

# USING KEY PERFORMANCE INDICATORS TO FACILITATE THE STRATEGY IMPLEMENTATION AND BUSINESS PROCESS IMPROVEMENT IN SME'S

Miguel Merino Gil and David Neila Sousa

*Department Enterprise Organization, University of Vigo, Campus Lagoas-Marcosende, Vigo, Spain*

**Keywords:** KPI's Performance Metrics, Strategy Monitoring, SME's Performance Control, Industrial Benchmarking.

**Abstract:** The use of metrics for a wide range of issues in business management is usual in big organizations but don't use frequently in business in small size enterprises. Business Intelligence (BI) is seen largely as the domain of large organizations, yet any size business can benefit greatly from BI tools. To date, the cost of BI technology has been too high for small businesses and limited scope of market operations and financial reports. We develop a method for successful BI implementation in the SME'S on the basis of its performance indicators based upon business process monitoring and constructing a plan of action (Business Initiatives) to carry out a defined strategy by targeted objectives.

## 1 INTRODUCTION

In their book, "The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment," Robert Kaplan and David Norton estimate that fewer than 20% of businesses execute their business strategies effectively. (Kaplan, 2001).

This principle would be much more severe if it is applied to the SME's for which it is difficult to know the drivers to transform strategy in action. Usually in this type of organizations, the corporate performance monitoring was based upon planning and financial metrics, that do not have critical issue for SME managers because they use frequently the direct monitoring due the small complexity of the matter. On the contrary the managers spend more time in operational performance monitoring, close to the main organizational direct objectives, like efficiency of products or services, than strategy control.

Despite decades of investments in business intelligence, most organizations still struggle to execute on their business strategies. Strategies are intended to focus everyone's attention on what to do; but, in many cases, they are inadequately created, poorly communicated and badly measured. "The align-to-action process is aimed at helping organizations synchronize their strategic and tactical activities, and better execute their strategies. Most

organizations continue to produce their key financial reports (such as the three core financial statements — profit and loss [P&L], balance sheet and cash flow forecast), as well as a raft of management reports via manually intensive processes". (Chandler, 2009).

"Business managers have often fought long and hard to achieve organizational efficiencies through a functional structure, and they don't want to risk losing these benefits as they explore new ways of improving organizational effectiveness. The challenge for managers is to hold on to the efficiency gains a functional structure provides, while still exploring the opportunities for effectiveness a process focus can give". (Smith, 2007).

The SME's functional structure is simplest than the bigger enterprises and many are process oriented.

"The most successful companies demonstrate significant market share growth. A well-rounded set of KPI's involving financial, customer, process and organizational measures yields higher performance in areas such "time to market" and "customer satisfaction/retention". Improvements in these and other key performance areas drive market share performance and overall growth". (Hatch, 2009)

This paper is organised in the following arrangement:

In the first place look at the fundamentals of the

strategy initiatives developed from the strategic maps, as the way of turning the strategy in action. Then we will analyze the use of Benchmarking to identify the performance indicators (metric) in the SME'S.

In the point 3 and on the basis of the Gartner Business Value Model, we specified its application to the case of an SME belonging to a specific industrial sector. Define its overall strategy and objectives and its "strategic map". The business processes are defined in from the Business Aspects of the model of Gartner and the performance indicators to control them. Then be linked these indicators with the strategic objectives

Finally be derived from these links, business initiatives that will be the way of setting up the strategy and that should be consistent with the strategic objectives raised, with which demonstrate the feasibility of the method followed.

## 2 STRATEGY MAPS IN SME'S

The strategy map describes the logic of the strategy, showing clearly the objectives for the critical internal process that create value and the intangible assets required to support them. The Balanced Scorecard translate the strategy map objectives into measures and targets. The organization must launch a set of action programs that will enable the targets for all measures to be achieved. Kaplan and Norton "Strategy Maps" refers these action programs as *strategic initiatives*. (Kaplan, 2004)

### 2.1 Strategic Initiatives

The first problem finding is to define what are the strategic initiatives for a SME. The Kaplan and Norton "Strategy Maps" are oriented to define financial metrics trough four perspectives Financial, Customer, Internal and Learning and Growth, determining a perfect causal link but easily break down in SME's organizations. According to Kaplan and Norton, only 25% of organizations link incentive compensation to strategy, only 40% link budgets to strategy, and only 5% of employees understand how their position affects the organization's strategy. Thereby we find an alternative model developed Gartner, that establish a coherent set of objectives that integrate all the "activities" (structures, systems and processes) to achieve that statement.

We use the concept, and well know theory of Business Process Management (BPM) for relate the

business process with strategy, because the last one are better understanding for middle level managers in SME's that are responsables for conduct and ensure implementation of strategy initiatives from senior executives decisions.

Based on "APQC's Process Classification Framework" (APQC, 2008), is possible to conduct a business process taxonomy that defines the steps or activities that make up the major processes and sub-processes used in the organization, in order to establish a set of performance metrics.

### 2.2 Identify SME Case Metrics from Benchmarking Process

The Benchmarking analysis method is a basic tool for help to fix quantitatives and qualitatives objectives and metrics for an industrial sector. These analysis have a double approach.

From normalized metrics , the companies show their reports and ratios throughout public entities or official registry whose information are mainly of financial nature and oriented to serve information for stakeholders. The possible benchmarking analysis in this case is easily from Specialized Data Base (FINTEL Industry Metrics; Moody's Financial Metrics; Deloitte; The Shift Index; ....) and small cost, but also small effectiveness for SME's. The reason is the financial data latency and final oriented information results not causal effects.

A second approach for benchmarking is focalized to SME's competitiveness analysis and based upon core competencies. This type of companies is characterized by a great flexibility and adaptability to markets and environmental factors, therefore the performance of its activities is a critical success factor and should be subject to a follow-up next and most accurate as possible. On the other hand, if your strategy is based on the growth in another sector or other types of customer, will need to take into account the possible development of skills and competencies, necessary, as well as the precise indicators to control them. The benchmarking in these cases is much more difficult to obtain, because it is of indicators internal process that are not published and with a rapid evolution to adapt to changing market conditions. In addition require specific studies by sectors, industry, countries, etc. that is costly in time and money, and that are offered frequently By companies specialising in this type of studies (Gartner; Forrester; ...).

One way to address the problem is through industry metrics snapshot from prestige publications those of APQC that allows a company to easily

benchmark its corporate performance against peers in the industry. The snapshot illustrates nearly two dozen metrics spanning six categories of operational performance including sales, efficiency, effectiveness, profitability, cash and earnings – all driving shareholder value.

A company can assess its performance in each metric against the industry average, determine where it specifically falls among the lower, median and upper quartiles, and identify the worst-in-class and best-in-class performers.

Table 1: Industry metrics snapshot.

Business Aspects	Metric
Sales Performance	-Revenue Growth (% ,LTM) -Revenue Growth (% ,5-yr)
Efficiency Performance (LTM)	-Revenue P/Employee -Net Income P/ Employee - SG&A Expense Rate - R&D Expense Rate - Asset Turnover (R/ LTM) - Inventory Turnover
Effectiveness Performance (LTM)	-Return on Assets (%) -Return on Capital (%) -Return on Equity (%)
Profitability Performance	-Gross Profit Margin (% , -LTM) -Gross Profit Margin Growth (% , 5-yr) -Operating Income Margin (% , LTM) -Net Income Margin (% , LTM) -Net Income Margin Growth (% , 5-yr)
Cash Performance	-Free Operating Cash Flow Margin (% , LTM) -Days Sales Outstanding (DSO) (Days, LTM) -Cash Flow Growth (% , 5-yr) -Current Ratio (Ratio, LFY)
Earnings performance	-EPS (Excluding Extr. Items) (\$/Share, LTM) -EPS Growth (Excluding Extr. Items) (% , 5-yr) -P/E Ratio (Excluding Extr. Items) (Ratio, LTM)

Source: QlikTech metrics snapshot, 2007

### 3 USING BUSINESS METRICS IN INDUSTRIAL SME'S

The scope of the standard measures contained in the Gartner Business Value Model covers all the controllable activities performed within an organization. These activities center on three broad categories, referred to as business aspects:

Table 2: Business Value Model High-Level Business Aspect Definitions (Smith, 2006).

Demand Management	All the actionable activities involved with generating demand for the products and services offered by the organization.
Supply Management	All the actionable activities directly involved with supplying the products and services offered by the organization.
Support Services	All other actionable activities involved with supporting the organization. These services operate within organizations by providing services to internal clients.

Source: Gartner Value Model. 2006

#### 3.1 Use of Industrial Metrics in SME Machinery Building Sector

A manufacturer of equipment in the automotive industry, originates from a normal way, on the basis of subcontracting by a company manufacturer or supplier of first level (tier 1) in the sector.

This initial phase requires to orient the business toward the intensive use in engineering and the exploitation of skills specific techniques, having less impact the commercial activity, with low number of customers.

A later stage is characterized by the growth based on a standardization of the product, a optimization of the processes of supply, manufacture and distribution and expand greatly the number of customers, which involves a more commercial activity of marketing, sales and customer service. It is essentially to increase the value creation through the processes that constitute the know-how of the company, and to withstand a strategy given.

- Company name example (We use a fictitious name to preserve the confidentiality):  
Técnicas Industriales Especializadas S.L. (TIE)
- Activity: Engineering and specialized industrial machinery building
- Business Strategy: Growth through expanding the range of products and services, highly specialized and adapted to the customer, with a reasonable standardization and at a competitive price.

Strategy objectives (defined through interview with the CEO of the organization):

1. Loyalty to the main customers
2. Design the best offer products and services through options pre-configured
3. Improve the operational efficiency (supply; assembly; warehousing; distribution)
4. Increase the work capital available
5. Improve the customer service and operational margin
6. Create an Image of Mark (Brand)

We search build a set of Business Initiatives that can create value to satisfy the Business Strategy.

We begin linking performance metrics with strategy objectives following the strategy map model in order to establish a cause-and-effect relationships (in accordance with Kaplan and Norton model).

The metrics of performance must be focusing on the actionable activities within the enterprise that are managed at the executive and middle management levels. The holistic nature of the Business Value Model should capture the cause-and-effect relationships between business functions within the enterprise, to ensure that all the effects of a specific change are considered.

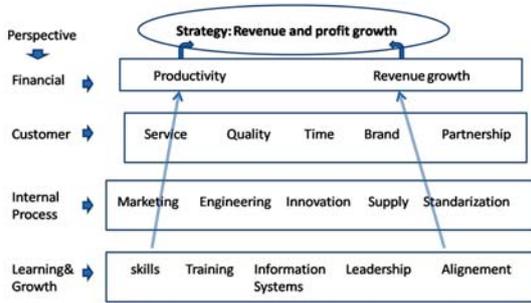


Figure 1: TIE Strategy Map Model.

The prime metrics should be selected based on general availability of the data required to support them in automated business transaction systems.

Regrouping according to the 3 Business Aspects of the Business Value Model (Demand Management; Supply Management; Support Services), in addition to a fourth, due to the relevance is for this company (Engineering), are selected indicators of process needed to carry out the strategy, according to the following table:

Table 3: Relationship between Business aspects and performance indicators.

Business Aspects	Performance Indicators
DEMAND MANAGEMENT (Commercial and Sales)	-Product Portfolio index -Sales Cycle index -Sales Close index -Customer Retention index -Sales by Customer index -Chanel Profitability index -Activity in Company Portal -Sales by Product Type -Payoff by Product -Profitability by Product index -On-Time Delivery
SUPPLY MANAGEMENT	-Order Fill Rate -Impacts Assembly index -Warehousing Cost per unit -Inventory Turnover -Supplier On-Time -Delivery Material -Quality Supply Service -Service Accuracy -Conversion Cost -Asset Utilization -Cash-to-Cash Cycle Time
CUSTOMER SERVICE	-Service level effectiveness -Time to Service index -Total Cost index
ENGINEERING	-New Products index -New Ideas Available index -Configurability index

By having a pre-defined set of metrics that can be used to translate vision to action. In this example, an industrial machinery building company has defined a high-level strategy to grow the business by delivering customized pre-configured products and services and at a reasonable price. By having a pre-defined set of performance metrics, the management team can more rapidly focus on the specific business elements necessary to achieve the strategy and formulate tactical plans to improve them. We will consider the mainly strategic implications of follow-up to these indicators.

Performance metrics facilitate strategy execution creating a set of Business Initiatives or actions adequate to meet targeted objectives:

- Develop a Web-based order fulfillment process tied to preconfigured product options
- Creating a new commercialization channel
- Creating a new warehouse for commodities
- Establish relationships with new partners in each of the areas
- Development of a production system for standardized products

Table 4: Performance Metrics Facilitate Strategy Execution.

Performance Indicators	Strategy objectives
-Product Portfolio index -Sales Cycle index -Sales Close index -Customer Retention index -Sales by Customer index -Chanel Profitability index -Activity in Company Portal -Sales by Product Type -Payoff by Product -Profitability by Product index -On-Time Delivery	-Loyalty customers -Design the best offer -Increase the work capital -Improve the customer service and operational margin -Image of Mark
-Order Fill Rate -Impacts Assembly index -Warehousing Cost per unit -Inventory Turnover -Supplier On-Time -Delivery Material -Quality Supply Service -Service Accuracy -Conversion Cost -Asset Utilization -Cash-to-Cash Cycle Time	-Operational efficiency -Increase the work capital -Improve the customer service and operational margin -Image of Mark
-Service level effectiveness -Time to Service index -Total Cost index	-Improve the customer service and operational margin -Image of Mark
-New Products index -New Ideas Available index -Configurability index	-Loyalty customers -Design the best offer -Image of Mark

## 4 CONCLUSIONS

The use of BI tools and performance metrics in is especially suitable in SME strategy growth processes. The model developed by Gartner must be very effective in most of the cases to implement the theories of Kaplan and Norton in regard to the establishment of strategic maps in the SME'S, and especially in the industrial environments, where the financial metrics are less value.

It is a critical success factor growth based on the development of an offer well suited to the customer and the creation of a brand image, for which the use of new technologies based on the Internet is crucial.

Although there have been obtained even results for the implementation of this method to the SME analyzed due to the time required for an analysis conclusively, it has been reached an agreement with the CEO to implement the system of measures and initiatives to help carry out the strategy defined, with which it sense satisfactory results in the medium term.

Finally the use of performance indicators based on the activities of business, can provide a critical path for the development of the strategies, which Gartner called "Business Initiatives".

This first analysis to develop currently in a specific industrial sector, will be subject to spread to other sectors that validated the adequacy of the model.

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