

Applying Balanced Scorecard to Hellenic Navy's Education and Training: An Initial Approach

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Abstract

Like organizations striving for growth, Hellenic Navy is facing rising pressure to increase the value added by its services. To meet this challenge in an era of scarcity of resources Hellenic Navy's education and training will need to undergo fundamental changes in the way they operate and continuously seek ways to create future value. This paper explores and discusses the potential applicability of Balanced Scorecard in Hellenic Navy's education and training in order to stimulate and sustain continuous improvement. Favorable results were reported in the for-profit and government organizations supporting the aforementioned applicability.

Keywords: Hellenic Navy's Education and Training, Scorecard to Hellenic Navy's Education and Training, Balanced Scorecard

1. Introduction

Nowadays there is an increased trend for government departments and public entities for reform especially in the area of management and budgeting. This reform along with the decreased government funding have resulted the need for delivering agreed outputs as efficiently as possible. In turn, this need has as an effect the adoption of private sector management practices one of which is performance measurement (Niven 2008; Holmes *et al* 2006; Pallot 1991; Suppanz 1996).

Traditionally, performance measurement systems have been based on financial results which have a limited effect on the criteria used to measure, to assess or even more to drive performance. In the past, various systems for performance measurement that overcome this limitation have been suggested. One of these, the Balanced Scorecard (BSC) has met worldwide acceptance as a management tool that measures and drive performance based on financial and non-financial indicators.

2. Background

The concept of the balanced scorecard was first introduced by Robert S. Kaplan and David P. Norton (1992) in their now well known *Harvard Business Review* article “The Balanced Scorecard – Measures That Drive Performance”. The idea of BSC has met enormous success worldwide especially in private sector organizations. For instance, Kaplan and Norton (2001) reported that by 2001 about 50% of the *Fortune* 1000 companies in North America and 40% to 45% of companies in Europe were using the BSC.

The core argument of BSC is that financial results alone cannot capture value-creating activities (Kaplan & Norton, 2001a). That means that financial measures are lagging indicators and, as such are not effective in identifying the drivers or activities that affect financial results. Also, Kaplan and Norton (1992) suggested that organizations, while using financial measures, should develop a comprehensive set of additional measures to use as leading indicators of financial performance.

The BSC is based on balanced set of measures covering financial, customer, innovation and learning process areas to manage effectively. In addition, the BSC is used to translate an organization’s mission and strategy into a comprehensive set of performance measures that enables organizations to track short-term financial results while simultaneously monitoring their progress in building the capabilities that generate future growth. In contrast to financial performance measurement systems, the BSC “puts strategy and vision, not control at the center. It establishes goals but assumes people will adopt whatever behaviors and take whatever actions are necessary to arrive at the goals” (Kaplan & Norton, 1992).

Kaplan and Norton divide the BSC into four quadrants of measures: financial, customer, internal business process and learning and growth. The adoption of these measures is not mandatory; instead a BSC is needed to be built in order to link measures with organization’s strategy. Actually, an organization’s BSC is imperative to reflect unique characteristics of the organization, for instance, cultural aspects, strategic planning horizon and the nature of operations (Hoffecker & Goldenberg 1994; Chesley & Wenger 1999).

However, after the initial introduction and the following evolution of BSC Kaplan and Norton (1996a) figured out that manager were using the BSC as a central organizing framework based around four key management processes:

- Clarifying and Translating Strategy
- Communicating and Linking Strategic Objectives and Measures
- Planning, Setting Targets and Aligning Strategic Initiatives
- Enhancing Strategic Feedback and Learning

Supportive to the use of BSC as a strategic management system are Birchard (1996), Booth (1996), Chow *et al* (1998) and Huckestein & Duboff (1999).

In addition to that, BSC has been found to be used as a tool to communicate information to external stakeholders. According to the United States Conference Board (1997), the disclosure of strategic performance information is a delicate balancing act. Whereas better company valuation and improved conditions for institutions to discuss strategy with management are recognized as benefits, in that case the costs of disclosure include the following:

- Exposure to the company to litigation
- Revealing competitive information
- Comparability of data

An example of this use of BSC is the OCIMF (Oil Companies International Marine Forum) Guide, which is an initiative from the tanker industry, by promoting TMSA (Tanker Management Self Assessment) as a tool that can help the ship’s operators/managers to measure and to improve their management systems. The TMSA is based on the belief that it encourages ship operators to achieve high standards of ship management and of continuous improvement, and it provides direction towards the proposal of current best practice for the industry via the forum. The sequence of action, based on the TMSA, is plan – act – measure – improve. Furthermore TMSA provides feedback of information to the charterer about the effectiveness of Total Safety Management of the ship manager (Goulielmos M *et al*, 2008).

The BSC is considered to have an increasing applicability to government organizations that often operate in the absence of a competitive market and it seems to have the potential to improve transparency and accountability for these organizations. The BSC provides government organizations an opportunity to demonstrate value for money and recognizes the multiple dimensions of value (Gambles 1999; Griffiths 2003).

Nevertheless the concept of BSC has been widely adopted and used in the business sector, followed by the public sector; the education sector has not embraced the BSC widely. A thorough review of the literature yielded few significant publications, as pointed out by Karathanos D & Karathanos P (2005). While, Cullen *et al.* (2003) proposed that a balanced scorecard be used in educational institutions for reinforcement of the importance of managing rather than just monitoring performance. Sutherland (2000) reported that the Rossier School of Education at the University of Southern California adopted the Balanced Scorecard approach to assess its academic program and planning process. Also, Chang & Chow (1999) reported that responses in a survey of 69 accounting department heads were generally supportive of the balanced scorecard's applicability and benefits to accounting programs.

BSC applicability seems to be expanded in the area of defense agencies, where a GAO report (2004) depicts that the Department of Defense in the USA (DoD) "took steps to strengthen performance plans and scorecards by revising and review process, requiring performance measures to align with agency and departmentwide goals, and requiring measures to provide a more comprehensive view of agency performance". However, despite the BSC applicability on defense agencies the literature on the issue is extremely limited.

Accordingly, there is a need for research that examines the range of BSC applications in Hellenic Armed Forces services and organizations. The present paper is examining an initial approach for BSC application in Hellenic Navy's (HN) education and training systems. The work presented is a part of the HN committee's task to prepare and propose evaluating and measuring performance tools for HN's education and training systems. The proposed plan of action is based on data collected through a in-depth structured survey with some of the stakeholders of HN's education and training systems (students and trainers), a SWOT analysis (Strengths – Weaknesses – Opportunities – Threats) for the above systems and an thorough research on HN strategic management practices for education and training.

3. The Hellenic Navy BSC initial approach

From the findings of the up to date research, the BSC application for HN's education and training systems might have a multiple use as following:

- BSC to assist the development and management of the organization's strategy and strategic objectives and ensure that internal work programs and resource allocation priorities are aligned to the mission.
- BSC to clarify, translate, communicate and measure the organization's strategy.
- BSC to be a strategic management tool to clarify the vision and strategy and communicate and link strategic objectives and measures.

Supportive to our research is the BSC literature (Birchard 1996; Kaplan & Norton 1996a, 1996b; Epstein & Manzoni 1997) reports that organizations initially use the scorecards as a performance measurement tool and evolve to using BSC as strategic management tool. It is well documented the transformation power of the balanced scorecard to move an organization from the measurement system to a management system. The foundation for such a system is the alignment of area and individual goals to HN education and training systems. Thus the first step in BSC is to examine the purpose of the organization from which all other initiatives flow. A broad expression of this purpose is expressed in its vision and mission statements:

Vision statement: The vision of HN education and training systems is the provision of the optimum and cost effective education and training to HN human resources based on operational and non operational needs of HN.

Mission statement: The mission of HN education and training systems is to prepare students to be both managers and leaders who add significant value to HN and communities

From the vision and mission flows the HN education and training systems' value proposition, based on the distinctive characteristics that give HN a competitive advantage in the marketplace – overwhelmingly deterrent sea power.

The core values held at the HN education and training systems come from the long tradition and history of HN and the Greeks as a maritime nation and these are derived through the dominant organizational culture of HN. Our initial research has identified the following core values:

- Sense of being member of an expanded team (HN)
- Innovation
- Adaptability
- Mutual trust and appreciation

- Sense of duty and task accomplishment
- Quest for optimum solutions
- Experiential learning
- Use of technology
- HR management emphasis
- Personal development
- Leadership

It is evident that the BSC model outlined by Kaplan & Norton (1992) has to be extensively modified by the HN education and training systems BSC designing process. Financial and Customer quadrants must be replaced by Shareholder and Stakeholders & Leadership quadrants to reflect a wider accountability and a non profit focus in public sector organizations.

4. Future work

From the initial findings and as the our research is expanding along with our deepening understanding in the issue of BSC our intention is to draw guidelines for further action in building our BSC. However, before trying to map variables that drive the organization and selecting measures encouraging staff, faculty and students to act in alignment of HN strategy, we believe that our committee must define strategy, which in turn depends on a well defined value proposition. Thus the following goals are set as prerequisite for strategy definition:

1) Clarify mission and strategic performance aims

As the principal guiding statement, the mission is most critical in establishing strategic priorities. Also, mission statement should be reexamined periodically to ensure consistency with other organizational HN units and changing environment conditions

2) Identify and prioritize core values

While organizations might differ in core values, the process in our committee is instructive in finding and evaluating value congruence among all stakeholders of HN education and training systems. So, our research should be expanded to include all stakeholders (students, faculty, staff and external stakeholders) in order to find the full spectrum of core values and to distinguish core value ordering. General agreement about core values should lead to a natural and pre-existing determination of HN education and training systems' value proposition. It is believed that this a necessary condition for developing a uniform strategy upon which a BSC strategic approach can be built.

The value proposition is the basis for defining how HN education and training systems will accomplish its statement of vision and mission. The ordering of values taken from our expanding research will guide the choice of activities composing the "internal operations" perspective of the balance scorecard. The list and sequence of core values will provide the required action plan for implementing strategy. For instance, if personal development is chosen as a core value, then it should also appear in internal operations. Measures can then be constructed to track activities in that direction. Thereby, focusing in enhancement of personal development. By comparing measures of actual performance with established targets, performance gaps can be identified, and initiatives can then be taken to align measures and action in align with core values.

3) Survey key stakeholders

Up to date our survey has been limited to faculty and students. In addition, our survey will include a follow up of our students surveying them in a later time in their working environment. However, there is the identified need to determine who the key constituents are. In a large organization such as HN, the stakeholders of HN education and training systems consist probably a wide group. It is part of our research to identify them and prioritize their impact and importance in order to make the appropriate expansion of our survey to the key stakeholders. Besides to this, given the dynamic nature of BSC, this has the capacity to strengthen relationships with the key stakeholders. This potential benefit is an element that must also be examined during the mentioned survey.

4) Strategy and Annual Work Plan

Kaplan & Norton (1996a) suggest that the scorecard can provide a bridge between an organization's strategy and the annual work plan. Based on this, it is assumed that when focusing in the initiatives that contribute to strategy, then initiatives can be prioritized. Also, Kaplan & Norton (2001b:352) note that this is a particular challenge for non-profit organizations as the decision-making and planning process generate more initiatives than can be met

within funding levels. Therefore, the BSC, that is to be built, should be used as a framework to prioritize to what must be achieved in any one year. Once the annual initiatives have been established these can be translated into accountability documents. It is believed that as the initiatives are linked to the strategy of the organizations, the impact that specific initiatives will have on the mission is transparent.

5) *Individual and Organizational Goals Linkage*

It stands to reason that the linkage between individual and organizational goals with BSC is essential. Poor designed BSCs have been found to have no linkage with these goals. By reviewing literature (McKenzie & Shilling 1998; McWilliams 1996) it depicted the necessity of establishing reliable linkages between scorecard measures is essential if the scorecard is to be accepted in an organization. If the linkages are not robust, then it is likely that the credibility that the compensation mechanism and the scorecard will be undermined. Also, Kaplan & Norton (1996b) note that the organizations may not have appropriate and reliable data for the many of the measures in the early stages of the BSC. Until these linkages had been embedded and measures established, the linkage to individual managers and performance assessments will not be made.

5. Conclusion

The present paper has sought to illuminate the processes, purposes, and limitations for designing and developing a BSC for HN education and training systems as part of its self-assessment by developing and reporting a comprehensive set of measures that comprise both leading and lagging indicators. A critical requirement is that measures be aligned with the organization's strategic objectives.

While there is no reported BSC implementation in a similar or equivalent unit of organization as HN education and training systems, the experiences from the for-profit sector indicate that developing and implementing the BSC can be a complex and lengthy process. Apart from that, the present paper illustrates clearly that the preparatory work that is needed might turn out to be a heavy load to carry. In addition, it is obvious that the time span between the start of process of BSC and harvesting of initial results can be considerable.

Given the mounting challenges to HN along with the unprecedented levels of change in the environment that HN operates, meeting these challenges in an era of shrinking resources will require HN education and training to undergo fundamental changes and to continuously seek ways to create future value. So it is imperative that there is no time for HN to lose in implementing BSC or similar approaches to promote and support change.

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