Supporting Strategic Planning Decision-Making in Higher Education by Developing IDSS using Open Source Dashboard Technology

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Authors:
Alhanoof Mohammed ALhumayan, Abdullah Saad ALMalaise

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Abstract

The strategic planning model fits into the best characteristics of higher education institutions. Regarding recent developments in Saudi higher education policies, we note that from the perspective of the Government, the proposed biennial planning system for higher education seems to fit the elements of the interpretive model and calls upon institutions to plan in an interpretive manner. Open Source Dashboard Technology IT plays an inevitable role in integrating the IDSS (Intelligent Decision Support System) in Establishment of higher education in technology for revolutionary decision-making. Due to modern factors, decision-making requires the complexity of business knowledge and data and data representation, therefore, an intelligent computer system is required. "IDSS is an intelligent information system that reduces the time when environmental decisions are made and improves the coherence and quality of
decisions [Haagsma & Johanns, 1994]." Decision makers are trying to apply new strategies and use new tools to transform data into useful information that can contribute in solving administrative problems. Decision makers require reports that are accurate, timely, and that give the entire "work image". Dashboard Technology and Intelligent Decision Support System (IDSS). Systems come to save decision makers. This paper proposes the integration of open source information technology and IDSS to improve the quality and effectiveness of higher education systems. The control panel enables executives to measure, control and manage organizational performance more effectively. If the IDSS are be applied to higher education using Open Source Dashboard Technology processes, it will help to improve student performance, manage their lifecycle, identify potential students, design a training course, and choose courses to measure their retention rate, infrastructure, and develop and manage a foundation grant fund. This is an approach to study the impact of the use of open source information technology and IDSS for higher education institutions in strategic planning. Finally, the Higher Education Planning System (IDSS) was be introduced to illustrate and evaluate the use of dashboard techniques as intelligence tools and decision-making tools and The analysis was conducted through two basic methods: the questionnaire of the questions and the direct interviews. The results were high to reflect the level of awareness and development in the higher education environment

References

10. Hoadly, Ellen D; Jorgensen, Brian; Masters, Craig; Tuma, Nalli&Wulff, Scott, ‘Strategic facilities planning A focus on health care’, Journal of Service Science, 3 (1), 15-22,2010

**Index Terms**

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