ASSOCIATION FOR FINANCIAL PROFESSIONALS

AFP MINI-COURSE
LEAD WITH DATA
Tip Sheet

With the pressing need to digitize activities, organizations are making data a priority. Engaging with data goes beyond achieving analytics and delivering reports. The data journey requires a holistic vision to align all facets of the domain with a common enterprise goal. It calls for architects of solutions that combine simplicity with scalability, and requires an impeccable understanding of data dynamics. Finance is uniquely equipped to lead the change and avoid the mistakes of the past.

1. DETERMINING YOUR BUSINESS CHALLENGES AND HOW DATA FITS IN

The first key question you need to ask is:

What is my business problem?

This may be a difficult exercise, but if you don't know what you're looking for, don't even start. Make sure you include other people throughout the organization to find what is exactly at stake that you need to explain.

2. DECISIONAL VS TRANSACTIONAL SYSTEMS

To fully optimize the usage of your information system, you must first discern what type of system it is:

- A transactional system should be used to run key operational processes.
- A decisional system should be used to query and examine your data.

3. EXTRACT-TRANSFORM-LOAD DATA STRUCTURE

The term "Extract-Transform-Load" (ETL) describes the process of pulling data from several sources and reassigning it to another destination. It involves three phases:

- **The Extract Phase:** Data is retrieved from the sources of your choosing.
- **The Transform Phase:** Your sourced data is transformed and formatted for the purpose of calculation and analysis.
- **The Load Phase:** Your data is uploaded to your preferred database.

Using this process will allow you to have access to the valuable data that you need, whenever you need it.

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4. OUT-OF-THE-BOX TECHNOLOGY APPLICATIONS

Pros:

- The applications are convenient.
- Often outfitted with data connectors, preset algorithms, and other useful features.

Cons

- They may be designed to only perform a single task well.
- May not easily adjust to accommodate the evolving needs of your practice.

If you decide to use this type of application, know that you or your vendor will need to do some occasional tinkering for it to meet your needs adequately.

5. HOW TO RESPOND TO FLAT FILES

Think of a flat file as the Swiss Army Knife of data fluidity. The flat file, also known as the .txt file, is a mailable and versatile media type that can be utilized by most data applications. It is crucial that .txt files are part of your data processing.

6. CONNECTING DATA

Joining is a method for combining the related data from two sets of data to create a new data set. Here are some important joining methods:

- **Inner Join:** This method will combine data from the corresponding lines between two data tables.
- **Left Join:** This method will create a data set by retrieving data from the left data table, including data that corresponds with information from the right table.
- **Right Join:** This method will create a data set by retrieving data from the left data table, including data that corresponds with information from the right table.

7. BUILDING A HOLISTIC VIEW OF YOUR DATA

In order to build a comprehensive view of your data, you must have the tools to aggregate it from a variety of sources.

Here are some commonly used methods:

- Multi variable correlations are used to measure the impact one variable has on another variable.
- Clustering allows you to organize similar data entities into groups.
- Pattern recognition determines what patterns and regularities exist within your data.
- Advanced visualization enables you to display data through various visual media such as diagrams, animation, and other graphic representations.

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