

# **EFFECTIVE DECISION MAKING IN HIGHER EDUCATIONAL INSTITUTIONS USING DATA WAREHOUSING AND DATA MINING**

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## **ABSTRACT**

One of the biggest challenges that higher education institutions face today is to improve the quality of managerial decisions. Higher educational institute seeks more efficient technology to better manage and support decision making procedures or assist them to set new strategies and plan for a better management of the current processes. One way to effectively address the challenges for improving the quality is to provide new knowledge related to the educational processes and entities to the managerial system. This knowledge can be extracted from historical and operational data that reside in the educational university's databases using the techniques of data mining technology. Recently, there has been a growing trend to use data warehouses to support real-time decision-making about a university's day-to-day operations. This paper presents the capabilities of data warehousing and data mining in the context of higher educational system by proposing a guideline for higher education institutions to enhance their current decision processes and applying data mining techniques to discover new explicit knowledge which could be useful for the decision making processes.

**KEYWORDS:** Data mining, Data warehouse, Decision-making, Higher education.