BUILDING AND USING STRATEGY MAPS TRANSLATING THE STRATEGY TO OPERATIONAL TERMS BY USING STRATEGY MAPS

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ABSTRACT

The Balanced Scorecards are used for describing a strategy in modern organizations and for measuring the results of implementing that strategy. For creating balanced scorecards we use strategy maps.

The Balanced Scorecard provides a new framework to describe a strategy by linking intangible and tangible assets in value-creating activities. The balanced scorecards can use strategic maps of cause-and-effect linkages to describe how intangible assets, combined with other assets, both tangible and intangible, create value-creating customer value propositions and desired financial outcomes.

A strategy map can be defined as a logical architecture that defines a strategy by specifying the relationships among shareholders, customers, business processes and competencies. Strategy maps provide the foundation for building balanced scorecards linked to an organization's strategy.

KEYWORDS*: strategy maps, operational terms, balanced scorecards.*

Introduction

Why the organizations do have difficulty in implementing well-formulated strategies? One problem is that strategies – the unique and sustainable ways by which organizations create value – are changing, but the tools for measuring strategies didn't follow them. In the industrial economy, companies created value with their tangible assets, by transforming raw materials into finished products. Nowadays, opportunities for creating value are shifting from managing tangible assets to managing knowledge-based strategies that deploy an organizations intangible assets: customer relationships, innovative products and services, high-quality and responsive operating processes, information technology and databases, employee capabilities, skills and motivation.

1. Translating strategy to operational terms

There are a lot of definitions for strategy, as there are a lot of strategy gurus. Why ? An explanation could be, that, in this era of knowledge workers, strategy must be executed at all levels of organization. People must change their behavior and adopt new values. Strategy can not be executed if it is not understood, and it can be understood only if it is described and explained. In order to create a management process to implement strategy, a reliable and consistent framework has to be defined. The financial framework worked well when competitive strategies were based on acquiring and managing tangible assets. But, in today's economy, sustainable value is created from developing intangible

assets, such as skills and knowledge of the workforce, the information technology that supports the workforce and links the companies to their customers and suppliers, and the organizational culture that encourages innovation, improvement and problem solving. Each of these intangible assets contributes to the value creation. Let's consider the following aspects in value creation:

1) Value is indirect

Intangible assets seldom have a direct impact on the financial outcomes of revenue and profit. Improvements in intangible assets affect financial outcomes of revenue and profit, through chains of cause-and-effect relationship involving two or more intermediate stages. Examples that show the value is indirect:

- Investments in employee training lead to improvements in service quality
- Better service quality leads to higher customer satisfaction
- Higher customer satisfaction leads to increased customer loyalty
- Increased customer loyalty generates increased revenues and margins

The financial outcomes are separated causally and temporally from improving the intangible assets. The complex linkages make it impossible to place a financial value to the assets: "workforce capabilities".

2) Value is contextual

The values of intangible assets depend on organizational strategy and context. They have to be evaluated together with the process that transforms them into customer and financial outcomes. The value of most intangible assets, as ex. : a very professional worker, depends critically on the context : the organization, the strategy, the complementary assets in which the intangible assets are deployed.

3) Value is potential

Companies can measure the costs of trainings, the spending on databases, the advertising to create brand awareness. But such costs are poor approximations of any realizable value created by investing in these intangible assets. Organizational processes, such as design, delivery and services, are required to transform the potential value of intangible assets into products and services that have tangible value.

4) Assets are bundled

Intangible assets don't have value by themselves (exception : brand names, that can be sold). They have to be bundled to other assets, tangible or intangible for creating value. Example: a new growth oriented sales strategy requires new knowledge about the customers, new training for sales employees, new databases, new information systems, a new organizational structure, and a new compensation program for the employees and for the coworkers. Investing in just one of these capabilities, or in some of them, would cause the new strategy to fail. The value does not reside in any individual intangible asset, but from the entire set of intangible assets, along with a strategy that links them together.

2. Building strategy maps

A strategy scorecard, containing four perspectives, can be built through executive interviews and interactive workshops. Strategy scorecards can be further mapped into a framework, called strategy map. A strategy map for a balanced scorecard makes the strategy's hypothesis. Each measure of the balanced scorecard becomes a chain of cause-and-effect logic that connects the desired outcomes from the strategy with the drivers that will lead to the strategic outcomes. The strategy map describes the process for transforming intangible assets into tangible customer and financial outcomes. It provides executives with a framework for describing and managing strategy in a knowledge economy.

A balanced scorecard strategy map is a generic architecture for describing a strategy. The cause-and-effect logic of this design constitutes the hypotheses of the strategy.

1. The financial perspective contains two themes : growth and productivity, for improving shareholder value.

For example, for a fashion retailer :

- The revenue growth strategy means to achieve aggressive, profitable growth by increasing the share of the customer's closet
- The productivity strategy means to improve operating efficiency through real estate productivity and improved inventory management.

2. The customer perspective shows how the customers can be satisfied, so that they produce growth.
3. The internal perspective shows the ways and the compartments that can deliver the value proposition to customers and drive the financial productivity theme.
4. The learning and growth perspective shows how learning leads to a better internal organization.

Fig. 1 Perspectives of a strategy map

Strategy is a step in a Continuum

Strategy does not stand alone as a management process. A continuum exists that begins with the mission of the organization, mission that should be translated so that the actions of individuals are aligned and supportive of the mission. The management system should ensure that this translation is effectively done. Strategy is one step in a logical continuum that moves the organization from a high level mission statement to the work performed by the front-line and back-office employees.

The mission is the starting point for the strategy and defines why the organization exists.

Fig. 2. Translating a mission into desired outcomes

Strategy is a hypothesis

Michael Porter describes the foundation of strategy as the activities in which an organization elects to excel.

The essence of strategy is choosing to perform activities differently from competitors as to provide a unique value proposition.

The balanced scorecard is a descriptive framework and builds a view of strategy as hypotheses. Strategy implies the movement of the organization from its present position to a desirable, but uncertain future position. As the organization has never been in this future position, its intended pathway involves a series of linked hypotheses. The scorecard enables the strategic hypotheses to be described as a set of cause-and-effect relationships that are explicit and testable. The strategic hypotheses require identifying the activities that are the drivers (or lead indicators) of the desired outcomes (lag indicators).

Fig. 3 illustrates the architecture of a balanced scorecard. The scorecard defines a set of near-term objectives and activities, called the drivers, that will differentiate a company from its competitors and create long-term customer and shareholder value, the outcomes. The process begins in a top-down fashion, defining the strategy from the perspective of the shareholder and customer. It asks:

1. What are the financial objectives for growth and productivity ? What are the major sources for growth? - Once the financial objectives are specified, the process continues by asking:

2. Who are the target customers that will generate revenue growth and a more profitable mix of products and services? How do we measure success with them? – The customer perspective includes also value proposition, which defines how the company intends to attract, retain and deepen the relationships with targeted customers.

Financial and customer objectives are desired outcomes, but they don't explain how to achieve them.

3. The internal business processes such as product design, brand and market development, sales, services, operations and logistics define the activities needed to create the desired customer value proposition and the desired financial outcomes.

4. The learning and growth perspective recognize that the ability to execute internal business processes in new and differentiated ways will be based on the organization infrastructure: the skills, capabilities, and knowledge of employees; the technology they use; the climate in which they work.

The architecture of a balanced scorecard has a top-down logic, starting with the desired financial and customer outcomes and then moving to the value propositions, business processes and infrastructure that are the drivers for change. The relationships between the drivers and the desired outcomes constitute the hypotheses that define the strategy.

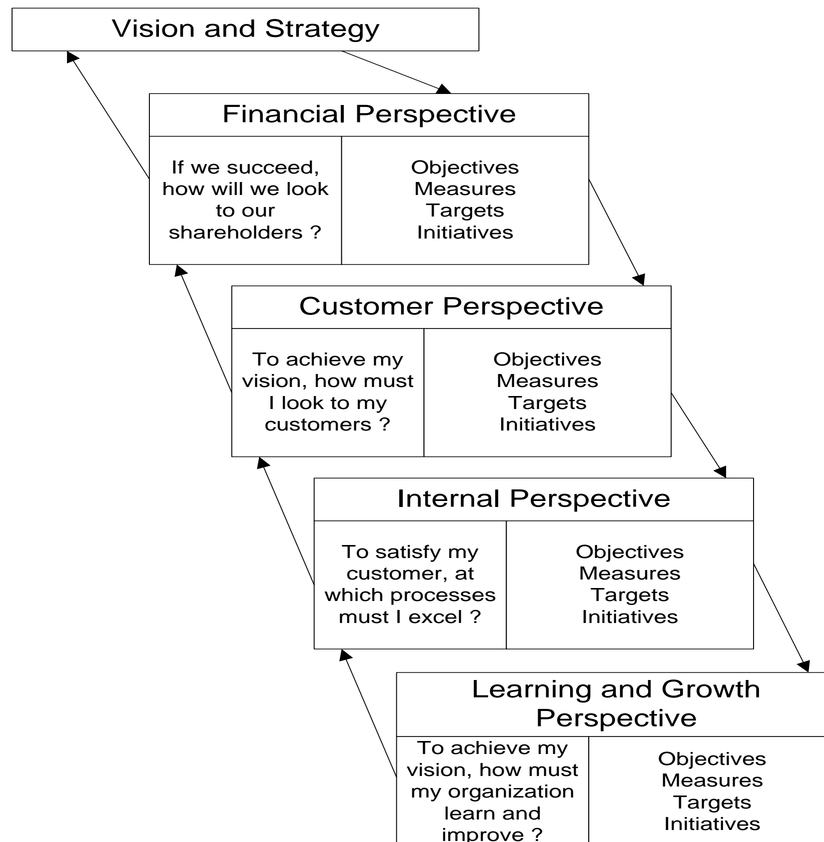

Fig.3. Defining the Cause-and-Effect Relationships

Strategy consists of complementary strategic themes

Executives separate their strategies into several focused themes.

Example 1: an insurance company built its strategy around the following strategic themes:

- Improve operating efficiency

- Grow profitable premiums in core segments
- Develop a new fee-based solutions business

An agribusiness firm defines four themes:

- Improve operating margin by reengineering supply chain processes
- Reduce the cost of capital employed
- Increase sales through improved retail channel alliances
- Improve sales by helping farmers with new agronomic practices

The strategic themes reflect the executives' view of what must be done internally to achieve strategic outcomes. The themes are related to internal processes. Strategic themes provide a way to segment the strategy into several categories:

- Build the franchise : the value creation; developing new products and services and penetrating new markets and customer segments
- Increase customer value : expand, deepen or redefine relationships with existing customers (ex: cross sell services, become trusted advisor and consultant, transform unprofitable customers) through multiple sales cycles
- Achieve operational excellence: internal productivity management and supply chain management that enables the organization to provide efficient, zero-defect, and timely production and delivery of existing products and services to customers. Also, the management of asset utilization and resource capacity.
- Be a good corporate citizen: manage relationships with external, legitimizing stakeholders.

Each of the four strategic themes provides a "pillar" for the strategy, and contains its own strategic hypothesis and its own set of cause-and-effect relationships, and its own scorecard.

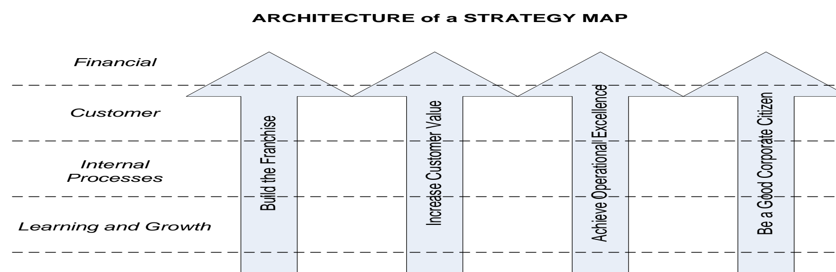

Fig. 4. Architecture of a Strategy Map

Strategy balances contradictory forces : the financial perspective

The development of a strategy map proceeds in a top-down fashion. It begins with a high-level financial strategy for growth, profitability and shareholder value. Creating shareholder value is the outcome that every strategy seeks to accomplish. Some financial measures, like return on investment (ROI) or ROCE, have been used as financial objective. More recently, companies have adopted various shareholder and value-based metrics such as EVA, cash-flow ROI, and variations of discounted cash flow.

EVA as a financial metric, recognizes an explicit capital charge for a business. The capital charge is calculated by applying a business-specific (and perhaps asset-specific) cost of capital to an organization's recorded asset. Thus EVA = accounting net income – the capital charge. Businesses that are earning above their risk-adjusted cost of capital are creating shareholder value, whereas businesses earning less their cost of capital are

destroying shareholder value. EVA addresses discourage business from investing in projects that return above the cost of capital , but below the apparent average cost of capital calculated by dividing net income by assets employed. EVA also addresses the defect in pure accounting income calculation that ignores the cost of assets employed to generate accounting profits.

Whether companies use ROI (return on investment), ROCE, EVA (evaluate value added) or some other value-based metric as the high-level financial objective, they have two basic strategies for driving their financial performance: growth and productivity. The revenue growth strategy focuses on developing new sources of revenue and profitability. It has two components :

- Build the franchise – develop new sources of revenue from new markets, new products or new customers. This dimension of strategy implies the greatest amount of change and requires the longest time to execute.
- Increase customer value – work with existing customers to expand their relationship with the company. This component is of intermediate term in duration and focuses on cross selling and solution development to deepen customer relationships.

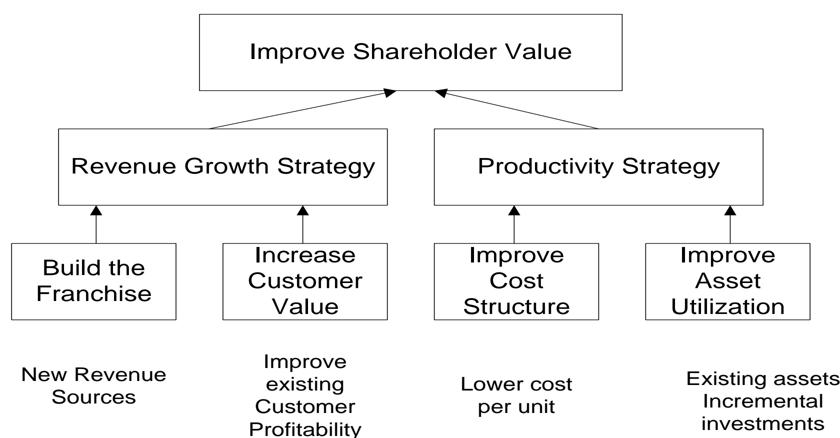

Fig.5. Building the Strategy Map: The Financial Perspective

The productivity strategy features the efficient execution of operational activities in support of existing customers and focus on cost reduction and efficiency. It has two components:

- Improve cost structure – lower the direct costs of products and services, reduce indirect costs, and share common resources with other business units.
- Improve assets utilization – reduce the working and fixed capital needed to support a given level of business by greater utilization, more careful acquisition or disposal of parts of the current and fixed asset base.

The productivity strategy yields results sooner than the growth strategy. But the balanced scorecard highlights the opportunities for enhancing financial performance through revenue growth, not just by cost reduction and asset utilization. Also, the balance scorecard helps to ensure that cost and asset reduction do not a compromise a company's growth opportunities. Financial metrics, such as process costs (used in a well-functioning, activity-based costing system) and productivity ratios provide reporting framework for a pure productivity strategy.

Organizations choose a balance between the contradictory levers of growth and productivity.

Companies that are in early-staged startup mode or see opportunity for extremely rapid growth will adopt the revenue growth strategy. These companies spend heavily to develop and introduce new products and services and to extend into new markets and applications.

Companies in their mature end of their lifecycle will emphasize the cost reduction and asset utilization components, as there are not opportunities to find new customers or expand into new markets. Most companies are in the middle of their lifecycle and employ a "profitable growth" strategy that requires a balance of the contributions from the revenue growth and from cost reduction and productivity. These companies have a balance of measures across the two generic financial strategies.

The strategic themes relate to the two financial strategies: "building the franchise" and "increasing customer value", will drive the financial growth strategy. The "achieving operational excellence" will drive the productivity strategy. But the relationship is not one-to-one. Extending the customer base can contribute to lower unit costs, and operational excellence can lead to a better customer buying experience.

Strategy describes a differentiated value proposition

The core of any business strategy connecting a company's internal processes to improved outcomes with customers, is the "value proposition" delivered to the customer. The value proposition describes the mix of product, price, service and image that the provider offers its customers. The value proposition determines the market segments to which the the strategy is targeted and how the organization will differentiate itself , relative to the competition. A clearly stated value proposition provides the target on which the internal business processes and infrastructures are focused. The development of this layer of the strategy map forces the executives to clarify its understanding of the customer and is the most valuable part of a balanced scorecard design process.

As described by Treacy and Wiersema, the organization uses to differentiate itself in the marketplace one or more of the following three different strategies :

1. Product leadership – "a product leadership company pushes its products into the realm of the unknown, the untried, or the highly desirable".

2. Customer intimacy – " a customer intimate company builds bonds with customers; it knows the people it sells to and the products and services it needs".

3. Operational excellence – "Operationally excellent companies deliver a combination of quality, price and ease of purchase that no else can match".

The successful companies excel at one of these three dimensions of value while maintaining "thresholds standards" on the other two.

Fig. 6 shows the template that translates these generic strategy concepts into the strategy maps used for balanced scorecard design. Depending on the strategy, different aspects of the value proposition become more important then the others. Companies following an operational excellence strategy need measure very well the price, customer-perceived quality, and lead time and on-time delivery for purchasing. Companies following a product leadership strategy must excel at functionality, features, and performance of their product or service. Companies following a customer intimacy strategy will focus on the quality of their relationships with the customers and the completeness of the solution they offer to the customers.

OPERATIONAL EXCELLENCE STRATEGY

Product/ Service Attributes				Relationship		Image
Price	Quality	Time	Selection	--	--	Brand

Quality and selection in key categories with unbeatable prices — *Smart shopper*

CUSTOMER INTIMACY STRATEGY

Product/ Service Attributes				Relationship		Image
--	--	--	--	Service	Relationship	Brand

Personal service tailored to produce results for customer and build long-term relationship — *Trusted Brand*

PRODUCT LEADERSHIP STRATEGY

Product/ Service Attributes				Relationship		Image
--	--	Time	Functionality	Service	Relationship	Brand

Unique products and services that "push the envelope" — *The Best Product*

Fig. 6 – Building the Strategy Map : The Customer Value Proposition

Strategy aligns internal activities to the value proposition

The customer value proposition and how it translates into growth and profitability for the shareholders is the foundation of strategy. Strategy must not only specify the desired outcomes, which are customer value proposition and financial outcomes ; it must also describe how they will be achieved. Porter claims that "activities are basic units of competitive advantage" [1]. The art of having a successful and sustainable strategy is ensuring alignment between an organization's internal activities and its customer value proposition.

The activities of an organization, creating the value chain, can be grouped into four business processes, as shown in fig. 7.

All of the processes have to be well performed by the organization, but they have to excel at the one process that has the maximum impact on its customer value proposition. The other processes may be supportive.

A product leadership strategy would require a leading-edge innovation process that created new products with best-in functionality and brought to market rapidly. Customer management processes might focus on rapid acquisition of new customers to consolidate the early mover advantage that a product leader creates.

On the other hand, a customer intimacy strategy requires excellent customer management process, such as customer relationship and solution development.

A strategy for operational excellence emphasizes measures of cost, quality, and cycle time of operating processes, supplier relationships, and speed and efficiency of supply and distribution processes.

Many companies, espouse a strategy of innovation or developing value-adding customer relationship, but choose internal business processes measurements that focus on cost and quality of manufacturing processes. These companies don't connect their measurements with their strategy.

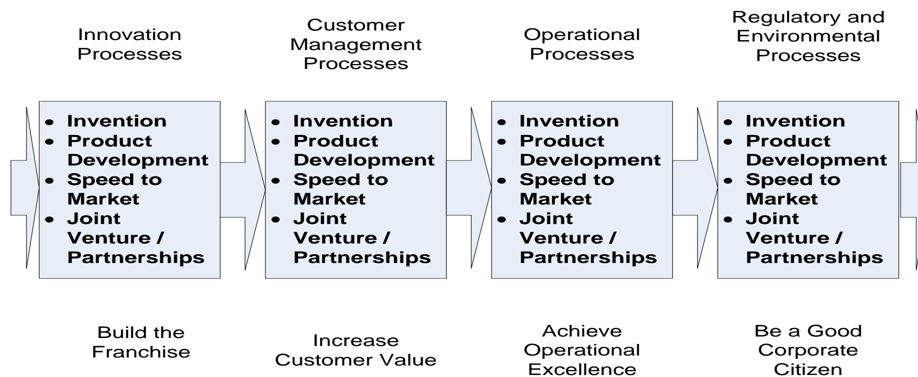

Fig. 7. A generic organization's value chain

Fig. 7 and 8 provide a diagnostic for companies to validate that the objectives and measures they select for their internal business process perspective match the priorities of their strategy.

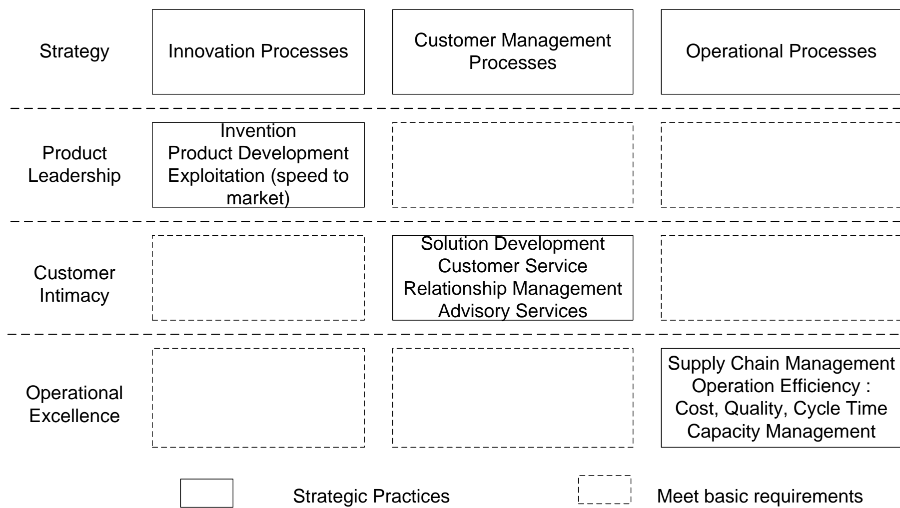

Fig. 8 – Identifying Strategic Internal Business Processes

Strategy transforms intangible assets

The learning and growth strategy defines the intangible assets needed to enable organizational activities and customer relationships to be performed at a higher level of performance. There are three principal categories for this perspective:

1. Strategic competencies. The strategic skills and knowledge required by the workforce to support the strategy.

2. Strategic technologies. The information systems, databases, tools, and network required to support the strategy.
3. Climate for action. The cultural shifts needed to motivate, empower, and align the workforce behind the strategy.

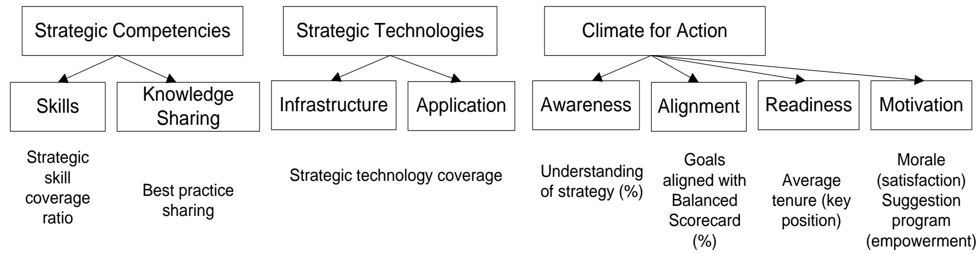

Fig.9 - The Learning and Growth Perspective

The learning and growth strategies are the true starting point for any long-term, sustainable change.

By treating the learning and growth strategy after the three other perspectives have been defined, executives can align their human resources, IT, and corporate climate objectives with the requirements from the strategic business processes and customer differentiation strategy.

In knowledge-based organizations, the ability to improve business processes, consistent with a customer value proposition, depends on the ability and willingness of individuals to change behavior and focus their knowledge on the strategy.

The objectives of knowledge management strategies are:

Customer Intimacy	Product Innovation	Operational Excellence
Capture knowledge about customers Understand customer needs Empower front-end employees with information they need Make company knowledge available to customers	Reduce time to market Commercialize new products faster Ensure the ideas flow (from customer to R&D) Reuse what other parts of the company have already learned	Reduce cost Improve quality Move know-how from top-performing units to others

Strategy map templates

1. The financial perspective is realized through :
   a. Growth from:
      - Fundamentally new sources ("build new franchise")
      - Expanded relations with existing customers ("increase customer value")
   b. The productivity is achieved through expense and asset management.
2. The customer perspective, the heart of the strategy, defines how growth will be achieved. The value proposition defines the specific strategy to compete for new customers or increased share of existing customer businesses.
3. The internal perspective defines the business processes and the specific activities that the organization must master to support this customer value proposition.

4. The learning and growth perspective defines the competencies, know-how, technology and climate needed to support these high-priority processes and activities.

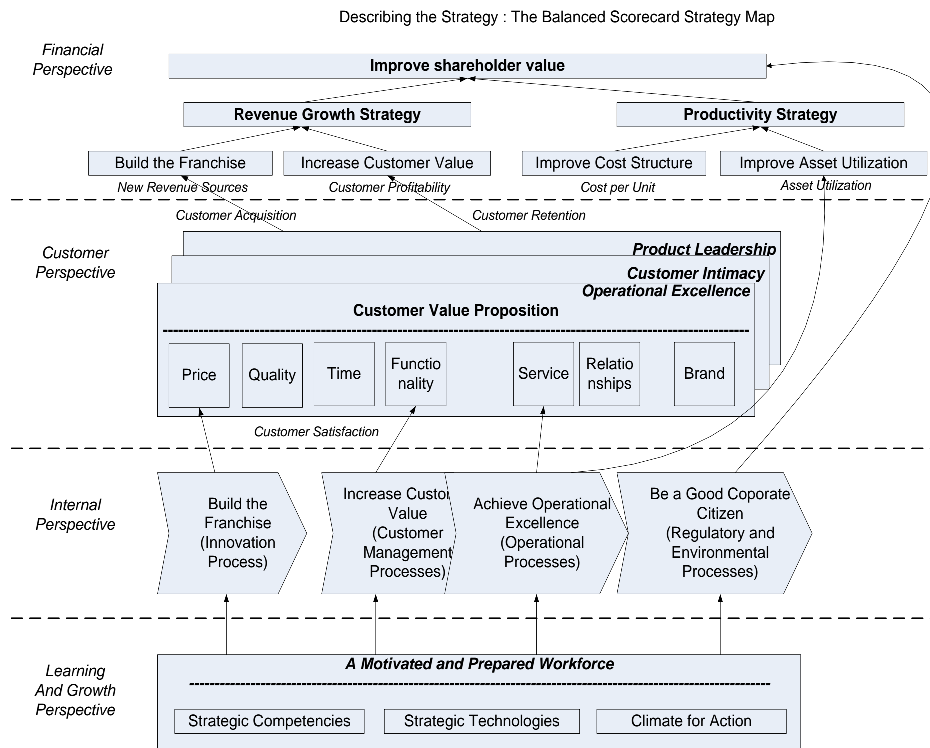

Fig.10 - Describing the Strategy : The Balanced Scorecard Strategy Map

When properly constructed, the strategy maps portrays an integrated and logical description of how the strategy will be accomplished.

The template is a starting point for the design process of a strategy. Templates also foster a cause-and-effect mentality that encourages more innovative approaches to strategy implementation.

Templates are also useful to analyze or reverse-engineer an existing scorecard. A well-designed Balanced Scorecard should tell the story of the strategy. Thus if you were to begin with a scorecard, you should be able to reverse the logic and deduce the strategy.

Implications for measurement systems

Performance measurement systems typically are aggregations of standalone measures, such as return on capital, customer satisfaction, and defect rates. But stand-alone measures are limited in their ability to describe and manage an organization's value-creating processes. For example, a human resource measure, such as employee turnover, can be refined by measuring turnover in various employee categories and degrees of criticality for the organization. A decrease of the employee turnover in a critical category can be very useful to the organization. The benchmarked performance for retention of key employees does not indicate anything about the value of decreasing key employee turnover. The value comes from noting a correlation between employee retention and customer

satisfaction and loyalty and increased revenue. Organizational value comes not from increasing individual measures of an intangible asset or internal process, but from linking changes in such measures to customer and financial outcomes.

The cause-and-effect linkages in Balanced Scorecard strategy maps describe the path by which improvements in the capabilities of intangible assets get translated into tangible customer and financial outcomes.

For example, if the strategy is to improve the return-on capital financial performance, it can be realized through 2 strategic themes: operational excellence – reducing cost and improving quality – and customer management – developing long-term partnerships with targeted customers. Both themes required new capabilities and attitudes on the part of the workforce.

Measuring organizational performance requires such casual chains of value creation. Stand-alone measures cannot capture the means by which improvements in intangible assets and internal processes lead to increased performance in outcome measures. The linkage in strategy maps provide the recipes for such transformations and value creation.

Stakeholders and key performance indicator scorecards

Many organizations say they have a Balanced Scorecard because they use a mixture of financial and nonfinancial measures. Such measurement systems are more balanced then ones that use only financial measures. Yet, the underlying assumptions and philosophies that govern many of these scorecards are different from the strategy scorecards.

In practice, two other scorecard types are used : the stakeholder or constituent scorecard and the key performance indicator (KPI).

Stakeholders (constituent) Scorecards

The stakeholders scorecard identifies the major constituents of the organization – stakeholders, customers, and employees – plus often the suppliers and the community. The scorecard defines their goals and develops possible targets and measures for them.

For example, a company for selling goods, can use the following themes :

- A compelling place to shop
- A compelling place to work
- A compelling place to invest

This means that the company builds its measurements around three dominant constituents: customers, shareholders and employees, using satisfaction measures for customers and employees. But from these scorecards, any indication of how these balanced scorecards are to be achieved, is missing. A vision describes a desired outcome; a strategy must describe how that vision will be achieved and how employees, customers and shareholders will be satisfied. Thus a constituent score cars is not adequate to describe the strategy of an organization and therefore is not an adequate foundation on which to build a management system.

The critical missing element from the constituent scorecard is the identification of drivers that will achieve the goals. In a well-constructed strategy scorecard, the value proposition in the customer perspective, all the processes in the internal perspective, and the lerning and growth perspective components of the scorecard define the *how* , that is as fundamental to the strategy as the outcomes that the strategy is expected to achieve.

Stakeholder scorecards are used effectively in practice, being the first step on the road of a strategy scorecard.

KPI Scorecards

KPI scorecards are found most frequently in manufacturing and health care organizations, especially those that have been implementing total quality management (TQM). The TQM approach generates many measures to monitor their processes and progress. When migrating to "Balanced Scorecard", they build on the already existing base , by classifying the many existing measurements into the four Balanced Scorecard categories (financial, customer, internal process and learning). KPI scorecards are helpful for departments and teams when a strategic program already exists at a higher level. Unless the link to strategy has been clearly thought, the KPI scorecard can be a dangerous illusion.

Only a strategy scorecard, build using the principles articulated before and embedded in a strategy map, can create a strategy-focused organization.

Conclusions

Balanced Scorecards should not just become a collection of financial and non-financial measures, organized into three to five perspectives. The best Balanced Scorecard reflects the strategy of the organization. A good test for that is if you can understand the strategy by looking only at the scorecard. Many organizations, especially those that create constituent/ stakeholder scorecards or KPI scorecards, fail this test.

Strategy scorecards, along with their graphical presentation on strategy maps provide a logical and comprehensive way to describe strategy. They communicate clearly the organization's desired outcomes and its hypothesis about how these outcomes can be achieved. They enable all organizational units and employees to understand the strategy and identify how they can contribute by becoming aligned to the strategy. With the Balanced Scorecard that tells the story of a strategy, we have a reliable foundation for the design of a management system to create Strategy-focused Organizations.

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