In my opinion, business analysis is to help enterprises make correct decisions through data collection and analysis, which is also the basic consensus of modern enterprises on business analysis. But when I really learned the course of business analysis, I realized that business analysis is not only about data. The real meaning of business analysis is to find the correct dataset, figure out the pattern behind the data, and make decisions. Obviously, the key to enterprise success is business analysis. So, this essay wants to discuss how to make enterprises successful through business analysis.

First and foremost, business analysis is about data-driven decision makings. The fundamental idea of business analysis is to analyze data. However, with the rapid development of technology, especially in recent years with the wide use of social media, Internet and cloud computing, the concept of big data appears. The biggest challenge of big data is volume velocity and variety. Therefore, successful enterprises require the basic ability of data analysis and collection. Google’ search engine is a very compelling example. During case study of Google, we learned that Google's data volume is among the largest in the world, so Google servers need to store a large amount of information. How to store data efficiently, how to extract data efficiently, how to use this data to extract information that can improve the product? From the development of Google search engine, we can know that business analysis is so important to enterprises. In the early Google, search engine is the core business of Google. At first, Google will browse each user's search history, and then conduct relevant search content based on the number of views. Then advertisers saw an opportunity: by paid listing, advertisers could increase sales by putting their products at the top of searches for relevant content. Therefore, Google makes profit by listing advertisements on the top. At the same time, there will be the loss of users due to inefficient advertisements or irrelevant content. Therefore, Google technicians focus on how to quantify the amount of advertisement to attract both advertisers and users. For example, with Google Analytics, advertisers could track keywords from the search engine and then increase their products on those keywords and reduce others. In general, if an enterprise can analyze data to make decisions accurately, it is the key to success.

From a technical point of view, business analysis is a combination of data and algorithm. However, leadership also plays an important role on business success. Otis Elevator also illustrates that leadership is important to business success. Otis Elevator began as a pure Elevator sales company. However, the leader believes that the simple sales cannot gain an advantage in the competition, so he transformed the company to the elevator design, sales and maintenance integration. In the early days, for every elevator sold, one professional staff will be sent to install elevators. When later maintenance or component replacement are required, company will send professional staff again, which is time-consuming. After the enterprise transformation, through the online system, the headquarters can predict in advance which elevators need to be maintained and which components need to be replaced, to make decisions in advance, reduce costs and improve profits. This is undoubtedly the success of the company.

The above two points mentioned that analytical ability and leadership ability are the keys to the success of the enterprise. However, good presentation skill is also important. It is to tell the customers the results of your algorithm through vivid stories. Customers often don't need to know the algorithms and programing; they just want to know the conclusions behind the data. Therefore, a good speaker first raises the problems existing in the current business, then analyze and find the key problems layer by layer, and then provide tools to operate with historical business data to improve business efficiency.

No company is always smooth sailing, no one is born with "business mind", only in the continuous learning and practice to improve their own analytical research ability, it is possible to become their own success in the business competition.

Goal definition

The first step to create the core objective of business is to make a list desired outcomes. This is because it makes sure everyone in the team has the same goal without conflict.

Data collection

With the rapid development of technology, especially in recent years with the wide use of social media, Internet and cloud computing, the concept of big data appears. The biggest challenge of big data is volume velocity and variety. Therefore, successful enterprises require the basic ability of data collection. Eg. How to extract useful data from numerous dataset efficiently and how to make sure the dataset satisfies customers’ need.

Data analysis and modeling

Coding proficiency in at least one language. The languages most commonly used include R, Python, and SQL to manipulate single or multivariate linear regression, anova and hypothesis testing.

Interpretation, action, and feedback

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Ten goal

1. Excellent presentation skills
2. Use data-driven decision makings to make company profitable
3. Understand competitors’ strengths and weakness
4. Analytics helps to measure the process of your mission
5. Analytics helps to make improvement on time management
6. Analytics increase efficiency
7. Understand pattern behind data and customer
8. Cluster analysis is used in unsupervised learning to group, or segment, datasets with shared attributes in order to extrapolate algorithmic relationships
9. In supervised classification the user or image analyst “supervises” the pixel classification process.
10. Data visualization

R Pros

R is an open-source software. Anyone can use and modify through R

R is accessible to make packages through CRAN and users can just install and library many packages

R has advantages in statistical analysis packages since many packages will appear first in R

R can read data and modify dataframe easily from many formats.

Cons

Charts and graphs from data visualization is hard to manipulate and save since it requires lots of coding inside function

It requires users to read the dataset first, which is time-consuming since the file path is strict.

It requires users to library packages before run the code, otherwise there might be an error

Python Pros

It is a versatile dynamic programming language

Python is also an open-source software

Python has advantages in library for web development and machine learning.

Python function makes coding easier to read and debug.

Data visualization

Python runs on Windows, Mac OS X, Linux/UNIX, etc

Cons

Compared with R, python has smaller library and resources in data analytics

Slower in Speed

Python

def sum(a,b):

total = a+b

return total

#the sum function return the sum of input a and b.

Sql

SELECT title

FROM films

WHERE release\_year >= 1994

AND release\_year <= 2000;

Query

 query selects the title column from the film table:

the condition is that …