

## How Can the Companies Make Their Processes More Efficient by Transforming the Way of Using Their Data in Today's Competitive Environment?

Maria Georgiana Ponea  
Ioana Antoaneta Ponea (Radu)  
„Valahia” University of Târgoviște, Romania  
[georgia\\_ponea@yahoo.com](mailto:georgia_ponea@yahoo.com)  
[radoo\\_oana@yahoo.com](mailto:radoo_oana@yahoo.com)

### Abstract

*Every day there are millions of opportunities to improve people's lives by making better use of data. In the digital era, harnessing data can be the difference between staying ahead or falling behind.*

*Most organizations are investing millions of dollars into digital transformation efforts, and yet, the majority of these initiatives are failing. Why? Because organizations are failing to create a Data Culture — the behaviors and mindsets that empower people to innovate and drive change with data. A growing number of enterprises are recognizing that turning data into information, knowledge, and insights requires a data culture. Data culture encompasses values, behaviors, and attitudes of executives and employees that promote and enable use of relevant data as the driving force of decision making.*

*Tableau Software products are transforming the way people use data to solve problems. They make analyzing data fast and easy, beautiful and useful.*

**Key words:** tableau, effective management, process improvement, data culture, entrepreneurship  
**J.E.L. classification:** M10

### 1. Introduction

In the existing competitive environment, most of the companies are becoming of great significance as corporations rely more and more on the financial and strategic approaches of their leaders. Nowadays, the financial professionals are challenging a series of different responsibilities and risks. Their role starts with reporting the data on the past year's activity, handling the present issues, and not least important taking decisions for the foreseeable future.

The aim of this paper can be translated into identifying the way of how the entrepreneurs or management of an organization can make use of data to really make a difference and increase the efficiency in their overall business processes. In the actual environment, keeping up the pace with the new technology is key to finance professionals. Having the end goal of increasing the agility and efficiency levels within their organization, the finance leaders must be using various up-to-date tools that will provide real time data access and help the business to grow. It is now the most appropriate moment to demonstrate their entrepreneurial spirit by taking a journey of transforming their business and driving success into the near future. Better workplaces mean happier employees empowered to express their fullest ingenuity and creativity.

There is always a need for change and data management makes no exception. Whether we are in the role of an entrepreneur or a manager, it is absolutely critical to be always informed of any up-to-date solution and ready to have it integrated into daily activity.

There is a true fact that most of the businesses focus on obtaining a competitive advantage. They are always trying to find something new in order to be able to keep their market share. Therefore, we must improve the internal operations of our entire organization.

## 2. Theoretical background

The paper focuses on the essence of an effective data approach as an economical category through the perspective of implementing managerial activities in the current and long-term periods of organizations. A special attention is paid to the methods and tools of both entrepreneurial and managerial influences that ensure the effective functioning and development of organizations.

All the organizations will need to have a data strategy in place, which is basically a plan for leveraging our company's data to create business value. The cultural framework of using data has always been a priority within the companies, as informed decisions are based on that. Belissent & Leganza (2015) and Xu (2013), report firms that appoint a top executive responsible for data management have superior performance compared to peers.

A modern solution like Tableau may be the key to unlocking big data's potential through discovering insights but it is still just one of the critical components of a complete big data platform architecture. Putting together an entire big data analytics pipeline can seem like a challenge. The good news is that you do not need to build out the whole ecosystem before you get started, nor do you need to integrate every single component for an entire strategy to get off the ground. Tableau is a perfect match to the ability of moving data across different platforms, adjusting infrastructure according to customized demands.

## 3. Research methodology

In the preparation of this article, we have approached to collecting, analyzing and interpreting different types of information from different sources with the end goal of answering to our question on *How Can the Companies Make their Processes More Efficient by Transforming the Way of Using their Data In Today's Competitive Environment?* From the viewpoint of objectives, our research can be classified as descriptive, as we attempted to describe different ways to learn about data, how should leaders manage it and what organizations need to do to survive and thrive in a competitive global market. Some things will never change, and enterprises, as well as other business leaders have learned that data analytics is the best way to answer business questions. In short, the organizations need to have a strategy for how they want to invest their most valuable asset, which is data. We have also combined the descriptive research to the correlational research, as we were interested in understanding the interdependence between a good data analytical approach and the organizational performance.

Observation was one of our qualitative research methods and another method suited for our research goal was the interview with top managers within an organization and they have re-enhanced the importance of efficiently utilizing data, especially when they must take informed decisions.

## 4. Findings

Companies need regular, predictable, standardized data and formats, a data literate workforce and defined, documented and repeatable business processes to be truly effective, efficient and sustainable. The way organizations move to a more desirable data condition is through deliberate and focus use of a data strategy. As also mentioned in their book (Aiken et al, 2017) developing data strategies is the first step towards organizations becoming data-centric and managing their data as a strategic asset. Today, many organizations do not think of their data in this way, and they consequently develop one information technology solution after another, thinking each system will be the solution they have been missing. There are many cases in which the information technology department will produce automated solutions without proper guidance from the business subject matter experts as to how the problems should be resolved. Instead, leadership needs to realize the best practice, in other words that the ultimate solution is a human and system engineering combination that should be augmented by automation where it makes sense. When businesses begin to focus their work, process and technologies on data, they can more tightly integrate their work and better leverage their data to the benefit of the organization and its strategic intent.

It has been demonstrated that on average, nine out of ten organizations are facing significant legacy data challenges (Aiken & Gillensen, 2011) and when they face this problem, it is highly important to have a strategy behind. However, these organizations are quick to get involved with data warehousing, business intelligence, customer relationship management, master data management and other new business and technology initiatives without having any notion on how the organization needs to leverage those data assets towards a desired business outcome.

Before the organization start making rules regarding data and its use, it is very important to establish an understanding of the value of that data. Integrating information into a balance sheet is not a trivial decision and the process behind doing so should be transparent, objective and repeatable. Instituting a process for accounting for the value of data has also other benefits, such as having a better control over organizational data (Van Rijmenam, 2014) and eventually people begin to make better use of it, treating it as a valuable asset.

Among other solutions that exist on the market at the moment, "Tableau helps Finance departments make their organization's most important decisions on how they spend their time and resources. And they use Tableau to make finance analysis and reporting more efficient, get more insights and value out of their financial data, and increase their organization's focus on its strategy and objectives. That means lower costs, more revenue, and a better bottom line for the business. Please see below seven ways leading Finance departments are driving return on investment by using Tableau". (Crook, 2019)

- Efficiency Reporting – There is a great business value that an organization can get out of the automation and standardization we find in Tableau implementation.
- Cost Avoidance – Tableau will make the business be more successful, bringing insight to the management group in real time, a proposal that will definitely improve operations.
- Discovering Risk areas - Tableau helps the users connect to different sources of data and identify predictable risks.
- Growth and Profitability Synthesis - A Chief Financial Officer (CFO) irrespective of the industry in which activates, will need to be able to easily analyze profit and loss data that serves in the strategic planning and decision-making and will also need to be able to identify which sections are most profitable, as well as what division has the highest growth rate. Tableau will help identify great performers or areas of opportunity by putting on all segments in dynamic quadrants.
- Expense Reduction - Having Tableau implemented, a company's finance team will be able to discover which are the key metrics for each cost center within the organization.
- Revenue Forecasting – As we all know that not only pas data is important for our finance leaders, but also expected results help in the process of decision-making, Tableau allows the companies to combine different sources of data and reach the single source of truth. Tableau helps develop dashboards showing opportunities and challenges, based on the available data in less than a minute.
- Cash Flow Management – Finance leaders are always interested in tracking the movement of funds in and out of the business either daily, weekly, monthly or quarterly. There are many useful questions that may arise, such as the following: Tableau is extremely useful for local or global cash management functions, by developing dashboards that will provide full visibility, easy access and control, so as the management will see the big picture, but also can drill down into the details.

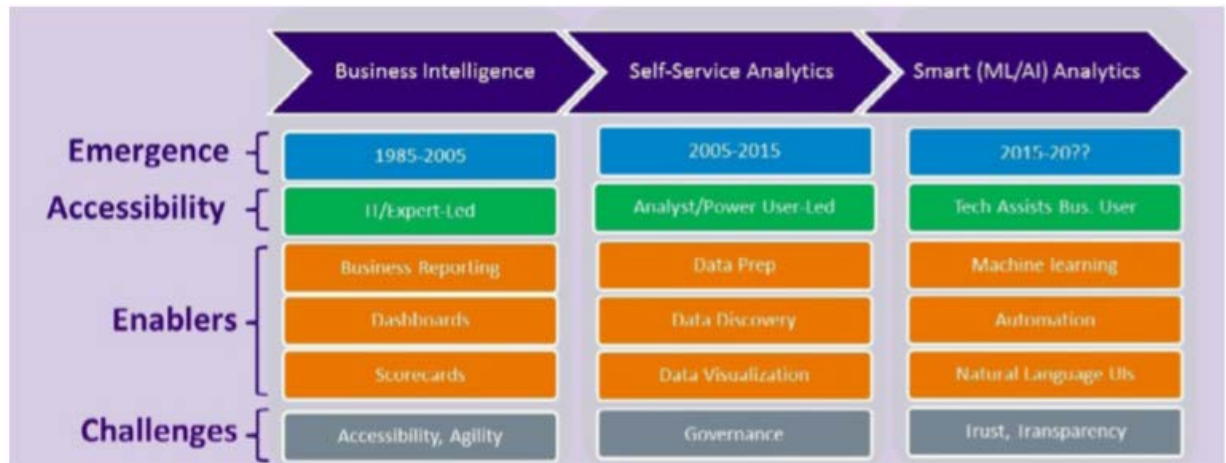
In the last couple of years, we have seen the positive impact of the Artificial Intelligence (AI) – a rapidly advancing technology and how users interact with the digital world and with each other. Machine Learning (ML) which is a particular approach to AI is more often used in products or services, however, there are some challenges to be considered when speaking about the users' confidence in the Internet. There were developed different applications based on AI technology in several domains such as: education, transportation, healthcare, entertainment, public safety and service robots. AI together with the internet will extend the application in other fields and may become the new engine for global economic growth in the coming years.

Tableau represents an innovator of Business Intelligence (BI) and was a leader on the market in the last couple of years, but market progressed as per Constellation Research (Henschen, 2019), we live "the era of Smart Analytics".

Constellation (Henschen, 2019) “designate these ML- and AI-powered advances not as extensions of self-service analytics but as early signs of a new era of computer-assisted analytics. Smart capabilities complement human interpretive skills with computer processing power that can be harnessed to automate repetitive tasks and tackle complex calculations. Furthermore, ML and NL understanding augments the analytical skills of employees and customers.”

Constellation Research (Henschen, 2019) “analyzes Tableau’s strengths and weakness on the background of four key categories: Smart Data Prep, Smart Discovery and Analysis, Smart Prediction, Natural Language Query.”

Figure no. 1. Self-Service Analytics Era moves over to the ML- and AI Era



Source: Constellation Research, June 2018, Updated March 2019

Although there will be a change from the utilization of self -service to smart era, when it comes to the deployment of any of these technologies such as artificial intelligence (AI) or machine learning (ML), the following best practices will always occur:

- Executive sponsorship – For the successful implementation of any project the support of someone who has influence and credibility in both the business sphere and IT has to be obtained.
- Another key aspect is building a cross-functional team. Critical drivers in an effective deployment are business stakeholders, IT data science experts and software development team members.
  - Choose the most appropriate project. The best approach would be to start with small projects that will payoff notably soon. Then move up to greater projects, more time-consuming and riskier.
  - Move quickly. Nowadays, everything happens with the highest speed, therefore management is waiting to deliver fast results and it is non-negotiable their expectation.

## 5. Conclusions

Beyond data analysis, Chief Financial Officers (CFOs) are more and more preoccupied of data management challenges. In this category we may include the monitoring, storage and quality of data, important functions which will allow all processes operate more efficiently. “The Four V’s of Big Data.19 The four V’s include volume (scale of data), velocity (analysis of streaming data), variety (different forms of data), and veracity (uncertainty of data)”. (IBM, 2013).

Tableau represent the tool that can convert simple data into a viable insight, by creating dashboards and different ad hoc analyses in just a few clicks. It helps share the work with anyone and make an impact on the business. From the individual analyst looking at specific sales performance to the sales executives looking at overall performance in the pipeline and ability to hit targets that meet company goals, people everywhere use Tableau to see and understand their data.

To find more time and make a bigger impact in the financial analysis, we do not have to disseminate lots of spreadsheets and existing processes all together. Integrating all our data sources with visual analytics is easier than ever before. Tableau helps people see and understand their financial data, no matter how big it is or where it is stored. We can quickly connect, blend, clean, visualize and analyze our data the way we want– no programming skills required (Crook & Gleason, 2019).

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