system, Group

3: working managerial system that needs to be balanced, Group 4: misbalanced and sometimes non-working management system, Group 5: non-working management system.

To be rated as group 1 in each category a company gets 5 point, as group 2 – 4 points and so on to getting 1 point for group 5. If a company earns from 67 to 75 points it is group 1 company, from 54 to 66 – group 2 company, 43-53 – group 3, 33-43 – group 4 and less than 33 – group 5. Interestingly based on these measures, the company-leader in the market examined could not achieve the maximum score for group 1 indicating that even the best company is having difficulty with management balance.

The data for the research was collected by distributing questionnaires to almost 150 managers in one of the Russian Federation regions. The research involved 30 enterprises (travel agencies) of different size (from 4 people up to 50). The questions were asked of the firms were divided into three groups. The first questions concerned the presence of formal planning, organizational, motivation, control and coordination systems. Second included questions which asked how many resources a manager spent on each of the above functions. The third section contained questions which were aimed to determine if a manager needed more resources for performance of a certain function. In each of the companies, managers from different levels of hierarchy were interviewed. Financial data was collected from official financial statements provided by the companies.

RESULTS

The research shows that the most poorly performed functions were motivation and coordination but at the same time managers when asked directly if motivation or coordination should be improved answered mostly "no". Indirect questions proved that true answer is "yes". In most cases that was due to the fact that companies had formal motivation and coordination systems and viewed them as working properly, but indirect questions showed the opposite result. Most of the time the firms CEO did not agree with that point assuming they just need more control. That point demonstrates the importance of control was over-emphasized. Planning functions, especially short term planning, were performed more or less properly in most of the companies. With regard to organizational function, there were two company categories. In first type it was performed properly while in the second it was performed improperly.

Balance does not mean that managers should spend the same amount of time and money performing each function. Table 2 shows how the efficiency of companies corresponds to distribution of time and money spent by management. Spending more time and money on performing motivational functions is more successful in the market than an equal distribution of resources.

Table 2: A View of Balanced Management Efficiency Estimation of Travel Agencies*

Indicator	Company-leader	Average company
Time spent by CEO on performing management functions, %	100	100
- planning	20	15
- organization	12	25
- motivation	42	30
- control	10	25
- coordination	16	10
Money spent on performing management functions	100	100
- planning	15	15
- organization	15	25
- motivation	45	25
- control	15	25
- coordination	10	10
Profitability, %	6.4	4.2
Market share, %	14	1,1
Financial stability (EBIDTA/debt)	1:1	1:4

** The research was carried out by the author on Kazan travel agency's market. Over 100 agencies were involved in the research.*

Throughout the research the company-leader was defined as the one that has the largest number of customers, had the highest profitability and acceptable level of EBIDTA to debt of all the searched companies. For the industry, acceptable level of EBIDTA to debt is considered to be 1:2.

Both listed companies chosen as the result of survey are spending too much time and money on performing control functions according to the CEOs. It is also interesting that usually the share of time and money spent on motivation decreases when the share control increases. With high motivation, less coordination is normally needed.

Next we applying the instrument to the business (see table 3). The detailed research was carried for a company that appeared in the bottom sector of the researched companies. The points in the table below were appointed by the experts according to the guidelines set out in the data and methodology section.

Table 3: An example of management system efficiency estimation (mismanaged company)

Figure	Figure's value	Point
Short-term planning accuracy	Reasonable	3
Long-term planning accuracy	Low	2
Controllability standard	5	3
Management cell fulfillment	61%	2
Quality of motivation	Low	2
Motivation function performance (by position correspondence)	Unsatisfactory	1
Quality of control (by usage of formatted indicators)	Excellent	5
Quality of control (by shares of deviations found on different stages)	Satisfactory	2
Quality of control (by internal clarity)	Unsatisfactory	1
Quality of coordination (by synergetic effect)	Unsatisfactory	1
Quality of coordination (by reaction to changes)	Satisfactory	2
Share of management maintenance cost relative to total cost	27%	2
Profitability	3.7%	2
Working capital to short-term debt	0.56	1
EBIDTA/debt	1:10	1
Total	--	30

According to the grade, the company belongs to group 5. The company above was excluded from the survey listed in table 2 though its profitability and market share can be assumed average. This company demonstrates a case where profitability is due to the fact that staff is not following the CEOs decisions and are taking risks. Otherwise the bureaucratic structure of the researched company (which is seen from the value of management fulfillment, the company is overloaded with managers performing control function) would have already paralyzed its market activity. This is an example of a mismanaged company. It is also interesting that 41% of management time and money in this company is spent on performing control functions, 11% - on motivation, 13% – on planning, 25% on organization and 10% on coordination. That emphasizes the above observation that companies in the this sector lack motivation while over performing the control function.

The results for the average company and company-leader in terms of suggested management efficiency estimation are presented in Table 4. The average company is the group 3 number one. The company-leader is a group 2 company. This indicates that even the best company in this market lacks management balance, over performing control. From the tables above we make a few conclusions on the poorly performed functions: 1) strategic planning is at best performed on an average level though the researched market, 2) motivation is poor in all cases. All the companies use only financial motivation and only three deal with staff development. In some cases development was present but it was performed after working hours which did not create motivation due to work balancing issues, 3) the coordinating function is not good due to CEO's believes that employees should deal with coordination by themselves. During the survey many employees mentioned a need to deal with problems on their own while the results are shared with the management; and 4) all of the above lead to financial problems.

Table 4: An example of management system efficiency estimation (company-leader and Average Company)

Figure	Company-leader's value	Average company's value
Short-term planning accuracy	4	3
Long-term planning accuracy	3	2
Controllability standard	4	3
Management cell fulfillment	4	4
Quality of motivation	3	3
Motivation function performance (by position correspondence)	3	2
Quality of control (by usage of formatted indicators)	5	5
Quality of control (by shares of deviations found on different stages)	4	3
Quality of control (by internal clarity)	4	2
Quality of coordination (by synergetic effect)	4	3
Quality of coordination (by reaction to changes)	3	3
Share of management maintenance cost relative to total cost	5	3
Profitability	4	2
Working capital to short-term debt	3	3
EBIDTA/debt	3	3
Total	56	44

It is also interesting that in the mismanaged company, while 41% of time and money was spent on control it led to the poorest financial situation. At the same time the control function was performed poorly due to unsatisfactory internal clarity. If we look at the average company and company-leader we notice that the raise in internal clarity leads to better motivation function performance and to a rise of profitability. At the same time internal clarity is uncommon among Russian management and its high score as a company-leader is the result of the company type, a sort of family business. In all the other companies there are problems with internal clarity.

Finally, all the studied management systems are misbalanced both in terms of functional performance and time and money spent on performing different functions. But measurement system introduced in this paper allow us to figure out what changes are to be performed in order to achieve balanced and efficient management. The advantage of the introduced systems is that one is able to range the needed changes according to the current shape of management performance.

CONCLUDING COMMENTS

To improve managerial efficiency, the balanced approach should be used. This approach is based on the idea that a single manager can not measure all the activities a manager should undertake. We are talking about estimating system efficiency and the system can consist of a single person or large organization. Managerial balance should be achieved in all cases. While creating a balanced measuring system managers should pay attention not only to the way management functions are performed but also to the specific features of the industry a company performs in. These features can be used to indentify what company's activity indicators are to be included in the measuring system.

The research carried have shown that there is a relation between the balance of management and financial results of the company, there also are relations in resources put into performing different functions. First of all, enterprise's which management can be described as balanced or somewhat misbalanced (groups 1 and 2 in the introduced methodology) tend to perform better financial results and cover a larger market share than misbalanced ones. Balanced companies also tend to hold an acceptable level of EBITDA to dept which proved to be an important issue during current crisis.

Other conclusions concern the relation between management functions. The best companies viewed themselves as putting too much effort into control. That is usually due to the fact that there is intermanagement misbalance, for instance, top-managers pay no attention to motivation while managers of lowest level spent a lot of time on that issue. That inner misbalance forces top-management towards losing trust and thus over performing control. In general when emphasis on motivation increases, the first function to decrease is control. The relation between motivation and organization can also be seen from the research. The more resources that are put into motivation the more self-organized a company becomes so the need to perform the organizational function decreases. The same is true for motivation and coordination and organization and coordination.

Within the research carried out, the stated functions (planning, organization, motivation, control and coordination) were studied from the point of view of boundless organization. Thus those functions are to be performed not only towards the inner environment of the company but also for suppliers and customer relations with which need balanced managerial performance as well. So all the measurement system can be utilized on the entire supply chain.

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BIOGRAPHY

Svirina Anna was born and lives in the city of Kazan, Russian Federation where she had graduated from Kazan State Technical University in 2001 to work there afterwards. In 2004 she defended her Ph.D. thesis and started a career of independent consultant along with lecturing at Chistopol branch office of Kazan State Technical University.