Using Business Intelligence Capabilities to Improve the Quality of Decision-Making: A Case Study of Mellat Bank

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Abstract : Today, business executives need to have useful information to make better decisions. Banks have also been using information tools so that they can direct the decision-making process in order to achieve their desired goals by rapidly extracting information from sources with the help of business intelligence. The research seeks to investigate whether there is a relationship between the quality of decision making and the business intelligence capabilities of Mellat Bank. Each of the factors studied is divided into several components, and these and their relationships are measured by a questionnaire. The statistical population of this study consists of all managers and experts of Mellat Bank's General Departments (including 190 people) who use commercial intelligence reports. The sample size of this study was 123 randomly determined by statistical method. In this research, relevant statistical inference has been used for data analysis and hypothesis testing. In the first stage, using the Kolmogorov-Smirnov test, the normalization of the data was investigated and in the next stage, the construct validity of both variables and their resulting indexes were verified using confirmatory factor analysis. Finally, using the structural equation modeling and Pearson's correlation coefficient, the research hypotheses were tested. The results confirmed the existence of a positive relationship between decision quality and business intelligence capabilities in Mellat Bank. Among the various capabilities, including data quality, correlation with other systems, user access, flexibility and risk management support, the flexibility of the business intelligence system was the most correlated with the dependent variable of the present research. This shows that it is necessary for Mellat Bank to pay more attention to choose the required business intelligence systems with high flexibility in terms of the ability to submit custom formatted reports. Subsequently, the quality of data on business intelligence systems showed the strongest relationship with quality of decision making. Therefore, improving the quality of data, including the source of data internally or externally, the type of data in quantitative or qualitative terms, the credibility of the data and perceptions of who uses the business intelligence system, improves the quality of decision making in Mellat Bank.

Keywords : business intelligence, business intelligence capability, decision making, decision quality

Conference Title : ICBIAKM 2019 : International Conference on Business Intelligence, Analytics, and Knowledge Management

Conference Location : Rome, Italy

Conference Dates : March 05-06, 2019