THE IMPACTS OF PERFORMANCE MEASUREMENT ON THE QUALITY OF SERVICE DELIVERY IN THE ZAMBIAN PUBLIC SERVICE

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The design, implementation and use of Performance Measurement (PM) systems have been studied extensively. However, the literature shows little evidence on what kind of impacts PM practices have had on, for example, the performance of the operative level of an organisation. This paper focuses on the impacts PM has had on the Quality of the service delivery (QSD) of employees, for example, their work motivation, learning opportunities, job satisfaction, participation in decision making and reward system. Furthermore, this paper presents how the perceptions of management and employees differ from each other and what the key elements in the implementation process are as regards the accomplishment of positive impacts of PM on the quality of service delivery. This paper concludes with the underlying factors behind the positive impacts of PM on the quality of service delivery

Key phrases: Performance management, performance measurement: PM, quality of service delivery, management, leadership

1   INTRODUCTION

According to current literature, the main purpose of Performance Measurement ("PM") is to deliver reliable information to support decision making. Furthermore, strategic purposes (e.g. Kaplan & Norton 1992) as well as stakeholder satisfaction (e.g. Neely & Adams 2001) have been under focus. In addition to strategic-level measurement, many companies have applied PM in the lower levels of organisation. When considering PM at the department, unit, team or even individual level, it is usually referred to as operative-level PM. The literature shows little evidence on how employees perceive the measurement system and its impacts. To achieve positive impacts, it is very important for the employees to understand why something is measured. When operative-level decisions are based on the information aggregated by a PM system, it may have effects on the Quality of the service delivery (QSD) of the employees. To gain positive impacts on the quality of service delivery, the role of management and leadership needs to be emphasized.

This paper presents a case study of 10 organisations. The research approach is qualitative and the empirical evidence is based on the 200 research questionnaires which were distributed and also on 10 interviews from 10 organisations. One representative of the management and two representatives of the employees were interviewed in each case organisation. The aim of this study was to explore what kind of impacts PM has had on the QSD of the employees. The concept 'quality of service delivery' has been combined from literature findings and includes eight aspects:

1   work motivation

2   learning opportunities

3   job satisfaction

4   work atmosphere

5   health and safety

6   participation in decision making

7   realisation of personal/team-level targets and

8   reward system.

The preliminary assumption of the study was that the management and the employees perceive PM differently and their opinions on the measurement may differ from each other. The study also clarifies the employees' role in the implementation process of the PM system.

2   THE CONNECTION OF MANAGEMENT AND LEADERSHIP TO THE QUALITY OF SERVICE DELIVERY IN THE PM CONTEXT

2.1   The connection of PM to the quality of service delivery

PM has been studied widely in recent years. The PM studies and the literature have focused on the development of a measurement system and measures (Bititci *et al* 1997; Kaplan & Norton 1996; Neely *et al* 2000), implementation phase (Bourne *et al* 2003; Gooderham 2001; Letza 1996; Olve *et al* 1998; Simons 2000; Tenhunen *et al* 2002; Toivanen 2001) and promoting systems and platforms (Kaplan & Norton 1992; Lynch & Cross 1995; Mettänen *et al* 2004; Neely & Adams 2001; Tenhunen *et al* 2003). However, the earlier studies show little evidence of the actual impacts of PM. The concept of the quality of working life is a rather grand one and difficult to define. For example, Graber (1980) conceptualises the QSD to consist of three key components:

- General and facet specific satisfaction with work

- The nature of working conditions, especially rewards, job design, influence, interpersonal relations, physical environment and job facilitation and

- The level of employee performance with regard to accomplishment of organisational objectives.

Packard (1981) divides QSD into seven categories: the work itself, working condition, climate, pay, potential for growth and development, supervision and the agency in general. In the survey of Gilgeous (1998), manufacturing managers were asked about their perceptions of the quality of their service delivery. Gilgeous' questions centred on how motivated, rewarded, valued, empowered, career developed, satisfied with their job and company the managers considered themselves to be.

To outline relevant themes for the interviews, the concept of QSD was combined from the literature to include eight aspects:

1 Work motivation

2 Learning opportunities

3 Job satisfaction

4 Work atmosphere

5 Health and safety

6 Participation in decision making

7 Realisation of personal/team-level targets and

8 Reward system

When designing and implementing a PM system there are always some impacts on the management, leadership and further on the QSD of the employees. Hence, the successful implementation of a PM system should bring out positive impacts. If the PM system can support the management of the company in leadership and communication, it can enhance for example the employees' commitment, motivation and possibilities to affect the decision making.

2.2   PM as a part of management and leadership

PM is quite often viewed from the perspective of the management. The management sets the targets and applies PM to monitor whether these targets are met. PM can be considered from the leadership perspective as well. Ruth (1996) states that the main qualities of leadership are abilities for long-term strategic thinking, communication skills, integrity and ambition. In the popular language leadership usually refers to motivating and committing people – in a word, leading people. According to Juuti and Vuorela (2002), a debating leader, taking into account the employees' opinions, will support employee welfare. The researchers and practitioners in the field of PM should also notice the leadership aspects of target setting and measurement.

When building up measurement systems, companies have to consider which organisational level the measurement is applied on and which organisation level sets the targets. According to Sloan (1964), the management has to decide which decisions are most efficiently done centralised and which could be moved to the unit level. The centralisation or decentralisation of power has influences on the PM. It is quite obvious that the management sets strategic-level targets, but operative-level targets could be negotiated with the middle management or even shop floor level. An important decision is what kind of role the employees have in the target setting. It is assumed that the employees will commit themselves more on targets they have been able to comment on. The commitment of the employees enhances the possibilities to meet the targets and finally improves the financial performance of the company.

2.3   The role of employees in the PM system implementation and measurement process

Researchers and practitioners have presented a number of different kinds of process models for the implementation of PM systems. The use of a suitable process model helps the company to pay attention to essential issues. Usually these process models are based on the company's vision and strategies or emphasise stakeholder satisfaction. However, the operative-level implications have not received much attention. It is obvious that the company's vision and strategies are defined on the top management level. When the measurement system operates at the strategic level, the employees' role in the development phase is minimal. When the system is operationalised at the lower levels of organisation, the employees' opinions should be noticed. According to Dumond (1994), performance measures are established to support the achievement of goals and are provided with the intent to motivate, guide and improve an individual's decision making. Above all, companies should not waste the employees' potential during the design of the PM system.

The management-employee juxtaposition during the measurement process has been studied fairly slightly. According to Rautajoki (1995), employees experience that they cannot contribute enough to the selection of measures or setting target levels. The study of Rautajoki brings out differences in the issue of productivity measurement between the employees and the management. Rautajoki states that the employees' and management's opinion on the openness of the measurement results differ; 47% of the production managers but only 29% of the shop stewards considered the productivity information gathering, processing and reporting open to the whole personnel. The employees considered it problematic that they could not participate in the development of the productivity measurement system. The study of Rautajoki

reveals a need for education in productivity, productivity measures and measurement system implementation.

Committing the employees to the productivity measurement has been acknowledged in former studies: for example, McKee (2003) suggests that there has been a strong movement over the last couple of decades to involve the workforce in productivity and quality improvement programmes – on the basis that shared 'ownership' is much more likely to lead to better results.

2.4   Organisational culture versus PM

Bititci et al. (2004) conclude that organisational culture, management styles and PM are related to each other; companies need organisation culture that is focused continuous improvement and strategic PM. Furthermore, they argue that a successfully implemented and used PM system will lead to a more participative and consultative management style and may lead to significant performance improvements. It can be argued that PM and management style can have an impact on companies' performance and financial outcome through the measurement system. Robson (2004) argues that measurement systems have to provide graphical, relevant, and local and team level information to encourage a culture of high performance. However, it can be assumed that some changes in management, leadership and quality of working life are more related to the PM system than to the organisational culture and individual characteristics and vice versa.

3   RESEARCH APPROACH

The study reported is based on 200 questionnaires which were distributed and also on 10 interviews from 10 organisations conducted during the summer 2008. The eight organisations that participated in the study were chosen on the basis of a preliminary survey carried out by e-mail in spring 2008. In the survey it was asked, for example, whether the organisation used a PM system and if not, the reasons for that. The selected 10 organisations that participated in the case study had Balanced Scorecard (BSC) in use. To discover the management's and the employees' perceptions, one representative of the management and two representatives of the employees were interviewed face to face in each case organisation. In total the study is of 200 questionnaires distributed and 10 interviews from 10 organisations were carried out in the offices of the organisations and all the interviews were recorded. The total number of days for collecting questionnaires was 15 to 20 days and the interview time was 21 hr, from 30 to 71 min per interviewee.

The interviewed participants of the management were chosen as near as possible to the top management. The representatives of the employees were chosen by the contact persons of the case organisations, and the representatives were both blue collar and white collar workers. Nowadays there are no traditional blue collar workers in many technology companies, as the employees are mainly highly educated specialists. When the representatives are selected by the case organisation there is always a concern about the criteria by which the representatives have been chosen. However, two employee representatives of the same case organization allow comparison between the representatives and improve the reliability of the analysis and the results. Because there was only one representative of the management from each case organisation, we asked for the manager's perception and opinion that the whole management of the organisation might hold. In our study, the management representatives were on so high level in their organisation that it can be assumed that they had an overall managerial view on the PM. In addition, all the representatives of the management were included in the management group of their organisation. The analysis of the interviews was conducted by two researchers independently, after which a common view was discussed. This procedure was followed to ascertain the reliability of the analysis.

Table 1: Hospitals and Health Centers organisations that received questionnaires and interviewed in this study.

No.	Hospitals/Health Centers	Employees surveyed	Employees surveyed	Employees surveyed	Employees surveyed
1	University Teaching Hospital	Pharmacist	Nurses	Doctors	Clinical Officer
2	Main Soko Military Hospital	Pharmacist	Nurses	Doctors	Clinical Officer
3	Kafue District Hospital	Pharmacist	Nurses	Doctors	Clinical Officer
4	Chainama College Hospital	Pharmacist	Nurses	Doctors	Clinical Officer
5	Hill Top Hospital	Pharmacist	Nurses	Doctors	Clinical Officer
6	Chilenje Health Center	Pharmacist	Nurses	Doctors	Clinical Officer
7	Chawama Health Center	Pharmacist	Nurses	Doctors	Clinical Officer
8	Kabwata Health Center	Pharmacist	Nurses	Doctors	Clinical Officer
9	Kamwala Health Center	Pharmacist	Nurses	Doctors	Clinical Officer
10	Chingwelele Health Center	Pharmacist	Nurses	Doctors	Clinical Officer

The case organisations of this study operate in health sector type of business. Five of them are health centers and five are hospitals, both are government institutions providing quality health service to the citizens of the Republic of Zambia. All the case organisations are located in Lusaka province under the Ministry of Health. The common nominator is that the organisations measure their performance with a comprehensive measurement system. The qualitative research approach is appropriate when the study focuses on the perceptions and experiences of people.

Furthermore, the study is grounded on hermeneutics to gain a deeper understanding of the phenomenon under discussion. The ontological and epistemological approach of the study is subjectivist, which is quite natural when applying semi-structured open-ended interviews. It is extremely difficult to find valid, objective and quantitative measures to study the impacts PM has on the QSD. In practice, the research of such abstract concepts often has to rely on subjective perceptions of people, especially in the business context. Furthermore, with an objectivistic, quantitative approach it is not possible to gain such deep knowledge on the research subject as with a subjectivist approach.

The research object was not only to create a description but also to find explanatory factors underneath the perceptions of the management and the employees, by exploiting the richness of the large interview material. Each company forms a case. According to Eisenhardt (1989), cases may be chosen to replicate previous cases or extend emergent theory or they may be chosen to fill theoretical categories and provide examples or polar types (see also Yin, 2003). The cases in this study were not selected to represent polar types. Primarily, the main criteria were that the companies measured performance in some systematic way (e.g. BSC) and they had applied the measurement to the operational level at least a few years. These conditions can be seen as the categories Eisenhardt mentions.

4   FINDINGS

4.1   Implementation process

In the case organisation the defining process of the PM system was started on strategic level, including representatives mainly from the management and administration. The role of the employees remained fairly slight and the participation was often limited to the membership of the management group. In most of the cases the commitment of the management was on a high level, which was shown in spent resources, like working hours and reliable advance of the implementation process. However, from the employees' perspective, these facts were not the most important issues when creating a successful PM system.

The employees' opinion was that the information on and introduction of the PM system were carried out too late and poorly. Many employees stated that informing about the new system should be started at an early stage. This way the employees' awareness of the PM and its connection to the organization's business activities can be ensured. Although the employees' possibilities to affect the measurement have been on the increase when launching unit and team level measures, the

consciousness and understanding of the connection between the PM and business operations have remained on an inadequate level. Understanding the entire PM system was seen to be in a remarkable role in employees' commitment and motivation. However, the organisations had paid rather little attention to the measurement and business training of the employees. The management of the organisations had a too positive view concerning the employees' capability to adopt and understand new management systems. The employees of the case companies felt that information and education clarifying the link between personal and company level targets is useful. The employees' representatives, as well as the management of the organisations shared the opinion that early timing of information distribution and measurement education may be more important than deep involvement in the designing process. These things should be gone through much earlier – before the measuring becomes a part of everyday routines. The role of education should be emphasized in organisations where the employees' basic education is at a lower level. The employees' representatives and the management of the case organisations had a shared view that the employees should have a bigger role in the area of PM, at least as it relates to the employees' individual metrics and goals. This can be put into practice by increasing the interactivity and communication between the employees and the management on all levels. Involving the employees more in the decision making was seen to be an obvious link to their work motivation.

4.2   Impacts on the quality of service delivery

The representatives of the management and the employees felt that the employees' work motivation had increased along with the PM system. This was noticed especially in those organisations where the teams and individuals had their own metrics and goals. Even the facts that the measures are visible and the employees know what the team-level targets are seen to have a positive effect on work motivation. According to the employees in most of the case organisations, their job contents and descriptions were clarified, as well as their awareness of what the organisation expected them to do. In this context, it was felt extremely important that the employees were able to participate in defining their own metrics and goals. The other facts that were seen in the background of the increasing motivation was the linkage between individual metrics/goals and the organization's business activities and especially the connection of the measurement system to the reward system. As a whole, the management's and employees' opinions about the impacts of the measurement on the employees' motivation and the reasons for its increase were rather similar.

According to the management's and employees' opinions the measurement has brought along more exact possibilities and aspects to the training and learning opportunities. In the case organisations the supply of training was reorganized to meet the needs that the organisations had at the moment and would have in the future. Furthermore, in some case organisations the available learning opportunities were gathered to one portal, when they had been scattered in different places and systems before. The employees have been able to get involved in the decision making concerning their own learning plans and goals. In most of the cases careful and proactive planning and regular measuring have made a very positive impact on the employees' learning opportunities. Furthermore, a common opinion in the case organisations was that along with the PM the employees understand the company's business and its performance better than before.

PM does not seem to have remarkable impacts on job satisfaction or the work atmosphere. Some representatives of the employees saw that the measurement had a positive impact on job satisfaction through the clarification of job description and content. Similarly, the work atmosphere was seen to have become better, especially through the increased communication between the employees and the management. However, the shared view of the employees and the management was that job satisfaction and work atmosphere depend much more on the organisational culture, individual characteristics and the whole management system. Hence, if the organisational culture is not striving for continuous improvement, PM has little possibilities to improve job satisfaction or work atmosphere.

The case organisations seem to focus their measurement on effects not causes. Both the management's and the employees' view was that after launching the PM system the employees' possibilities to participate in the decision making had increased. The reasons were seen to be the increasing communication between the employees and the management and the employees' raised understanding of the organization's business. The employees saw that they could now have more impact on the decisions concerning their individual or team matters, but to some extent on the company level as well. The employees felt even more than the management that they had got a bigger role in the decision making. It can be concluded that even a small but genuine improvement in the possibilities to participate in decision making has a positive effect on the employees.

According to the management and the employees the team and personal goals were reached better with the PM. The impacts of PM were seen as strongest in those case organisations where the goals were defined carefully and a logical connection to the entire PM system was found. In some case organisation the management held the

view that a self-controlling effect could be seen when extending the measuring to the team and personal level. The background factors that made the employees reach better personal and team goals were similar to those of work motivation. To reach the goals best, the employees should be able to participate in the decision making, understand the linkage between personal goals and the organization's business operations and the measurement should be connected to the reward system.

In seven case organisations of the total ten, the measurement was linked to the reward system. The management and employees were unanimous about the importance of the reward system for the employees' commitment to the PM system. The criteria of the reward system were perceived equitable, although this was considered a fairly difficult and sensitive issue. When the PM system was connected to the reward system, the transparency of the measures and reward criteria were emphasised. In the organisation which operates without a reward system, the impact of PM on the QSD was seen much slighter both from the management's and the employees' perspective, compared to the other organisations.

The views of the management and the employees on the impact of PM on the quality of working life were quite similar. The perceptions of the employees and managers on the impact of PM on the quality of working life are presented in Table 2 (including 8 management representatives and 12 employee representatives).

5   DISCUSSION AND CONCLUSIONS

The impacts of a comprehensive and multidimensional PM that has brought along to the QSD of employees were discussed above. The survey of ten case studies indicated that PM has had a positive impact on the employees' motivation, learning opportunities, decision-making opportunities and achievement of goals. In the background of motivation were seen to be, for example, the clarification of job contents, better understanding of the linkage of the individual's goals to the organization's goals and business activities, possibilities to set one's own targets and the connection of the PM system to the reward system. These are significant issues when introducing PM to the operative level close to the employees. Hence, it can be argued, that to gain any positive impact of PM on the quality of working life, the role of interactivity and communication should be emphasised. The findings suggest that the PM system should be linked to the reward system to fully exploit the potential of measurement. The PM design process revealed the present state and future needs concerning training and learning, which led to the reorganising of knowledge acquisition in many case organisations, focusing more on future needs. The

employees of the case organisations felt more than the management that they were able to affect the decision making, especially concerning their own jobs. It can be argued that having even a little possibility to take part in the decision-making process improves employees' work motivation, which is a key element for any organisation's success. Job satisfaction and work atmosphere were seen to depend more on the organisational culture and individual characteristics than the PM system. If the organisational culture is inflexible, any single management tool, for example, PM cannot have positive influence on it.

Table 2:   Management's and employees' perceptions on the impact of PM on the QSD of the employees

Management	No. Impact	Some Impact	Substantial Impact	Employees	No. Impact	Some Impact	Substantial Impact
1 work motivation	2	1	5	1 work motivation	2	4	10
2 learning opportunities	0	2	6	2 learning opportunities	2	2	12
3 job satisfaction	2	3	3	3 job satisfaction	4	6	6
4 work atmosphere	3	3	2	4 work atmosphere	5	4	7
5 health and safety	2	2	4	5 health and safety	8	3	5
6 participation in decision making	1	3	4	6 participation in decision making	3	2	11
7 realizations of personal/team-level targets and	1	0	7	7 realizations of personal/team-level targets and	3	2	11
8 reward system	2	0	6	8 reward system.	2	2	12

As a whole, the management's and employees' opinions about the impacts of the PM on the quality of working life differed from each other less than expected. However, the study of Ukko *et al* (2005) revealed that the management's and the employees' perceptions differed substantially as regards the impact of PM on leadership. The management considered PM to have brought new elements to the management style, while the employees saw management style as an unconnected issue to the PM system. The different perception concerning leadership may reflect the traditional employee-management juxtaposition in comparison to the perception concerning QSD, which is easily seen as a common interest.

The main differences between the management's and the employees' perceptions were seen to be in the implementation process. The employees saw that the information and education on the PM system were conducted too late and poorly. The employees' opinion was that those things were even more important than being involved in the designing process on the company level. The management of the case companies seemed to have a too positive view concerning the employees' capability to adopt and understand new management systems. Hence, companies

should pay more attention than before to the education and especially to the information, during the implementation of the PM system.

The findings of this study are quite well in line with the earlier study of Dumond (1994). Her research revealed that individuals, for example, have a greater 'comfort level' if they understand their PM system; they feel more confident in their decision making, they enjoy the environment more when they understand what is expected of them and they also want feedback about their performance relative to these measures. Her study also showed that if the employees were able to obtain information about both the internal activities and external environment, the information would enhance the individual's ability to meet the company's goals as well as his/her personal performance measures.

The empirical evidence of the study is based on 200 questionnaires which were distributed and on 10 interviews from 10 organisations. Furthermore; only one representative of the management was interviewed from each organisation. Although the overall managerial view was asked, there is place for a concern about how representative the perceptions of the management interviewees are. These can be seen as limitations of the study. The findings could be strengthened by extending the sample of management representatives in order to enhance the quality of the data. Generalisation of our findings to concern all organisations applying a PM system should be done cautiously. Despite the limitations, we believe that the results are applicable to companies that are measuring their performance, to companies that are planning to launch a PM development project and to academics as well.

Finally, many issues can be highlighted for further research, concerning, for example, information dissemination, understanding and education of PM, the connection of the PM to the reward system, to achieve effective and motivated use of PM systems. In the future more research should be focused on the current situation as regards the underlying factors behind the work motivation in organisations using a PM system.

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