

### Business Analytics in 2021

A Comprehensive Trends Report



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### INTRODUCTION

Today, organizations function in a dynamic business environment that is characterized by constant changes in consumer demand for better products and services.

To meet customer expectations and remain competitive, companies not only capture current data, but they also collect historical data to evaluate past performance and trends.

In a highly competitive business landscape, it is critical to analyze past and present trends in order to streamline business processes, optimize resources, identify risks, reduce operating costs, and better meet customer demands, all of which boost profitability.

The growing need to analyze recent and previous trends is accelerating the adoption of BA (Business Analytics) tools, solutions, and software in diverse industries.

BA tools, utilizing data visualization, text mining, data aggregation, and data mining techniques, help enterprises gain real-time, actionable insights from complex datasets, ensuring datadriven, better-informed decisions.

In addition, Business Analytics solutions, incorporating AI (Artificial Intelligence), Deep Learning, and Information Systems principles, facilitate near-accurate predictive analysis, enabling organizations to formulate strategies

and explore business possibilities based on prediction models.

According to global market intelligence and advisory company Mordor Intelligence, the business analytics market will reach \$103.65 billion by 2025, up from \$67.92 billion in 2019, at a Compound Annual Growth Rate (CAGR) of 7.3 percent.

The rapidly expanding business analytics market offers many career options for qualified professionals, including positions such as Data Scientist, Data Visualization Analyst, Big Data Engineer, Financial Analyst, Marketing Analyst Manager, Fraud Analyst, Retail Sales Analyst, and Data Architect.

However, experts from top universities and management consulting firms, as well as the World Economic Forum, agree that there is a severe shortage in the supply of professionals with analytics-related skills, compared to the soaring demand. The widening talent gap presents an excellent opportunity for individuals aspiring to make a career in the fast-growing field of analytics.

This business analytics trend report covers the top business analytics trends 2021 with 2020 hindsight. It also highlights the top tools and skills that will be in demand by companies in the years ahead.

## THE YEAR THAT WAS: 2020 BUSINESS ANALYTICS TRENDS

As a year when the world got plunged into a pandemic, 2020 witnessed fundamental shifts for many organizations around the world. There has been sudden changes in customer needs and habits and companies have had to figure out new ways to orient their day-to-day work and strategic direction to serve their new goals. The new realities created pressure for businesses to evolve faster than ever.

With internet usage going into overdrive and a resulting rise in data, businesses have increasingly turned to

technology to navigate the new

landscape. Analytics, in particular, has been helping organizations predict demand, anticipate potential disruptions in

supply-chain, mitigate risks for workers and customers, and develop overall crisis intervention strategies, to name a few.

As such, businesses have been adopting analytics solutions at a startling pace. Here are some trends that we saw emerging in 2020.



### **Smart Analytics**

2020 is the year of "smart analytics". The primary drivers for smart analytics are ML and AI-related technologies. Smart analytics is well-suited for data-driven companies that use smart tools, smart devices, and smart technologies to enhance business processes, increase business efficiency, and minimize operating costs.

### **Augmented Analytics**

Augmented analytics democratizes and transforms how business users analyze, explore, and respond to insights in data by surfacing the key insights through AI and ML-assisted data exploration, data preparation, and automation of model development. The insights are easily accessible, and they can be extracted without the help of any data specialist.

### **Conversational Analytics**

While NLP (Neuro-Linguistic Programming) has simplified the process of making queries and obtaining data-driven responses, "conversational analytics" takes this a step further by replacing text sessions with voice-based commands. Experts predict that conversational analytics will boost the adoption of BA among a wide variety of business groups.

### **Graph Processing**

Graph processing refers to a technique that involves the graphical representation of relationships between various entities, including places, things, and people. Graph Processing, which enables adaptive and complex data science, has wideranging applications in the area of social analysis, fraud detection, and genome research. Gartner predicts a 100% annual growth rate for this technology through the year 2022.

### Continuous Intelligence

The increased adoption of cloud platforms, IoT architectures, sensors-enabled devices, and technologies like event stream processing have propelled the demand for Continuous Intelligence - an integration of real-time analytics into business processes. By 2022, over 50% of business systems, to improve decision-making, will implement Continuous Intelligence, according to leading research and advisory company Gartner.

### Commercial Applications of Artificial Intelligence and Machine Learning

Until now, most of the studies related to Machine Learning and Artificial Intelligence have been done using open-source technologies. However, in the second half of 2020, the situation started to change. Now various commercial players are participating in the development and research of AI and ML applications, through collaborative models.



## LOOKING AHEAD: BUSINESS ANALYTICS TRENDS 2021

The trends we that came to the forefront this year will continue to play out through 2021. As the analytics landscape evolves to match the emerging challenges of today's business environment, what are the trends we need to keep an eye on? In this section, we take a look at the business analytics trends that we hope to see getting bigger and bigger in the coming year.



### **No More Dashboards**

By 2025, data stories would become the most popular way to leverage analytics, and seventy-five percent of these data stories will get generated automatically via augmented analytics methodologies. With dashboards, users often need to do lots of manual tasks to delve deeper into insights. Thanks to data stories, insights can be extracted without the user having to perform analysis on their own.



### **Decision Intelligence**

In 2021, most large corporations will recruit analysts for Decision Intelligence implementation, including DM (Decision Modeling). The Decision Intelligence domain incorporates a variety of real-time, decision-making capabilities, encompassing applications such as CAS (Complex Adaptive Systems). Decision Intelligence

integrates both traditional approaches and advanced technologies like Machine learning and Artificial Intelligence, allowing non-tech users to modify decision logic with no programming involved.



### Hands-On Blockchain

Experts believe that in the realm of analytics and data, Blockchain technology will play a vital role in the drive for highly advanced data-driven initiatives, for instance, smart contracts. Although Blockchain is not a more secure environment than other data sources, still, businesses that are adopting blockchain-based smart contracts — voluntarily adopted or externally enforced — will see a **fifty percent** jump in the overall quality of data by 2023, according to a forecast by Gartner, Inc.



### **ADM (Augmented Data Management)**

Al technologies are being utilized for next-best-action recommendations, metadata auto-discovery, or governance auto-monitoring. These applications are being enabled by data fabrics, which leverages Continuous Intelligence over existing and discoverable metadata assets for supporting the design, utilization, and deployment of reusable and integrated data objects, irrespective of the architectural approach or deployment platform.

Organizations that are taking advantage of data fabrics, Machine Learning, and active metadata to connect, automate, and optimize data management will reduce the time to delivery by **thirty percent** within the year 2023.



### **Data Exchanges and Marketplaces**

**Thirty-five percent** of large corporations, by 2022, will either sell or buy data through formal data marketplaces on online platforms - a ten percent increase from **twenty-five percent** in 2020. The significant rise indicates the fast-paced adoption of cloud, Machine Learning, AI, and data science.

# THE HOTTEST BUSINESS ANALYTICS TOOLS FOR BUSINESSES IN 2021

With a staggering volume of data generated by companies each day, they are increasingly adopting business analytics tools into their operations to better understand their customers and boost the speed, scale, performance, and future growth of their business.

As analytics tools become more refined and sophisticated in their abilities to help businesses crunch complex data and make better decisions faster, their significance is only going to increase, as shown by **studies** that predict the global investment in business intelligence is soaring.

In this section, we take a quick look at some of the most promising business analytics tools that are likely to remain business favorites in 2021.

### splunk>

### **Splunk**

Developed with an objective of processing log file data, Splunk features a user-friendly web interface that is ideal for visualization.



### **QlikView**

Tableau and QlikView hold top positions in almost all data visualization surveys. QlikView, a BA solution for advanced users, offers exceptional flexibility and faster response.



### **Tableau**

The Tableau BA tool performs critical analytical tasks, and it creates fascinating visualizations. The best part is that Tableau is incredibly easy to learn.



### SAS

SAS is a versatile, robust, and easy-to-use tool. SAS incorporates a variety of features, and over the years, it has continued to add more modules for a best-in-class user experience.



### **Apache Storm**

Apache Storm is one of the preferred tools for handling large data, especially when it flows in a continuing stream. It is ideally suited for stream processing and real-time data analytics.



### **Apache Spark**

An open-source data processing engine, Apache Spark has been developed with a special focus on unstructured data analytics. One of the most popular Business Analytics tools, Apache Spark offers easy integration with Hadoop ecosystem.



### **Python**

A widely-used tool for Business Analytics, Python is famed for its seamless big data integration. The emergence of statistical and analytical libraries, such as SciPy and NumPy, has added more power to Python. This tool is a preferred choice because of its simplicity and user friendly features.



### R

The latest trend in Business Analytics, R is a cost-efficient analytics solution that has a comprehensive portfolio of over 8000 models. In terms of users, R has outperformed many popular Business Analytics tools after Microsoft took over and revamped it.



### WHAT IT TAKES TO BE A BUSINESS ANALYST:

### QUALIFICATION, QUALITIES, AND THE NECESSARY SKILL SET OF THE 2021 BUSINESS ANALYST

A business analyst is tasked with the responsibility to understand the business landscape and the changing needs of an organization. They are required to closely collaborate with diverse teams, execs, and stakeholders to gain a deeper understanding of the business so they can provide efficient and innovative solutions to address the challenges that the company is facing.

Here's a glance at the qualification, qualities and skills that the role of a business analyst demands:

- A master's degree from a university/certification from a well-known institution
- Conceptual and analytical thinking capabilities
- Cutting-edge technical skills
- Outstanding documentation skills
- Expertise in giving presentations and generating reports

- Excellent time management, planning, and organizational skills
- Proficiency in leading teams and projects
- Ability to uncover new opportunities, develop and implement solutions, assess business processes, and anticipate requirements
- Deep knowledge of optimization strategies
- Staying updated on IT advancements in order to modernize and automate systems
- ✓ Superb communication skills to interact with all stakeholders
- ✓ Aptness to gather critical information and produce reports
- Capability to collaborate with managerial staff, technicians, team members, and clients
- Understanding of resource allocation and maintaining costeffectiveness
- Competence to manage priorities based on needs and demands
- The adeptness to monitor project deliverables to ensure timely completion



### LEARN THE SKILLS OF TOMORROW TODAY!

By 2025, **eighty-five million jobs** could be displaced due to a shift in labor between machines and humans, according to the World Economic Forum's Future of Jobs Report.

However, the report also states that **ninety-seven million new jobs** could emerge, which are more suited to the labor sift between humans, algorithms, and machines.

Over the next 5 years, the skill gap will further widen, and individuals who can make sense of Big Data will be in high demand.

The present moment is a good time to prepare for the future by acquiring a certification from an industry-recognized educational institution, such as Simplilearn.

The world's #1 certification provider and online bootcamp, Simplilearn offers a **Business Analyst Master's program** that will train you on the most-advanced BA techniques and tools, including SQL databases, Agile Scrum methodology, visualizations, statistics, and data analysis.







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