Running Head: DATA VALIDATION

Data Validation: Front End or Back End

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Front end validation ensures that data entered into the system by a user or process is in correct form in relation to business rules. It safeguards that what passes the interface boundary into the application is in a usable form by the system itself. However, the front end application is agnostic when it comes to placing that data in the database.

 For instance, the application is programmed to ensure that a first name, middle name, and last name are present before the data is passed down the stack. However, once the data is out of the front end interface’s control it no longer cares how or where the data exists. In essence, if the data is not stored correctly, it is lost forever.

 On the other hand, the database understand what the data is, and where it is to be stored. However, it does not know where to get the data from (ignoring SSIS/ETL scripts). This means that a user must enter data into the system using a query language, e.g. SQL, which when working with large amounts of data can become quite cumbersome.

 Validation at the front end is preferred in all instances where doubt can be introduced in terms of user interaction. That is, when a user must manually input some piece of data which may cause a tpyo (typo\*). This is reflected in ways such as drop down lists, check boxes, or flat our error alerts when incorrect text is input.

 Back end validation is kept for areas such as null data detection, data type correction, and data redundancy removal. It is also preferred when large sets of data must be transformed to produce relevant and useful information. E.g. taking invoicing information and projecting out capital adequacy models. This type of data needs to be absolutely correct, but would bog down a front end interface.

Reference

Coronel, C., Morris, S., & Rob, P. (2012). *Database Systems: Design, Implementation, and Management* (10th ed.). Boston, MA, USA: Cengage Learning. Retrieved 2012