Using KPIs for Strategic Management of IT in Mellat Bank

A. Divandari  
Mellat Bank Chief Executive Officer, Tehran, Iran  
www.divandari.com

M. E. Pourzarandi  
Mellat Bank R&D Manager  
Tehran, Iran  
email: pourzarandi@yahoo.com

S. Karimi  
Mellat Bank  
Tehran, Iran  
email: s.karimi@bankmellat.ir

Abstract

Performance evaluation in big organizations plays an important role in recognition of strategic and operational goals. Regarding to this concept, some performance indicators and their communication with goals and activities must be assigned, measured and analyzed. Nowadays information technology is a main driver of any business, as you know business process of information technology is different. As a result, managers of this section need to evaluate their performance of department with a different metric. Since Performance Indicators for evaluating IT sector are too many in this paper we try to introduce Key Performance Indicators for IT sector, relate them to plans and goals of organization and finally represent some samples for that.

Keywords: KPI Strategic Management, Organizational Performance.

Introduction

Measuring and analyzing organizational performance plays an important role in turning organizational goals to reality and companies have increased the capabilities of their performance measurement systems over the last years (Popova, Sharpanskykh, 2010). The performance is usually evaluated by estimating the values of qualitative and quantitative performance indicators. It is essential for a company to determine the relevant indicators, how they relate to the formulated company goals and how they depend on the performed activities (Lohman, Fortuin, et. tl, 2004). Usually, strategic performance measurement refers to the monitoring of companies’ long-range plans and success. Nowadays many managers recognize this and put conscious effort in defining company-specific goals, performance indicators and evaluate them (Ukko, et. tl, 2007). Besides, the important role of IT in delivering services to customers as a key driver is highly clarified. But which metrics represent this development? How we can claim that an organization or widely a country goes through the development road? [(Broadbent, Laughlin,2009), (Raus, et.tl,2010)]

KPI’s are nonfinancial indicators for assigning quality of goals and reflex the strategic operation in an organization. They use for evaluating present status of organization and define solutions for making their business intelligent. The process of monitoring and
maintaining KPIs through the time are known concepts in supervising the business of organization. Some major factors affect defining KPIs such:

1- A predefined business process
2- Obvious operational goals for business process
3- Some metrics for measuring quantity/quality of results and compare them with goals collection
4- Analyzing variances and references for achieving the targets (Parmenter, 2009)

In this paper first we introduce performance indicators and differences between types of them. Then with focus on KPIs we consider the scientific basis and technical requirements for implement them in an organization. Finally, we have implementation steps for covering different parts of organization.

**Key Performance Indicators**

Many companies are working with the wrong measures, many of which are incorrectly termed key performance indicators (KPIs). Very few organizations really monitor their true KPIs. The reason is that very few organizations, business leaders, writers, accountants, and consultants have explored what a KPI actually is. There are four types of performance measures:

1- Key Result Indicators (KRI) tell you how you have done in a perspective or critical success factor.
2- Result Indicators (RI) tell you what you have done.
3- Performance Indicators (PI) tell you what to do.
4- KPIs tell you what to do to increase performance dramatically.

Many performance measures used by organizations are thus an inappropriate mix of these four types.

**Figure 1. Four Types of Performance Measures**

**Views on Key Performance Indicators**

The first view on KPI’s is the Implication they have. The KPI’s are leading or lagging.
Lagging measures give feedback on past performance, such as last month’s profit, and typically do not provide insight into future performance. Leading indicators, in contrast, are designed to measure future performance, and more often than not, future financial performance. Some leading indicators to future performance might include customer defection rate, customer satisfaction scores or changes in consumer confidence. Lagging KPI’s without leading KPI’s do not communicate how the outcomes are to be achieved. They also do not provide an early indication (warning) about whether the strategy is being implemented successfully and whether strategic objectives are achieved. On the other hand, leading KPI’s without lagging KPI’s may enable companies to achieve short-term operational improvements, but will fail to indicate whether the operational improvements have been translated into long-term (strategic) objectives, and, eventually, to enhanced financial performance.

An appropriate mix between lagging and leading KPI’s is necessary to include KPI’s which respectively show outcomes, and KPI’s which show the performance drivers.

The second view is the Responsiveness of KPI’s. KPI’s are responsive or not responsive. Individuals can directly influence responsive measures, whereas non-responsive measures are outside the direct influence or control of an individual (such as consumer confidence).

An appropriate mix between responsive and non-responsive KPI’s is necessary to include KPI’s which respectively are manageable internally, and KPI’s which act on the company externally. This represents the actual environment companies operate in.

The third view is the Nature of KPI’s. KPI’s can refer to tangible (hard) things, often recorded in the chart of accounts, such as inventory levels, accounts receivable balances, employee headcount, or can refer to intangibles (soft) such as level of skill or knowledge, creativity and innovation.

An appropriate mix between tangible and intangible KPI’s is necessary, because decision-making is often based on both hard and soft factors.

The fourth view is the Location in the processes (which are chains of logical arranged activities aimed at achieving results). The distinction can be made between the line organization process and project organization process (actually, there is not a strict separation between these ‘organization’s’ but the distinction can be used as point of views). Processes in the line organization exist of 7 elements, see Figure 2:

1- Means (a): used to understand resources consumed to produce the outputs and outcomes (input).

2- Activities: used to understand the intermediate steps in producing a product or service ((sub) processes).

3- Performance: used to measure the product or service provided by the system or organization and delivered to customers (the output meant for the client).

4- Outcome Measures: evaluate the expected, desired, or actual result(s) to which the
outputs of the activities of a service or organization have an intended effect.

5- People: these are actors with certain tasks, competences and responsibilities to execute (a part) the activities within a process. People are expected to be the main input in the primary processes.

6- Means (b): items that independently perform activities within processes or are used by actors to execute activities. Means are not the same as input. They are different in the way of usage: input functions as material for transformation into output, while means are not directly being transformed in the process.

7- Frameworks: pre-conditions, requirements, standards, plans and triggers coming from outside the process into the process and having an influence on the management of the process. (Chandi, 2009)

---

**Figure 2.** Elements and level of processes and the transformation process within organizations

**Characteristics of KPIs**

What to do with the KPI’s? To answer this question it is firstly necessary to analyze how the KPI’s can be used to improve performance. We can imagine some general characteristics like: 1. Performance measurement must aid the decision-making process (provability, explain ability, believability, and communicability). 2. Measurement information needs to be acted upon within the time frame needed for market survival (Latency: propagation and response). 3. Performance measurement needs to operate self-reflexively and largely below the threshold of the firm’s awareness (adaptability, measurability, autonomic).

According to previous researches for covering most organization types in the public and private sectors, we can define the seven characteristics of KPIs. KPIs:

1- Are nonfinancial measures (e.g., not expressed in dollars, yen, pounds, Euros, etc.)
2- Are measured frequently (e.g., 24/7, daily, or weekly)
3- Are acted on by the CEO and senior management team (e.g., CEO calls relevant staff to enquire what is going on)

4- Clearly indicate what action is required by staff (e.g., staff can understand the measures and know what to fix)

5- Are measures that tie responsibility down to a team (e.g., CEO can call a team leader who can take the necessary action)

6- Have a significant impact (e.g., affect one or more of the critical success factors [CSFs] and more than one BSC perspective)

7- They encourage appropriate action (e.g., have been tested to ensure they have a positive impact on performance, whereas poorly thought-through measures can lead to dysfunctional behavior). (Parmenter, 2009)

Some cases to attend

10/80/10 Rule

Kaplan and Norton1 recommend no more than 20 KPIs. Hope and Fraser2 suggest fewer than 10 KPIs. The 10/80/10 rule is a good guide. That is, there are about 10 KRIs, up to 80 RIs and PIs, and 10 KPIs in an organization. Very seldom are more measures needed, and in many cases even fewer measures are necessary. For many organizations, 80 RIs and PIs will at first appear totally inadequate. Yet on investigation, you will find that separate teams are actually working with variations of the same indicator, so it is better to standardize them (e.g., a “number of training days in the past month” performance measure should be consistently applied with the same definition graph).

| Key result indicators (10) | Tell you how you have done in a perspective or CSF |
| Result indicators |
| Performance indicators |
| Key performance indicators (10) | Tell you what you have done |
| | Tell you what to do |
| | Increase performance dramatically |

Many KPI project teams will also, at first, feel that having only 10 KPIs is too restrictive and may wish to increase KPIs to 30. With careful analysis, that number will soon be reduced to the 10 suggested unless the organization is made up of many businesses from very different sectors; in that case, the 10/80/10 rule can apply to each diverse business, providing it is large enough to warrant its own KPI rollout.

Importance of Timely Measurement

Before proceeding further, we will look at the importance of measurement. The use of measurement varies widely across the world. In the United States, many businesses use the BSC to create behavioral alignment in a balanced way.

It is essential that measurement be timely. Today, a KPI provided to management that is
more than a few days old is useless. KPIs are prepared in real time, with even weekly ones available by the next working day. The suggested reporting framework of performance indicators is set out in Exhibit 1.6.

Some of the KPIs will be updated daily or even 24/7 (as in the British Airways case), while the rest of the KPIs will be reported weekly. Performance measures that focus on completion should be included.

In organizations where finishing is a problem, a common weekly KPI is the reporting of projects and reports that are running late to the senior management team. Such reporting will revolutionize project and task completion in your organization.

The RIs and PIs will be reported in various timeframes from daily, weekly, and fortnightly to monthly. The KRIs, which is best used to report performance to the board, will thus be based around the timing of the board meeting. (Parmenter, 2009)

**Foundation Stones for implementing KPIs**

The ultimate success of a change strategy depends greatly on how the change is introduced and implemented rather than on the merit of the strategy itself. Successful development and utilization of key performance indicators (KPIs) in the workplace is determined by the presence or absence of four foundation stones (Figure 4):

1. Partnership with the staff, unions, key suppliers, and key customers
2. Transfer of power to the front line
3. Measuring and reporting only what matters
4. Linkage of performance measures to strategy through the CSF
Four Foundation Stones Guiding the Development and Use of KPIs

Partnership Foundation Stone

The successful pursuit of performance improvement requires the establishment of an effective partnership among management, local employee representatives, and unions representing the organization’s employees, employees, major customers, and major suppliers. Implications of the partnership foundation stone include:

- Recognition by all stakeholders that significant organizational and cultural change requires a mutual understanding and acceptance of the need for change and how it is to be implemented
- Commitment to the establishment and maintenance of effective consultative arrangements with unions, employee representatives, and employees
- Joint development of a strategy for the introduction of best practice and KPIs
- Extension of the notion of partnership to include and involve the organization’s key customers and key suppliers.

Transfer of Power to the Front Line Foundation Stone

Successful performance improvement requires empowerment of the organization’s employees, particularly those in the operational “front line.” Implications of the transfer of power to the front line foundation stone include:

- The operation of effective top-down and bottom-up communication, including staff knowing what the CSFs are
- The empowerment of employees to take immediate action to rectify situations that are negatively impacting KPIs (e.g., able to authorize doubling of cleaning staff to speed
turnaround time for an anticipated late plane)

- Devolving responsibility to the teams to develop and select their own performance measures
- Provision of training on:
  - Empowerment
  - KPIs
  - The organization’s critical success factors
  - Process improvement methods
- Additional support for those employees with literacy, numeracy, or other learning-related difficulties

**Measuring and Reporting Only What Matters Foundation Stone**

It is critical that management develop an integrated framework so that performance is measured and reported in a way that results in action. Organizations should be reporting events on a daily/weekly/monthly basis, depending on their significance, and these reports should cover the critical success factors (CSFs). The human resources (HR) team has an important role to ensure that the workforce perceives performance measurement in a positive way (e.g., a way to increase their long-term job satisfaction, rather than the old views of performance measurement so well portrayed in the Peter Sellers film, *I’m All Right Jack*—a must-see for all of the KPI team).

Implications of the measuring reporting and only what matters foundation stone are:

- Every report should link to a success factor (SF) or critical success factor (CSF); no report should exist because it was done last month and the month before.
- We should measure only what we need to. Each measure should have a reason to exist, a linkage to an SF or CSF.
- What gets reported should get actioned. The CEO has to commit to making phone calls: “Pat, why did BA235 leave 2.5 hours late?”
- There needs to be a major revamp of reporting so that it is more concise, timely, efficient to produce, and focused on decision making.
- Organizational performance measures will be modified in response to the performance measures developed at team level.

**Linking Performance Measures to Strategy through the CSFs Foundation Stone**

For a performance measure to be a KPI it has to be linked to one or more of the organization’s critical success factors (CSFs), more than one balanced scorecard (BSC) perspective, and the organization’s strategic objectives. Performance indicators, being less important, are normally linked to the organization’s success factors (SFs).

Figure 5 shows the linkage between mission, strategies, CSFs, balanced scorecard
perspectives and performance measures.

An organization will be more successful if it has spent time defining and conveying its vision, mission, and values. They need to be defined in such a way that staff and management intuitively work with them on a daily basis. CEOs who are great leaders and motivators—these often go hand in hand—continually promote the virtues of these three “beacons.” It is important that an organization has a well-considered and well-constructed strategy. These strategies need to link back to the six BSC perspectives. You may find when you cross-check your strategies to these perspectives that some perspectives might not be covered, in which case a revisit to the strategies may be required. Great CEOs ensure that their strategies encompass the staff satisfaction and environment/community perspectives.

As you can see in figure 6 vision and strategy have four perspectives. These four are customer, financial, internal business process and learning and growth. All these issues include objectives, measures, targets and initiatives.

![Diagram](image)

*Figure 5. Journey from a Mission and Vision to Performance Measures that Work (David Parmenter, 2009)*

It is important that an organization has a well-considered and well-constructed strategy. These strategies need to link back to the six BSC perspectives. You may find when you cross-check your strategies to these perspectives that some perspectives might not be covered, in which case a revisit to the strategies may be required. Great CEOs ensure that their strategies encompass the staff satisfaction and environment/community perspectives.

Ascertaining an organization’s CSFs is a major exercise, and one that is often only obliquely tackled. CSFs identify the issues that determine an organization’s health and
vitality. When you first investigate an organization’s success factors (SFs), you may come up with 30 or so issues that can be argued as being important for the continued health of the organization. The second phase of thinning them down is a relatively easy process; the more important SFs have a broader influence impacting many other success factors. Better practice suggests that there should be only between five and eight CSFs. Once you have the right CSFs, finding the KPIs is much easier, as they will reside within these CSFs. (Kaplan, Norton, 1996).

Figure 6. Translating vision and strategy: Four Perspectives (Kaplan, Norton, 1996)

Implications of the linking of performance measures to the strategy through the CSFs foundation stone include:

- The CSFs have to be sifted from the numerous success factors in advance of determining the performance measures.
- The current strategies should be balanced (e.g., they should link to the six perspectives of the balanced scorecard).
- The KPIs, performance indicators, result indicators, and key result indicators that an organization is using should all be linked to either a CSF or an SF. The database of measures that an organization utilizes should record this linkage.
- The current strategies
- , the CSFs, and progress against them should be documented and reported to management and to staff on a regular basis. (Parmenter, 2009)
How to implement KPIs

Kaplan and Norton, in their groundbreaking book, The Balanced Scorecard: Translating Strategy into Action indicated that 16 weeks is sufficient time to establish a working balanced scorecard with key performance indicators (KPIs). However, organizations of all sizes and complexity stumble with this process, and 16 weeks easily turns into 16 months. The key to success is to learn 11 key lessons:

1- Appoint an external project facilitator.
2- Begin with senior management team (SMT) commitment and education.
3- Start off with a six-perspective balanced scorecard template.
4- Focus on the critical success factors (CSFs).
5- Follow the 10/80/10 rule.
6- Select a small KPI team to be full time on the project.
7- “Just do it.”
8- Use existing systems for the first 12 months.
9- Trap all performance measures in a database and make them available to all teams.
10- KPI reporting formats are an art form, not a science.
11- You may need to rename the scorecard. (Parmenter, 2009)

IT action criteria of Mellat Bank

In recent years IT sectors of Mellat Bank had a great revolution in IT driven services. These widening in IT sector require a proficient management team. In the other side, managing a large scale team with a lot of jobs without any related performance indicators is out of question. Besides many employees in this sectors were dissatisfied from their evaluation regarding to their defined task volume and there was not any metric for estimating their job. For figuring this problem out first we had a survey on IT key performance indicators. After that based on operational plan of Mellat Bank, IT employee’s tasks and CSFs that extracted from business process management team we could extract some key performance indicators in IT sectors of bank.

What we did

Firstly and most importantly we surveyed about KPIs and IT section KPIs. Achieving this information we spent a long time to consider all the hidden corners. There are different sorts of IT KPIs as follows:

- IT services
- IT/business ratios
- Microsoft Operations Framework
- Service Level Agreement
- USMBOK
Using KPIs for Strategic Management of IT in Mellat Bank

- Application Services Library
- Business Information Services Library
- Cobit
- Green IT
- IT Infrastructure Library
- IT security

After considering all these sorts and comparing them with departmental activities, we deduced a meaningful similarity between job assignments and IT Infrastructure Library as a framework for managing IT services. IT Infrastructure Library (ITIL v3) is the most updated and powerful tool for managing IT services. Because of nature of banks in delivering financial services to customers and use of IT and new technologies as a facilitator, it seems to be important to manage IT services. ITIL represents some KPIs regarding to processes in an organization. The processes of it had a lot of similarity with ours here. As a result we chose ITIL for its comprehensiveness and similarity to our processes.

Mellat bank includes different departments, do various types of jobs. It has also IT department for developing, maintaining, upgrading and generally regulating this criteria. Regarding to different job assignments we categorized all departments’ activities into 11 issues (ITIL processes). Increasing accuracy we checked these groups with operational plan of IT departments. Besides, operational plan presents mission of mentioned department. For the next we focused on CSFs based on challenges departments map into their operational plan. Finally based on job assignments in IT departments and division of assistant directors some processes are assigned into assistant director criteria.

Here we introduce some KPIs we could extract. They are as followed:
- Availability (excluding planned downtime)
- % of overdue incidents
- % of network bandwidth used
- Average number of calls / service request per handler
- Average problem closure duration
- Incident queue rate
- Average number of components under management per FTE
- Number of repeated incidents
- % of incidents caused by deficient documentation
- % of Service Desk Availability
- % of backed-out changes
- % of fully documented SLAs

This research continues with measuring performance of IT sector of Mellat Bank with extracted KPIs.
Conclusion

Information Technology has a short precedence in Iran. Mellat Bank like other companies almost some years begins it’s IT plans. This is the time for all IT dependent companies for breaking their legacy metrics to monitor IT departments. The reason for migration to new metrics is the nature of IT services. Unlike other tasks, IT services have a very complicated and implicit structure that is different from other sectors of organization. In comparison Mellat Bank is a progressive financial company in our country. Going after technology caused some changes in IT sectors of this bank. Finally defining KPIs for measuring IT sector came into action in R&D of Mellat Bank. After mentioned researches we define KPIs based on operational plan, tasks and CSFs. We hope that this research may lighten the road of IT KPIs for future works.

Endnotes
1. Key Performance Indicator
2. Full Time Employee

References

David Parmenter, Key Performance Indicators, developing, implementing, and using winning KPIs (Second Edition), 2009


RISHI CHANDI, Key Performance Indicators (Measuring Performance in the Oil & Gas EPC Industry), MASTER THESIS OF RISHI CHANDI, Professor W. Thissen, CB&I Lummus B.V. – Delft University of Technology, May-2009
