Building a data warehousing system to increase sustainability of the archeological tourism sector

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The Archeological tourism has developed throughout the world as an important segment of tourism industry. The importance of development in archeological heritage tourism is to boost the standard of living by attracting tourists to the destination and disseminated heritage knowledge to them. In this situation, the decision makers in the archeology and tourism sector face real challenges. Long-term sustainability requires the balance of three dimensions of sustainability principles as economic, environmental and socio-cultural aspects of tourism and archeological development.Therefore, this research paper proposes to build a data warehouse (DW) & information system with focusing above three dimensions to meet their inquiries and expectations for the decision making and sustainability development in this sector.

The proposed system is a collection of technologies to enhance fast decision making. The data was collected from country internal tourism & archeological websites, organizations, and related any institutes. It is designed to support data warehouse techniques such as OLAP (On Line Analytical Processing) and ETL (Extraction, Transformation and Loading). These processes include operations for data integration, cleaning and unification data transferring from data sources into data warehouse.

Most archeologists, tourism specialists, decision-makers and researchers can engage with the proposed data warehouse to develop the process of sustainability in continuously by providing patterns, predictions and trends of information to analyze the tourists' favorability for archeological valuable areas. For the archeological excavation, the big data set needs to collect and analyze the important sections of archeological tourism. This industry needs to analyze statistical indicators about visitors (Foreign & Locally) for the development of this particular sector to gain sustainability for the country. Therefore, the proposed data warehouse is most important for developing country such as Sri Lanka.

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