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Validation of imported data by recursive matrix function

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Abstract

Purpose of the article MS Office includes, among other things, MS Excel spreadsheet, a data processing tool in the form of tables. Importing data from other sources (data transfer between public administration workplaces) is done directly in this environment, often from a file with a different data format. It is very common in practice that such data import can arise a problem that may have fatal consequences from the perspective of the relevance of the processed data results. This article aims to point out these shortcomings in data processing technology and outline the way to eliminate unwanted consequences by recursive matrix function.

Methodology/methods The method by which the input data will be validated during the data transformation (import) into MS Excel is based on the call of a customized recursive matrix function. This feature will have user-configurable input data control methods, depending on the nature and character of the imported file. Also the output of this function is variable, it offers the user a whole range of outputs depending on the selected parameters - methods.

Scientific aim The aim of this article is to compare the individual methods offered by MS Excel and VBA depending on the nature of the input data, to make conclusions on the basis of which a recursive matrix function will be created for the appropriate data validation when imported into the MS Excel environment.

Findings This recursive matrix function validates input data when imported to MS Excel from an external environment. Own validation eliminates human factor errors, that is, incorrectly inserted input data. The feature alerts this fact and offers the user automatic correction option of input data types.

Conclusions As a result of deploying this user function in the context of a previous analysis of data types testing by the system, mass data processing errors are eliminated and thus the fatal consequences of these errors are eliminated.

Keywords: MS Excel, VBA, type compatibility, custom functions, validation, matrix

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