

QUICK REFERENCE LIST: 8 PROBLEMS BIG DATA WILL FACE IN THE FUTURE

The big data market is clearly growing quickly and because it is, organizations are investing heavily in different types of technologies in order to join the party. Integrating some of those new technologies into existing business processes is presenting challenges that likely will lead to some big data initiative failures. In addition, people challenges and organizational challenges continue to obstruct efforts to become more data-driven.

So while many of big data's current problems will carry forward into the foreseeable future, others will come into the fold as technologies, processes and tools evolve. Here is a quick reference list of potential problems big data will face in the future:

PROBLEM	DESCRIPTION	WHAT TO EXPECT
CONTINUED DATA GROWTH	With the number of connected devices, Internet of Things (IoT) devices, handheld devices and more expected to continue to increase, the volume of big data that will be generated will continue to get larger and larger with no end in sight.	Technologies, processes and tools will need to be scalable and adaptable to handle the needs of growing environments.
NEW PRIVACY REGULATIONS	It's only a matter of time before new and more robust privacy regulations are put into place to better define big data analysis usage rules and protect consumers. with it.	Organizations who partake in big data analysis activities will have to stay up-to-date with evolving regulations and stay within the boundaries of what is appropriate, or risk facing heavy fines and reputational damage.
LACK OF LEADERSHIP	More and more companies are hiring a Chief Data Officer (CDO) to handle data-related activities and provide organizational guidance as it relates to data usage. Those that aren't hiring one either can't find one due to the lack of available talent, or can't justify allocating the budget resources needed for the hire.	The creation of the CDO position intensifies the already existing big data problem with lack of skilled workers. Organizations that are unable to fill data leadership roles such as CDO will continue to lean on in-house personnel whose expertise may not be related with such fields.
COSTS	Total revenues from big data and business analytics will rise to \$187 billion in 2019 according to IDC analysts, while business spending on big data will surpass \$57 billion.	Investments in Big Data are likely to shoot up dramatically. Although this may differ depending on the industry, the surge in spending will be consistent overall.
"BIG DATA" COULD BE REPLACED	According to some big data experts, big data will soon be replaced by fast and actionable data. This is because many businesses don't utilize a significant portion of the data they have access to, but still rely on the insights their data provides.	If this were to occur, the idea with fast and actionable data is quickening the pace of analysis and extraction of actionable information, thereby providing a stiff competitive advantage.
ROBUST DATA GOVERNANCE STRATEGY	Organizations need an infallible governance framework to use big data in the most secure and productive ways possible.	Having a governance framework in place effectively manages accessibility and provides an accurate description of data origins. Without this in place, you could be subject to more regulatory compliance fines, to go along with poor security and productivity.
EDGE ANALYTICS	Edge Analytics gives organizations the ability to perform real-time analysis at any point where data is generated. This could be an IoT sensor, connected device, network switch and more.	With massive volumes of streaming data from an estimated 30 billion connected devices by 2020, Edge Analytics could support advanced decision-making capabilities and responsiveness while minimizing data management difficulties.
AI FAILURE	There's no denying that AI is going to be huge, but it's still early. As a matter of fact, Forrester has predicted that "75% of early AI projects will underwhelm due to operational oversights." AI projects have been short-lived to this point, done mostly to prove out value.	Organizations will soon learn how to utilize AI properly to realize its many benefits. But while it's still early, you may be surprised at the regularity of failure as organizations neglect various operational considerations that cause negative consequences with AI ventures.