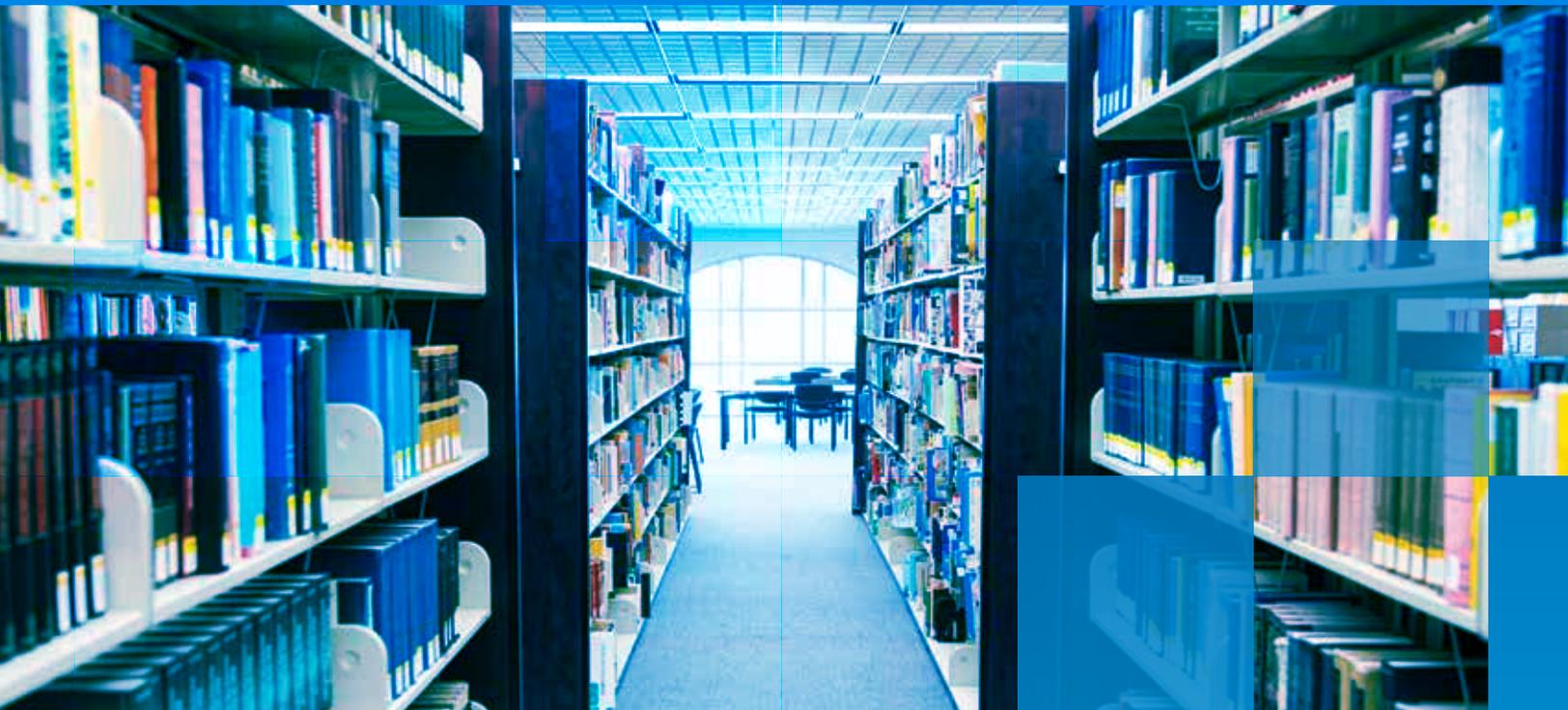


# PERSPECTIVE

Big Data, Analytics, and Business Intelligence:  
*Making the Industry Future-Ready*



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## Abstract

Insurance companies always have vast amounts of data, some highly valuable. However, till recently, due to its complexity, the data was just stored or archived, but not used. Now, with the right analytics and business intelligence (BI) tools, companies can not only use this data which is otherwise made redundant, but also gather more relevant and timely information.



## Benefits of big data in an information-rich landscape

Big data delivers new opportunities for growth – an advantage that stakeholders missed out on with traditional content analysis methods. It brings great value to businesses thanks to the number of media it accepts data from, and the richness and near completeness of the information. Here are a few more benefits that big data and the right analytics and BI tools bring:

- ✓ Greater reliability and consistency than other data
- ✓ Strong potential to be used to gather deep insights (in various areas like risk reduction)
- ✓ Systems become more transparent, allowing authorized stakeholders to access it anytime, anywhere
- ✓ Data collection can be done in real-time

All these benefits are essential for insurance companies that want to get ahead in the game and lead. The application value of big data, analytics, and business intelligence in the insurance industry is immense. One of the pivotal factors the entire industry is carefully balanced on is the underwriters' ability to make decisions on who to insure, and at what premium, based on risk evaluation. Big data, comprising financial, risk, claims and

actuarial information, among other critical aspects will help insurers make more informed decisions on these aspects. Big data is growing at an exponential rate. And as time goes by, aged IT infrastructures will not be able to handle the surge in information, and will bring unprecedented challenges that can pose major roadblocks to the survival of insurance companies. How can companies prepare for these big-data-related challenges?

Insurance companies, especially life and P&C insurers, will face issues related to big data like an increase in volume, data velocity, structure complexities, and more. Changes to architecture will compound the issue, as it will make it difficult to retrieve even the 'little data' that the company has stored in legacy systems, which will eventually become dysfunctional.

A survey by the Novarica Insurance Technology Research Council revealed that out of the 86 of its member executives specializing in insurance IT who participated in the survey, only about 20% stated that their organization is gearing up to make the move from 'little data' to big data to become future-ready.

The best and most effective way is to use analytics and BI tools. However, just any analytics or BI tool will not suffice for key functions. While analytics tools are generally used quite extensively across the industry in areas like finance and actuarial science, it is not being used to optimize areas like operations which are made up of specific functions like marketing, claims, and underwriting.

## How analytics and business intelligence work with big data to deliver more benefits

An insurance organization's ability to extract business intelligence and leverage it depends to a large extent on how its actuarial resources are used. When both functions sync with each other, digitally empowered organizations can experience advantages like:

- Insightful information that can be leveraged for better strategic decisions
- Better alignment with rules and regulations set by external stakeholders
- Enhances segmentation of customers, markets, and products and services
- Greater support for management teams based on a strong understanding of the functions of the business
- Generates reports on customers whose portfolios have strange characteristics that raise a red flag (which even enables fraud detection)
- Identifies micro-trends and indicates the ones that can be maximized for better outcomes



## Big data outlook: becoming future-ready

With the right analytics tools, big data can become instrumental in changing the way key decision makers perform. Big data that is relevant, timely, and accessible will be most valuable to these decision makers. One of the latest and most effective platforms that is being adopted quite rapidly by those integrating big data is

the open source Hadoop ecosystem. This framework takes big data processing to a whole new level, as it not only accepts different types of data but also offers fast processing capabilities even with large amounts of data.

Analytics tools also allow insurers to not only leverage information gathered the

traditional way, but also through various other media like social networks, mobile, websites, beacons, etc. This will give insurers access to valuable information that is more complete and rich, which can give them an edge in developing the right products for their customers, and marketing them to the right audience.

1. [http://www.businessinsurance.com/article/99999999/NEWS040105/399999706?tags=\[59|331|76](http://www.businessinsurance.com/article/99999999/NEWS040105/399999706?tags=[59|331|76)

2. <http://www.tcs.com/SiteCollectionDocuments/White%20Papers/Insurance-Whitepaper-Business-Value-Big-Data-Insurers-0613-2.pdf>

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