Leadership versus management accounting systems
An exploratory study in hospitals

Dr. D. Naranjo-Gil and prof. dr. F.G.H. Hartmann
David Naranjo-Gil is Assistant Professor of Management Accounting at the Pablo Olavide University at Sevilla; Frank Hartmann is Professor of Management Accounting & Control at the Nijmegen School of Management – Radboud University

Under contemporary Spanish law, hospitals are required to revitalize their corporate strategies towards more cost effectiveness on the one hand, and more customer orientation on the other hand. This paper attempts to explain differences between successful adaptation to strategic change in terms of management accounting system and leadership style. A three-stage analysis involving archival data, interviews and a questionnaire was adopted, thus enabling a systematic and comprehensive analysis. The results show the importance of certain MAS characteristics (innovator versus traditional) rather than certain leadership style in organizations facing strategic change.

1. Introduction

The current worldwide environment is very dynamic, turbulent and competitive, due to the influence of multiple economic and technological variables. In this environment the impetus is towards more flexible and agile organizational forms in order to accommodate rapid change (Abernethy & Brownell, 1999). Organizations that want to survive must change their strategy to adapt to their new competitive environment (Porter, 1980). Top managers have the position and potential to initiate and implement strategic change (Tushman & Romanelli 1985). The changing environment has triggered a radical shift in the role of top managers from the traditional hierarchical authoritarian style with centralized control to a more open, democratic and participative control style. With the current emphasis on adaptability, cooperation, flexibility and communication, top managers need both a different leadership style and a range of information. One of the most significant information sources of an organization is its Management Accounting System (MAS), which helps managers in making decisions and developing strategies (Chenhall & Morris, 1986). The question is how different MAS designs and leadership styles are related to that direction of the strategic change.

2. Theory and research objectives

This paper analyzes this question by looking at public hospitals of the largest region of Spain (Andalusia), which have been exposed to significant turbulence since 1997 – when there was no competition. Since then, hospitals have acquired the autonomy to determine their own strategy and the means of achieving it. Many hospitals have responded to the changing environment by adopting a proactive stance and have undergone significant strategic change. Others have been more reactive, waiting to see which strategy works best. This introduction of competition into the Spanish hospital market provided an opportunity to gauge how different MAS designs and leadership styles have to be aligned in order to facilitate the strategic change.
need. Denhardt (1993) has argued that the assumptions behind Max Weber's bureaucratic model – i.e., stable environment, simple goals and impersonal treatments – are not applicable to today's environment, which is more dynamic and turbulent. Many governments emphasize the importance of delegation, decentralization, streamlining, and voluntary compliance to create new public organizations focused on the customer and on being service-oriented (Osborne & Gaebler, 1993). These organizations often need new strategies supported by an appropriate leadership style and information system in order to improve their performance in this new environment. Osborne and Gaebler (1993) point out that CEOs, holding positions of power in public organizations, are expected to lead people and the organization through a constantly shifting environment. There are two orientations with respect to strategic change (Porter, 1985; Abernethy & Brownell, 1999): defensive and prospective. A defensive change is a change from a strategy focused on internal issues and a limited set of products or services, to a more market-oriented strategy which focuses on the introduction of new products or services. A prospective change is the opposite: from a market-oriented to an internal-oriented strategy.

Top managers, through their leadership style, can initiate and drive strategic change. In general, leadership style can be defined as 'how' a manager leads the subordinates toward organizational goals. It can be classified as proactive or reactive. Following Ackoff (1999) and Larson et al. (1986), a proactive leadership style is characterized as participative, democratic and future-oriented, with coordination and synergy between departments. By contrast, a reactive leadership style is autocratic, focusing on solving problems presented by the current operating environment and emphasizing controlling internal events.

MAS can be described as 'traditional' or 'innovator' based on several information attributes, such as scope, timeliness, aggregation and integration (Chenhall & Morris, 1986). Innovator MAS supplies information focus on external environment, reports information quantified in monetary and non-monetary terms, has a long-term orientation, and supplies highly aggregated information by time period and functional area, formatted for use by specific services or programs. Traditional MAS tends to focus on internal information, quantified in monetary terms for the purpose of generating periodic (short term) reports.

MAS design and leadership style are related to each other, but a dominant argument in management research is that since the accounting system is organized to transmit information to the decision makers, variations in the decision-making style can affect the orientation, directness and formality of the information provided. Also, an alignment can be expected between leadership style and MAS design in organizations facing strategic change.

With these observations in mind, a study was designed to examine the following propositions.

1. Organizations with a prospective orientation to strategic change will be more likely to use a proactive leadership style than organizations with a defensive strategic change.
2. Organizations with a prospective orientation to strategic change will be more likely to use innovator MAS than organizations with a defensive strategic change.
3. In organizations facing a strategic change, MAS design will be the dominant variable rather than leadership style.

3. The empirical study

To analyze the relationship between MAS-leadership style and strategic change, the use of multiple research methods was adopted: archival data, questionnaires and interviews. The unit of analysis was the individual public hospital in Andalusia, the largest region in Spain. Archival data, starting in 1986, consisted of documents and publications available publicly from government sources. They were examined in order to determine the general characteristics of the hospitals (size, number of employees, pathologies and services) and the evolution of the hospital sector policy since. Through the archival data, we noted that hospitals in Andalusia are divided into three categories, according to the size and pathologies they treat: five Regional Hospitals (the largest), ten Specialty Hospitals and fifteen Rural Hospitals (the smallest). The hospitals were analyzed by category, so the sub samples selected for comparison were relatively homogeneous.

A significant year for the initiation of data recording was 1997. In this year Andalusia Health Service published a Strategy Plan for Hospitals (Plan Estratégico del Servicio Andaluz de Salud, or PESAS), which imposed on hospitals the basic rules for increasing the competition in the sector. Specifically, service orientations shifted from a hospital-centered, disease-focused model to one of disease prevention, health promotion, and primary care (Carretero, 2000).

In trying to improve the hospital's performance and quality, the government suggested a new strategic orientation, focusing on service quality, flexibility and customer attention. The rule changes suggested that hospitals would have to change their information technology, treat the
patients like customers, and orient their strategy to the disciplines of a competitive market. This Strategic Plan anticipated rewarding hospitals that made the greatest progress toward efficiency-effectiveness with more funds from the government.

Seventeen semi-structured interviews were conducted with the CEOs of two Regional Hospitals, six Specialty Hospitals and nine Rural Hospitals. The interviews lasted approximately one hour each and were recorded and then transcribed to facilitate synthesis of the data. Also a questionnaire was administrated to the CEOs of all public hospitals in Andalusia (a total of 30). The questionnaire was distributed and returned by mail and the process yielded a total of 23 usable questionnaires.²

When the interview data were synthesized, several themes emerged that warrant further discussion:

1. the foreknowledge concerning the need for strategic change;
2. the relationship between leadership style and strategic change;
3. the relationship between MAS and strategic change; and
4. the relationship between leadership style, MAS and strategic change.

An important but unexpected issue was that many hospitals knew they would have to change their strategy and the direction of this change, even before the PESAS were published in 1997, because they knew of the recent evolution in the health industry in other European countries. These hospitals showed the largest strategic change toward a prospector type. For example, one CEO asserted:

“…I have been working in different Andalusia hospitals for over ten years, and I knew that our [Andalusian] hospitals and Spanish hospitals in general had to change toward more flexible and open organizations, as had other European hospitals, where there is a more competitive and non-regulated health care industry.”

Many CEOs seemed to identify readily the need for change, and the direction to pursue. For example, one CEO had identified new demands in the market and described how his hospital was changing to meet them.

“…we have set up a child wellness program … alcohol/drug services not only for adult but also for teens … at the moment we are thinking about setting up a psychiatric outpatient program and expanding our geriatric services due to the aging population.”

However, in one case a clear contradiction was identified: one CEO considered himself to be a prospector, but stated that he preferred to follow other hospitals in introducing new techniques and services.

“This hospital is working on expanding our oncology services but we are waiting to see how the new technology operates in others hospitals … Last month we expanded our pain management program which had been working successfully for one year.”

In short, the interview data suggested that respondents had little difficulty in distinguishing between their strategy five years ago and their current strategy. Through the interviews, we were able to confirm that most CEOs who rated their organizations as prospectors, also described their organizations as such during the interviews.

Concerning the relationship between leadership style and strategic change, all CEO’s interviewed, except one, had a clear concept of their leadership style. Several hospitals use a proactive leadership style to cope with the strategic change, but the alignment between the direction of the strategic change and the leadership style is not evident in the interview analysis.³ For example, one CEO, positioned in the defender category, stated:

2 This paper focuses on interview analysis and partial results from the questionnaire are provided. For a more extended analysis of the questionnaire results see Naranjo-Gil et al. (forth-coming).

³ The questionnaire analysis also support this, since the results of testing the alignment between leadership style and strategic change were not statistically significant at the 0.05 level (see table 1, in the appendix).
“In this hospital, new ideas are welcomed but they have to be communicated properly through the hierarchical levels … We make decisions mainly based on precedents, in this way we can see more clearly the evolution and consequences … so we can control more easily.”

CEOs also had a clear sense of the MAS design in their hospital. Moreover the alignment between MAS design and strategic change direction was clear during these interviews.4 A CEO positioned in a prospector orientation toward strategic change, stated:

“This hospital encourages the use of information to make decisions, even when the information does not have absolute precision … we are using a system that allows us to build scenarios with both historical data and projected data – …and we have just started to use qualitative data, too.”

Another CEO, positioned in a defender strategic change, stated:

“…before looking at events outside, we have to solve the internal problems … it is impossible to look at to the long term when you need information to manage a problem in the short term.”

The interview data suggested that there was a great congruence between MAS, leadership style and strategic change. For example, a CEO positioned as a prospector described clearly the fit between leadership style and MAS:

“I need aggregated information from all services and levels of the hospital, so I discuss with other directors what kind of information is most relevant and how to operate with it in the short and in the long term … always in a participative and open way.”

For defenders, MAS seemed to be more important than leadership style, but the interviews provided surprising insights about the relationship between strategic change and the relative importance of MAS and leadership style. MAS is the dominant variable in a defender strategic change, but leadership style is the dominant variable in the prospector strategic change.

Typical of defender organizations was one CEO’s comment…

“I have been the general manager of this hospital since 1996 and yet I do not have the information that I need to respond quickly to change. I receive information from some departments only once every 30 or 40 days, but I know that some hospitals can get it once a week.”

However, another CEO evidenced his prospector posture toward change:

“I receive a report monthly about the evolution of the rest of the hospitals in the same category … the information system gives me the main variables by area and does so almost instantly … so it is not necessary to monitor people closely.”

4. Discussion and conclusions

The healthcare executive faces the challenge of creating a healthier system that balances and coordinates patient, physician, employee, legal, governmental, financial and community needs. The healthcare executive must develop a leadership style centered upon the corporation’s relationship with many constituents in a time of rapid change (Kimberly & Hooljberg, 2000; Abernethy & Brownell, 1999).

The major objective of this study was to explore the way in which accounting systems and leadership styles are used by companies with differing orientations toward strategic change in a public setting. Interviews provided evidence for our expectations, showing that organizations with a prospective orientation toward strategic change would use innovator MAS more than traditional MAS. However, no support was found for our proposition that organizations with a prospective orientation to strategic change will be more likely to use proactive leadership style than organizations with a defensive strategic change. This can explained by following the assumption that CEOs, through their leadership, would be motivated to implement a prospective strategy because of the potential for high returns, which does not work in public organizations, where other variables are more important than profit (Kimberly & Hooljberg, 2000). This paper also provides insights in the dominant role of MAS on leadership style in facilitating the strategic change in the public sector. This finding suggests that leadership style is a static variable influenced by other individual and organizational variables. This is consistent with Gartner’s (1994) study, which considers several factors (the environment, and individual and organizational characteristics) as the explicative factors of the leadership style. The results of this research show the importance of certain MAS characteristics (innovator versus traditional) in facilitating strategic change.

In sum, the CEO interviews provided an understanding of the reasons for adopting a certain leadership style and MAS, and they also provided insight into the relationship

4 The questionnaire analysis also shows significant support for the alignment between MAS design and strategic change (see table 2, in the appendix).
between these variables and strategic change. An important practical consequence is not only that the technical qualities of MAS matter, but that ‘alignment’ between MAS and leadership style may facilitate the organizational strategic change.

5. References


Appendix: Results from questionnaire analysis

Table 1. Relationship between Leadership Style and Strategic Change.

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<thead>
<tr>
<th>Leadership Style</th>
<th>Reactive</th>
<th>Proactive</th>
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<td>3</td>
</tr>
<tr>
<td>Prospective</td>
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<td>7</td>
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Fisher’s exact test: P<0.1644

Table 2. Relationship between MAS design and Strategic Change.

<table>
<thead>
<tr>
<th>MAS design</th>
<th>Traditional MAS</th>
<th>Innovator MAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Change</td>
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<td></td>
</tr>
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<td>2</td>
</tr>
<tr>
<td>Prospective</td>
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<td>8</td>
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Fisher’s exact test: P<0.0332