Efficiency versus Effectiveness

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Abstract

Even though efficiency and effectiveness are central terms in assessing performance, managers rarely understand the difference between efficiency and effectiveness. Dealing with efficiency and ignoring effectiveness, companies neglect the achievement of differentiation and innovation. The present article describes efficiency as a necessary condition or hurdle, and effectiveness as the company's ability to generate a sustainable growth in its surrounding business network.

Introduction

Efficiency and effectiveness are central terms in assessing and measuring the performance of organisations, as well as inter-organisational arrangements such as strategic alliances, joint ventures, sourcing as well as outsourcing agreements. Despite the obvious relevance of assessing and measuring performance, it appears that business managers rarely understand the exact meaning of efficiency and effectiveness and rarely assess the full impact of their actions on key financial indicators (Barwise, Marsh, and Wensley, 1989; Myers, 1999). And yet managers are often reassured by efficiency indicators achieved by cost cutting, outsourcing activities or under-funding marketing or research & development, even if these indicators are not measures of effectiveness in the marketplace (Ambler, 2003).

Dealing with efficiency and ignoring effectiveness, many company-centred studies focused on issues of competitive advantage through value appropriation rather than on issues of creating new growth opportunities within business networks. This propensity to efficiency may be attributed to the fact that purposive business action is far more applicable to efficiency gains than to the effectiveness by creating new sources of value in a business network (Moran and Ghoshal, 1999).

This study develops a theoretical structure that links efficiency and effectiveness and justifies the need for new empirical research. Therefore, the present study attempts to provide an answer to following research questions: What is the reason behind this propensity to efficiency? Is there an efficiency trap? Many contemporary methods such as target costing and activity-based costing or analysis of ratios, such as operating margins, are useful tools in promoting efficiency in business but do they tell us whether this business is effective? What do we mean by effectiveness? What can we learn from the inherent conflict between efficiency and effectiveness and what are the implications for research?

In this article I attempt to describe and explain the inherent conflict between efficiency and effectiveness and argue that current obsession with efficiency gains prevents managers from achieving differentiation and a sustainable growth. Taking a position in favour of effectiveness, I describe efficiency as a necessary condition or hurdle, and effectiveness as the company's ability to generate a sustainable growth in its surrounding business network. However, companies need to pay equal attention to efficiency and effectiveness. It is only profitable growth that is sustainable. The implication of this perspective is that managerial acting needs to be guided by its consequences or ends in the surrounding network and not by its means.

The structure of the present article is the following: I will first describe the challenge that companies face today. Making sense of the concept of efficiency and effectiveness, I will discuss their relevance and the principal factors linking each concept. Then I will set out how managers think about efficiency and effectiveness and describe a number of key indicators that managers use to measure and assess their performance. I will also provide an illustrative case that describes the *efficiency trap* and explain why it is important to focus on the effectiveness of action in the surrounding network. Furthermore, the present article will set out a research agenda and will define research questions to advance the study of organisational and inter-organisational performance.

Dealing with efficiency and ignoring effectiveness

The challenge that managers face today is to find business opportunities that raise the market value of their companies above the cost of capital that they needed to finance their endeavours. This challenge is best captured by the principle that companies need to embrace business opportunities that consistently generate a return on assets that exceeds their financing cost. It is often the case that companies success of meeting the above challenge is characterized by the term *efficiency* rather effectiveness. A company, however, can be efficiently run without being effective in embracing business opportunities inherent in its surrounding network. Efficiency is not a measure of success in the marketplace. It is rather a measure of operational excellence or productivity. It is, therefore, concerned with minimizing costs and improving operational margins. On the other hand, effectiveness is linked to a

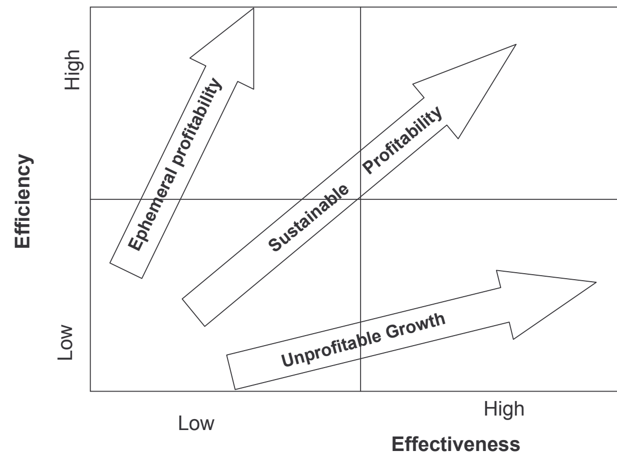
company's ability to design a unique model of embracing business opportunities through exchange relationships. Effectiveness is, therefore, related to the company's own recipe to generate a sustainable growth in its surrounding business network. Gaertner and Ramnarayan (1983) argue that effectiveness is not a characteristic of organizational outputs but a rather a continuous process relating the organisation to its constituencies; it is negotiated and rather than produced. An effective organization is one that is able to create accounts of itself and of its activities that relevant constituencies find acceptable. The accounts may be for various purposes to various audiences and for various activities.

Advancing criteria for determining organizations' efficiency in the marketplace and the effectiveness with which the organizations' offering is rendered, Clark (1921) links efficiency and effectiveness by making the cogent argument that a system is "inefficient when it is cheap but ineffective". Nonetheless, the large majority of economic and business studies have dealt with issues of *efficiency* and ignored *effectiveness*. Describing the process of economic development as the interplay between markets and firms, Moran and Ghoshal (1999) maintain that historically firm-level theories focused on issues of competitive advantage through value appropriation rather than on issues of creating new sources of value. The historical propensity may be attributed to the observation that purposive business action is far more applicable to operational efficiency gains than to the effectiveness in creating new sources of value in the market. The implication of Moran and Ghoshal's (1999) argument is that if an organization does not adequately enable new possibilities it is likely to witness its own decline. Decline will come if someone else is better structured to embrace the possibilities that emerge.

The same observation seems to apply to management control systems. Gordon and Boland (1998) report that while effectiveness issues are not fully included in management control systems for private companies, in the not-for-profit sector measures of effectiveness are beginning to be examined. The existing accounting framework, however, contributes to our understanding of the interplay between effectiveness and efficiency by offering us the concept of the return on assets. The concept of *return on assets* could be expressed as the product of efficiency and effectiveness. Companies use their assets that comprise their own equity and capital that they have borrowed (Myers, 1977, 1984; March, 1982; Stiglitz, 1988; Harris and Raviv, 1991; Hawawini and Viallet, 1999) to generate sales revenues. In order to generate revenues, companies implement business activities that produce costs and expect that these costs will be sufficiently low to allow them to make profits. Moreover, the assets that they utilize are not free of charge; there is an opportunity cost of capital (Modigliani and Miller, 1958) that is the cost of not investing in other business opportunities of similar systematic risk. Therefore, the opportunity cost of capital varies from action to action, depending on risk. The concept of the return on assets can used to assess the financial implication of a company's action in the marketplace (Corstjens and Corstjens, 1995). Achieving a return on assets requires concerted efforts that involve both gearings: efficiency as well as effectiveness (please see figure 1).

FIGURE 1

Efficiency versus Effectiveness



Focusing on efficiency and neglecting effectiveness would result in an ephemeral profitability. In contrast, focusing on effectiveness and neglecting efficiency may result in an unprofitable growth if the opportunity cost of capital is higher than the resulting profits. A balanced approach that aims at high efficiency and high effectiveness would require organizations to “stretch” their endeavours. Companies’ endeavours, however, would need an integrative framework of organizational action that enables them to create new sources of value inherent in business networks and create superior levels of sustainable profitability.

Creating new sources of value requires a different horizon than increasing profitability. Companies with a myopic time horizon may trade off a higher profitability in the short term against growth potentials in the long term (Johnston and Kaplan, 1987; Laverty, 1997). Describing how the quest for efficiency corroded the market (Healy and Palepu, 2003) proposed, among other measures, the introduction of mechanisms that encourage long-term investing. In their view the most effective measure would be to “reduce investors’ incentive to trade actively” (2003:84). The question that companies need to ask when they evaluate new business possibilities is whether these initiatives will grow their customer equity. This is conceptually equivalent to assessing the value of portfolio of income-generating properties which is determined by the cost of acquiring customers and the expected future stream from retained customers (Blattberg and Deighton, 1996).

While companies in general explore the implications of embracing new business opportunities, they usually do not consider the outcome of customer equity if they do not invest in acquiring customers. Hence, companies often assume that the base case in their investment valuation is the “continuation of status quo” (Barwise, Marsh, and Wensley, 1989:86). This is a rather simplistic assumption because it largely ignores that a company is embedded in a network of business relationships and that changes within this network induced by competitors or customers will surely affect the company. Barwise et al. (1989) also claim that assuming a continuation of status quo, companies ignore the impact of changes such as improvement operational efficiency that they are implementing anyway.

As a number of companies systematically underestimate the value of growth and hence risk the sustainability of their business while other companies neglect the impact of operating margins, Mass, (2005) develops a valuation method that helps to understand and estimate the relative value of growing their business. The incremental value of a percentage point of growth could be expressed as multiple of the value of a percentage point increase of the operating profit margin. The higher the multiple, the more valuable is business growth for a

company (Mass, 2005: 104). In his study of the relative value of growth in some of the most-well known multinational companies, a number of companies such as Hewlett-Packard and Wal-Mart displayed a low multiple of 1.2 and 1.6 respectively while other companies surprised by their high multiples. For example, Procter & Gamble' multiple was 7.2, General Electric' was 11.4 and Pfizer' was 12.8. A multiple of 12 implies that a company could create twelve times more shareholder value by achieving a percentage point (1%) growth compared to the shareholder value which it would create by improving operating margin by one percentage point (1%). This of course, presupposes that the company's management can convinced the market to expect one percentage point incremental growth. In Mass' study (2005) achieving a point of sustainable growth appears to be more difficult that achieving an improvement of one point in operating margin. This inherent difficulty may explain how manager often choose the easiest way of improving the operational efficiency of their companies instead of generating growth of their business organically.

Barney (1986) describes that in general it is difficult to buy goods and services for less than they are worth and that any attempt to explain superior profitability must account for why the assets supporting such profitability could have been acquired for a price below their rent generating capacity. Inspired by the work of Barney (1986), Denrell, Fang and Winter, (2003) start their analysis of the economics of strategic opportunities from the observation that a profitable business opportunity exists whenever prices fail to reflect the value of a resource's best use. The discovery of profitable business opportunities is, however, a matter of serendipity and a matter of access to idiosyncratic assets of other companies. Therefore, companies need to be concerned with the task of developing and managing assets that arise from the commingling of the organization with entities in its surrounding business environment (Srivastava, Shervani, and Fahey 1998). Profitable opportunities require effort and luck as well as alertness and flexibility. Each company is shaped by its own capabilities and its own access to idiosyncratic assets of other firms. Assets are complex and multidimensional. They comprise tangible resources such as buildings or inventories but also intangibles such as brands (Barwise et al., 1990; Ambler, 1995; Longman, 1995) as well as business relationships or access to business networks, which may not be recognized by potential buying or selling organizations. Therefore, information asymmetry and symmetric ignorance imply massively imperfect markets (Akerlof, 1970; Dierickx and Cool, 1989; Stiglitz, 1993; Harris and Raviv, 1996) where business opportunities are not equally visible to all actors. Denrell et al. (2003) provide evidence that profitable opportunities are specific to organizations that seize them and they are usually specifically prepared for them by their pre-history. In their view (Denrell et al., 2003: 988-989), the "crucial missing element in the resource valuation story is the idiosyncratic information and capabilities of an individual firm" and thus "the challenge of strategy is the challenge of assessing the opportunities that open to an idiosyncratically positioned actor in a changing environment". As resources and capabilities are dispersed in business networks, it appears that companies, which are able to gain an on-going access to idiosyncratic assets of other companies, are better able to seize profitable business opportunities.

What do managers think?

It can be posited that that notion of efficiency connotes among many managers a sense of "cost elimination" or "reduction of spending". Hence, the quest for efficiency can be seen as a problem of how to maximise saving potentials. Even though there are many alternative routes to generate savings, managers may prefer the easiest way, which is through outsourcing and budget cuts in marketing, research & development. Information technology, for example, was also seen during the 1990s as a major vehicle to increase efficiencies. Many business managers, sales managers or various service providers were suddenly able to offer their services from their own home and companies were able to reduce their fixed operating expenses. This cost-driven understanding of efficiency may be attributed to an implicit assumption that price is an exogenous parameter determined by market forces while cost is an endogenous variable that needs to be minimized. Effectiveness on the other hand is not a term that is frequently used. The notion of effectiveness may be associated with the managers' idiosyncratic understanding of "impact", "result" or "efficacy". For example, while for finance managers effectiveness will be indicated by the return on investment, for marketing managers, effectiveness may mean advertising awareness or market share, and

for sales and business managers, effectiveness is directly related to sales volume. Moreover, managers may deal with the terms efficiency and effectiveness in different time horizons. Effectiveness may be seen as long-term while efficiency may be seen as a short-term achievement. For instance, sales or business managers who are responsible for a particular segment of a business may act within a long-term horizon of growing their sales volume. Similarly, marketing managers responsible for a number of products appear to act within a long-term horizon of building advertising awareness and market shares. When it comes to efficiency, it appears that managers are primarily concerned short-term cost cutting to meet quarter profits and operating cash flow. This reflects senior managers' remuneration, which is often linked to return on equity and not necessary to profitable growth.

The efficiency trap

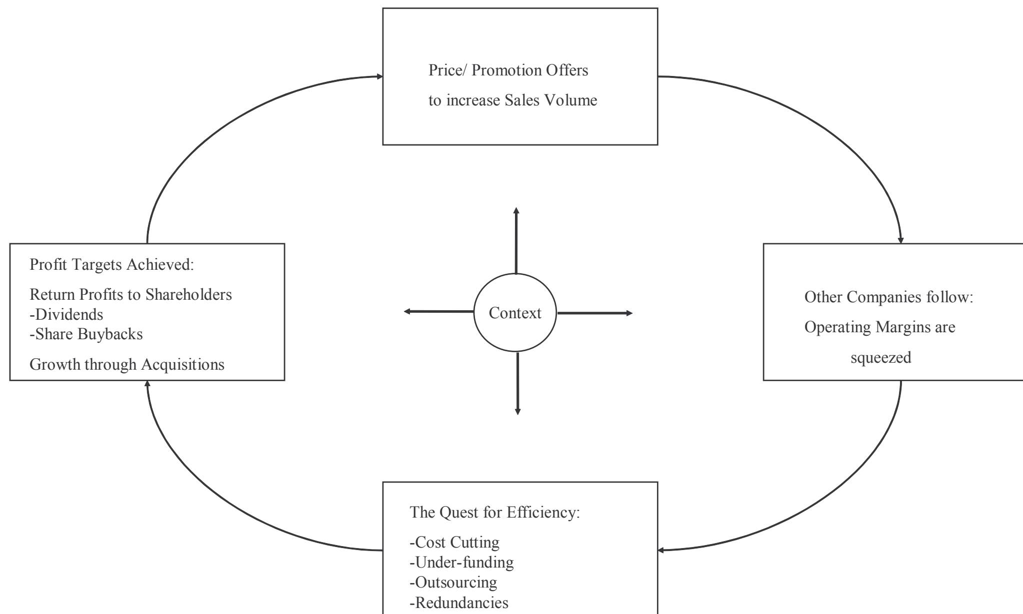
In many different industries, traditional European companies such as Siemens, Volkswagen, BASF, Allianz or US companies such as Ford, GM, Boeing, DuPont, Coca Cola, Xerox, Toys "R" US, H.J. Heinz, Viacom and AT&T, MCI (see Fortune, 2005) face a problem of low growth. Consider the case of Jacobs Suchard, a Swiss fast-moving consumer goods company that owned some of the leading brands in chocolate and coffee business such as Milka, Toblerone and Jacobs. In 1990, Philip Morris acquired Jacobs Suchard for 6,5 billion SF and in the following years integrated the new confectionary and coffee business in its Kraft Food division. Competition for shelf space and market share was fierce in the new business. There was a race among competitors Ferrero, Nestlé and Jacobs Suchard to offer generous trade allowances to retailers in order to obtain listing, promotional support at the point of sale and temporary price reductions. All volume increases were temporary as they were off-set by competitive counter-actions. Although operating margins were squeezed by trade allowances, Jacobs Suchard, Ferrero and Nestlé relentlessly continued their marketing and sales efforts. What has changed was an increased alertness to drive out cost where possible. Employee numbers were reduced, operating activities in manufacturing and logistics were outsourced, research & development budgets were cut, and marketing spending in media advertising was diverted into below the line activities at the point of sale. As the confectionary business was not growing, both Philip Morris and Nestlé chased further growth through the acquisition of smaller companies.

Eventually, the senior managers at Jacobs Suchard were replaced and the brands Milka, Jacobs and Toblerone were fully integrated into the brand management structure of Kraft Foods. In the year 2002, Kraft Foods had operations in 151 countries with 49,000 employees, representing a total of 30 billion US $ business. In the year 2004, Roger K. Deromedi, the new Chief Executive Officer of Kraft Foods, announced that while the effort to drive out costs continues, top line results reflect solid progress against the implemented "Sustainable Growth Plan". This was mainly attributed to further investments in brands, product portfolio adjustment and growth of business in developing markets. Nevertheless, in November 2004, Kraft Foods announced the company's agreement to sell its confectionery business and to treat this business as a discontinued operation.

Kraft Foods' measure of growth is now stated as being based on on-going revenue growth, including acquisitions and excluding divestitures and implementation costs associated with the company's restructuring program. The company's managers argue that "this measure better represents the revenue growth prospects of the business on a go-forward basis and provides improved comparability of results".

The efficiency trap may best be illustrated as a vicious circle (see figure 2). Depending on competitive and market dynamics in each particular a business context, companies may attempt to generate sales volume by offering temporary price reductions or promotions. Other companies may follow by taking similar actions which results in a process of squeezed operating margins. The quest for efficiency starts by placing the emphasis on cost savings in manufacturing, logistics, outsourcing or under-funding marketing programmes and research and development. Finally profit targets are achieved and they are returned to shareholders in form of dividends or share buybacks or are used to buy growth through acquisitions. This reflects the companies' lack of own recipe to invest the shareholders' money in organic growth of their business.

Figure 2: The Efficiency Trap



Conclusion and implications

Efficiency and effectiveness are central terms in assessing and measuring the performance of organisations or inter-organisational arrangements. It seems, however, that managers rarely understand the difference between efficiency and effectiveness and the exact meaning of these terms. The present article indicates that currently, in many companies, managers are obsessed with efficiency gains and that this propensity to efficiency is preventing them from achieving differentiation and sustainable growth of their business. Dealing with efficiency and ignoring effectiveness means neglecting the creation and development of new sources of value within business networks. Many companies relentlessly focus on maximizing their profitability and rarely assess the full impact of not investing in organic growth by strengthening marketing & research and development. This emphasis on efficiency is deeply rooted in the implicit belief that companies, who work less efficiently than their competitors, will be eliminated from the market. As a result many companies emphasize cost-reductions, downsizing of employees and put pressure backwards on their suppliers.

The present article shows that large multinational companies, in particular, face a problem of idle resources: Their growth is low and their profitability is high. To solve this problem of low growth, companies decide to return the money to shareholders in form of dividends and repurchasing shares, or they buy growth through acquisitions. Furthermore, this research demonstrates that improving efficiency requires different managerial capabilities than achieving effectiveness. Efficiency involves financial discipline and control over operating margin and working capital requirements, while effectiveness necessitates the company's ability to develop their own recipe for sustainable growth. Hence, effectiveness is linked to the companies' access to idiosyncratic resources of other companies and to the achievement of differentiation and innovation. It is, however, only the profitable growth that could be sustained. Therefore, companies need to see efficiency as a necessary but not sufficient condition and to consider effectiveness not just as an output but as a continuous process of impacting on their surrounding networks.

The present research aimed at providing the conceptual underpinnings for developing a research agenda that links efficiency and effectiveness. There are three research problems that deserve attention and empirical investigation:

Firstly, empirical investigation is needed on how companies achieve a sustainable growth in their networks. Existing accounting methods can tell us about the "sustainable growth rate" which is the maximum growth that a company can achieve with changing its financing policies but they do not tell us what constitutes sustainable growth. What are the mechanisms and contingencies that contribute to a sustainable growth? Brands are now widely recognized as significant assets (Barwise et al., 1990; Ambler, 1995; Longman, 1995) in the process of investing in differentiation. They create a quasi-monopolistic or unique position in a business network, which is difficult for other companies to imitate. How are brands linked to the efficiency and effectiveness of a company?

Secondly, we need to learn more about the impact of retained earnings on organic growth and compare it to the current policy of returning money to shareholders in form of dividends payments and share buybacks. What is the influence of these alternative policies on the effectiveness of company? What is the role of risk as an underlying factor? What is the link between asset sale or asset buy and investment opportunities (Bates, (2005)? There is certainty a number of financial and legal constraints to grow a business (Beck, Demirgüç-Kunt, and Maksimovic, 2005), which poses a further research question of identifying barriers to sustainable growth.

Thirdly, we need to improve our understanding about the intrinsic inability of companies to pursue efficiency and effectiveness simultaneously. Maybe this is attributed to an ingrained belief that there is a trade-off between efficiency and effectiveness. It appears that managers are often trapped in the dilemma of answering "either" "or" questions, and face difficulties in embracing the conjunction "and" (Collins and Porras, 1994; Markides, 2001; Markides, and Charitou, 2004). What is the role of accounting and control systems in accomplishing a balance between efficiency and effectiveness? Accounting and control systems which focus on efficiency may represent a considerable obstacle to companies' sustainable growth. Generating a sustainable growth for a company will also depend on how broadly companies define their scope of business and the network in which they operate (Levitt, 2004). Apart from accounting and control systems, there is also the question of who will discipline management in poorly performing companies (Franks et al., 2004)?

The implication of pursuing such research agenda is the development of a managerial perspective that does not only place emphasis on instrumental rationality but also on value rationality (Weber, 1956). This is in a research enquiry, which guides managerial action according to its consequences in the surrounding context, and not by its means.

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