

Quality Assurance View of a Management Information System

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INTRODUCTION

Strategic management has been widely applied in public and private organizations. Strategic management adapts educational institutions to their environment, which includes the educational policy, local demand for labour and other circumstances. The increased autonomy of educational institutions has emphasised the role of strategic management. Quality assurance has also gained more attention in recent years when plans have been made to establish the European Higher Education Area (Berlin Communiqué, 2003).

European countries develop their own national solutions for evaluating and demonstrating the quality of degrees (FINHEEC, 2006). There are no European or national agreements that provide any specific approaches or tools for the management of higher education institutions (HEIs) (Maassen & Stensaker, 2003). Each HEI is responsible for defining its management and quality assurance systems. Strategic management is a strong candidate for the management system for Finnish HEIs, but there is more variation in the quality assurance systems. Quality assurance refers to quality management and improvement. Quality is understood as the ability of an institution to fulfill its mission or a study programme to fulfill its aims (Harvey, 2007; Harvey & Green, 1993).

The purpose of this chapter is to describe the management information system (MIS) which integrates strategic management and quality assurance. Institutional quality audits have shown that quality assurance is quite often separate from the general management system of HEIs. By contrast, a well-functioning quality assurance system produces evaluative information about results and processes and then management uses this information to develop processes. Management at each institutional level determines the corrective action. While providing support for strategic management, the

management information system can also contribute to continuous improvement, which is the core of quality assurance.

The balanced scorecard approach developed by Kaplan and Norton (1996, 2001) translates the strategy into action and provides a framework to integrate the strategic management and quality assurance approaches. This chapter describes the case of the Turku University of Applied Sciences (TUAS). At the TUAS, the implementation of the strategic plan includes, among others, budgeting, action plans and HR plans, which are stored in the MIS portal. The balanced scorecard is used to create an understandable structure for the strategic and action plans which include quantitative measures. All these management and quality assurance tools are provided for the managers and personnel as the tools of the MIS portal.

BACKGROUND

Quality Assurance in Higher Education

The Bologna Process Finland has developed its own approach to quality assurance in higher education. The approach is based on the quality assurance systems of HEIs and external quality audits at the institutional level. The quality assurance systems of all Finnish HEIs will be evaluated by the Finnish Higher Education Evaluation Council (FINHEEC) by 2011. Each institution is responsible for the development of its own quality assurance system. HEIs have the responsibility to define what they mean by quality and how they manage and enhance quality. The external audits aim to evaluate how the quality assurance system of an institution performs as a tool for quality management and enhancement. The institutional quality audit ascertains whether a

quality assurance system produces useful information for continuous improvement (FINHEEC, 2006).

When building a quality assurance system, the first step is to define the concept of quality. In everyday language, the word “quality” has been associated with excellence. However, fitness for purpose is the approach to quality accepted by most quality agencies. Fitness for purpose sees quality as fulfilling a customer’s requirements, needs, or desires. In higher education, fitness for purpose is understood as the ability of an institution to fulfill its mission or a study program to fulfill its aims (Harvey, 2007; Harvey & Green, 1993). This is the definition adopted in this chapter. At the institutional and faculty level, quality is defined in the institution’s mission, strategic plan, and annual action plans and evaluated against these plans.

The concept of quality assurance has various definitions in different contexts. According to Woodhouse (1999) quality assurance refers to the policies, attitudes, actions, and procedures necessary to ensure that quality is maintained and enhanced. Quality assurance is defined in this chapter to include strategic management and the performance of the internal processes. A similar interpretation is given by FINHEEC (2006), which states that quality assurance is part of strategic planning and includes the management process and the internal processes of HEIs. Quality assurance refers to the procedures, processes, and systems which safeguard and improve the quality of an HEI, its education, and other activities. At the level of HEIs, the quality assurance system refers to the entity composed of the quality assurance organization, the respective responsibilities, procedures, processes, and resources.

The relationship between the strategic management and quality assurance of higher education institutions could be interpreted as a new conceptualization for some of the most essential features of quality assurance. From our viewpoint, two basic ideas of quality assurance are continuous improvement and management’s commitment. According to Beckford (2002), the principle of continuous improvement is an explicit part of the thinking of many quality gurus. Furthermore, John Oakland says, “Quality must be managed, it does not just happen”, and Beckford argues that without adherence to the quality management system, it is impossible for the organization to know how well it is performing.

It is evident that management is an essential element of quality assurance. Mostly it is only the managers who

possess the power and resources needed for carrying out the planned development steps (corrective action). One way to look more profoundly at the relationship between strategic management and quality assurance is to emphasise the fitness of purpose and use the phases: plan, do, check, and act (PDCA). This is known as Deming’s cycle (Beckford, 2002). The cycle has been used in various quality awards. The Malcom Baldrige quality award has renamed it and uses the words: approach, deployment, results and improvement (ADRI) (Woodhouse, 2003).

Figure 1 presents the quality cycle of continuous improvement. The approach is about planning what will be done and how it will be done. Deployment is about how to implement these plans. The results are the consequences of these actions. At this point, the results may be accepted as such and no changes are made to the approach or deployment. Often results are unsatisfactory and objectives have not been achieved. Then a systematic reflection about what approach and deployment led to these results may suggest useful improvement measures (Woodhouse, 2003).

MAIN FOCUS OF THE ARTICLE

The Quality Map

The concept of the quality map is introduced to describe the quality assurance of an organization. The quality map is a visual representation of the cause-and-effect relationships among the objectives of education policy, regional strategies and the institutional strategic plans. It provides an insight into the management, personnel and stakeholders to understand the main elements of quality assurance. The quality map is a graphical representation of quality assurance. We have developed the concept of a quality map from the strategy maps introduced by Kaplan and Norton (2004). A quality map describes the essential characteristics of the quality assurance system like a road map, but omits all the minor details.

Figure 2 describes the quality map of the TUAS. The quality map shows that quality assurance is a comprehensive concept including the strategic planning, the management process and the internal processes and structures of the organization. There is a continuous flow of communication and interaction between these elements. The description of the quality assurance sys-

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