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The Integration of Alteryx® and Microsoft Power BI®: A Case Study

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Abstract

Many companies have been seeking competitive advantages over their competitors in various market segments. The insertion of intelligence in the automation processes is one of the points that allow this potentializing. Thus, the automation of data analysis has been gaining more relevance, and the ETL software tools (Extract, Transform, and Load) such as Alteryx Designer® gives the flexibility to overcome complexity and encourage users to find more valuable insights. Therefore, this study aims to highlight the integration of Alteryx Designer® and Microsoft Power BI®, especially for classification analysis. For this purpose, a classificatory model based on a logistic regression tool was used to manipulate production orders from an eyewear frames factory located in the region of Campinas - Brazil. The analysis shows that 88,3% of data is accurately loaded to the target system as per the expectation and 90,7% of data is loaded with precision in the destination system according to expectations. It can contribute to the improvement in the decision-making process. The goals were achieved, and it is concluded that this type of analysis and model help to promote greater efficiency to the business decision making, reducing costs and optimizing time.

Keywords

Classification **Logistic regression** **ETL** **Automation**

The integration of Alteryx® and Microsoft Power BI®: a case study

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Abstract. Many companies have been seeking competitive advantages over their competitors in various market segments. The insertion of intelligence in the automation processes is one of the points that allow this potentializing. Thus, the automation of data analysis has been gaining more relevance, and the ETL software tools (Extract, Transform and Load) as Alteryx® gives flexibility to overcome complexity, and to encourage users to find more valuable insights. Therefore, this study aims to highlight the integration of Alteryx and Microsoft Power BI, especially for classification analysis. For this purpose, an Alteryx® classificatory model based on a logistic regression tool was used to manipulated production orders data from an eyewear frames factory located in the region of Campinas - SP. The analysis shows that 88,3% of data is accurately loaded to the target system as per the expectation and 90,7% of data is loaded with precision in the destination system according to expectations. It can contribute to the improvement in decision making process. The goals were achieved, and it is concluded that this type of analysis and model help to promote greater efficiency to the business decision making, reducing costs, and optimizing the time.

Key words: Classification, Logistic Regression, ETL, Automation

1 Introduction

Nowadays several companies from the most varied sectors have increasingly sought to automate and insert technology in their processes to save time and manage to allocate resources more assertively, aiming at their growth [1]. It is also noted that the data analysis has gained great relevance, in view of the growing generation of data around the world and the possibility of storing them, to analyze and gain in-sights to obtain conclusions for decision making at both the operational and strategic levels.

The advances of data analysis mainly in data classification and predictive analysis give great competitive market advantage, mainly because it can anticipate trends and accurately predict events, guiding the decision-making process. For this purpose, the Alteryx® has a great value because it offers tools that can be carried out from simple