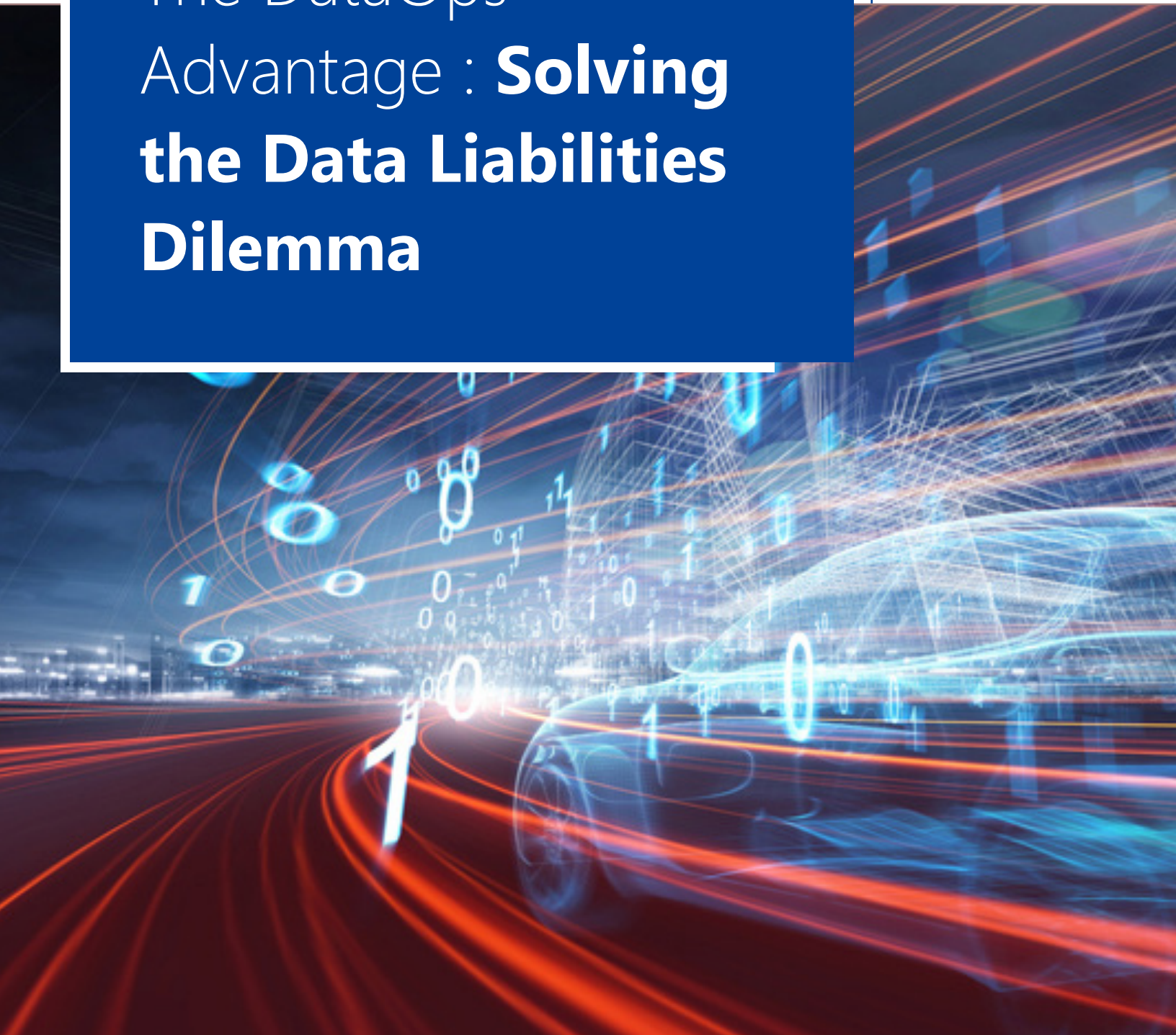


The DataOps
Advantage : **Solving
the Data Liabilities
Dilemma**



The global health pandemic and subsequent economic crisis have shaken the very foundation of business.

Closures, quarantine mandates, and other measures have reshaped consumer behaviors, redefined human interaction, upended traditional work environments, and created a massive, remote labor force. Amidst this uncertain and ever-shifting marketplace, organizations have been forced to adapt rapidly, implementing structural changes and new operating models—and embracing digital solutions at pace never seen.

As a result, organizations have accelerated their digital transformation efforts by several years—and a key driver is data and analytics.¹

Despite the rush to embrace innovation, the success of enterprise data programs is often lackluster due to data liabilities, which include anything that impedes the inability to manage data from source to consumption at the speed, scale, and efficiency. But as corporations increasingly embrace data as a key asset, building an organization's data and analytics competency is key.

How DataOps Unleashes Data Analytics

In this whitepaper, we will explore:

- Why high quality, reliable data is critical to the future of your business.
- The top issues impeding data analytics programs, including data liabilities.
- The importance of DataOps and how this framework solves the data liabilities challenge.
- Critical steps for addressing your data liabilities challenge with DataOps.

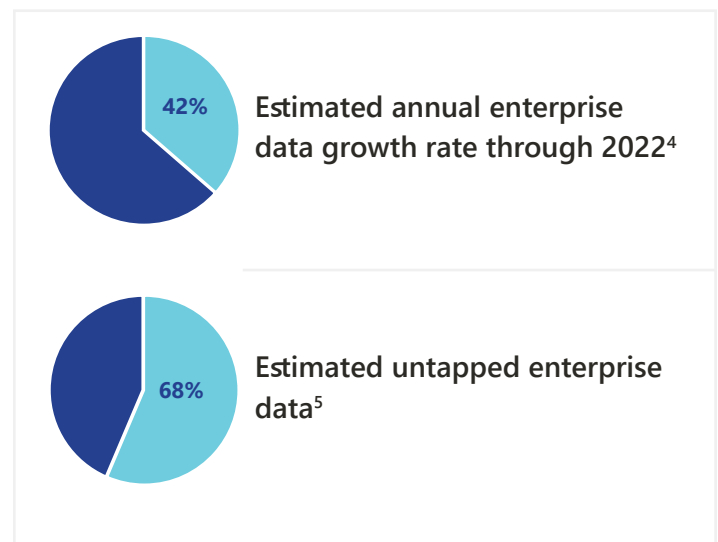
Harnessing the Value of Data

A cultural and technological lag has impeded the broad adoption of information as an asset and competitive enabler. According to Gartner, while fewer than 50% of companies considered data and analytics as documented strategic priorities in 2019, this number will swell to 90% by 2022.²

Adherence to traditional business models and processes is giving way to the realization of the immense enterprise

value delivered by data and analytics. As companies embrace data and analytics, they can make far better business decisions, increase agility, improve efficiency and productivity, drive product quality, and more.

As this cultural transition occurs, companies must overcome technological hurdles that hinder them from maximizing the impact of their data analytics programs. While the annual enterprise data growth rate through 2022 is estimated to be 42%, only 32% of enterprise data is currently used.³



Benefits of Data and Analytics



Understanding the Data Liabilities Challenge

Among the biggest technological obstacles that companies must overcome are data liabilities.

Data liabilities are anything that hinders the consumption of data as an asset—such as flawed data, security issues, data debt, data waste, and even the lack of data literacy. Data liabilities must be addressed for organizations to leverage data to drive positive business outcomes.

Common Data Liabilities

Poor data security ▶

Data security is a major issue. In fact, 64% of companies have experienced a data breach in the past two years.⁶ Issues can range from lack of encryption to improper access credentials to not understanding how sensitive data is used.

Low-quality data ▶

Poor data quality, including erroneous and incomplete data, is another major obstacle in adopting a successful data analytics program. At the core of this issue is a lack of non-repeatable processes and technologies that enable the detection and correction of data flaws. Poor data can cost between 15-25% of revenue for companies.⁷

Data debt ▶

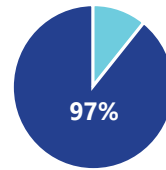
Like the concept of technical debt, data debt can be incurred deliberately or accidentally and is a result of immature data processes, silos, and fractured environments. Examples might include duplicate data or a failure to archive data that is no longer used.

Wasted data ▶

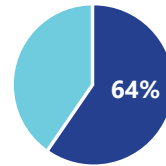
Organizations that do not take full advantage of the data available to them are leaving opportunities to accelerate business on the table. On average, it is estimated that companies are only tapping 32% of available data.⁸

Lack of data literacy ▶

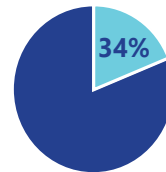
Finding qualified data professionals is difficult, especially when it comes to newer technologies such as data lakes and advanced analytics. But organizations can bypass the need for internal data literacy with the help of external partners such as Beyondsoft. This allows them to focus on leveraging the benefits of data to drive business forward.



of company data fails to meet basic quality standards⁹



of companies have experienced a data breach in the past two years¹⁰



of companies categorize their data quality as "good" or "excellent"

DataOps Solves the Data Liabilities Dilemma

What Is DataOps?

DataOps is an emerging data analytics and operations discipline that improves the communication, integration, and automation of data flows across an organization. Combining Agile development, DevOps methodologies, and process controls, DataOps includes everything required to capture, process, scrub, store, secure, and manage data.

The goal of DataOps is to improve data management practices and create a predictable cycle for the delivery and change management of data, data models, and artifacts. DataOps applies the DevOps continuous delivery framework to data and uses processes and automation to improve the use and value of data in a dynamic environment.

How DataOps Addresses Data Liabilities

DataOps introduces the governance, quality controls, and rigor needed to address data liabilities. DataOps shortens the end-to-end data analytics cycle, from the origination of ideas to the creation of charts, graphs, and models that inform business decisions.

Of course, the data lifecycle relies upon people in

addition to tools. For DataOps to be effective, it must manage collaboration and innovation. To this end, DataOps introduces Agile Development into data analytics, to enable data teams and users to work together more efficiently and effectively. Agile methods govern analytics development and enable organizations to act quickly in response to shifts in customer requirements and market trends.

Benefits of DataOps

Faster data processing ▶

DataOps reduces the time required to process and analyze data, driving greater efficiency.

Real-time data insights ▶

Faster processing time can enable real-time insights that increase business agility.

Improved data quality and reliability ▶

DataOps reduces the chances for flawed data by inserting automated quality controls into data collection, processing, and output processes.

Data prioritization ▶

DataOps enables organizations to identify and analyze just the data that is needed and ignore the data that provides no value.

Increased data analytics maturity ▶

Removing data liabilities through DataOps enables organizations to evolve their data analytics maturity and drive toward predictive insights.

Tighter collaboration ▶

DataOps enables greater data ecosystem integration, breaking down barriers between internal organizations as well as external partners.

New opportunities ▶

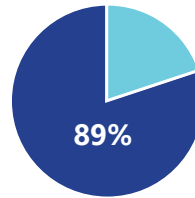
An outcome of DataOps and increased data analytics maturity is the ability to identify marketplace and customer trends and capitalize on new business opportunities.

Increased productivity ▶

DataOps saves substantial time scrubbing and analyzing data through standard processes and automation.

Getting Started with DataOps

For many organizations, DataOps represents a massive strategic shift. Rather than attempting to boil the ocean by tackling every data pipeline at once, organizations can ease the transition with an incremental, phased approach. Below we have provided some tips for getting started with DataOps and addressing data liabilities.



of companies struggle with managing data¹¹





Take a Targeted Approach

Identify, inventory, and prioritize critical data liabilities and bottlenecks within your organization that are impacting your business. Narrow this list to isolate opportunities to solve data liabilities and bottlenecks through the application of DataOps principles. Establish clear and measurable objectives. Conducting a small pilot can help demonstrate value and learnings that you can apply on a larger scale.



Involve Key Players

Buy-in and close collaboration between teams is essential to a good DataOps strategy. Identify the key players, their roles and responsibilities, and coordinate activities between them. Ensure that they understand your motivation, objectives, and the value that you are trying to deliver.



Build and Communicate Processes

A key part of DataOps is implementing well-defined processes and workflows for all stages of the data pipeline, from building to testing to deploying to measuring. Monitoring data ingestion, engineering, and analytics is critical to ensuring that data is delivered properly. Consider leveraging technologies to help if they integrate with existing solutions.



Measure Outcomes

Capture the outcomes of DataOps. What data liabilities were resolved? How much time was saved? How quickly was data delivered? What was the impact to the business? Document key learnings and ideas to improve the data pipeline. Metrics and learnings can help enhance your existing pilot and inform the creation of your next pilot.

Get Started Today with DataOps

Regardless of your company's size or where you are in your cloud journey, DataOps principals empowered through a robust technology ecosystem provide compelling business value and outcomes. Starting small is a fantastic way to get your feet wet.

You can also reach out to Beyondsoft. Beyondsoft has a deep history of empowering companies around the world through high quality IT services, including data

analytics and DataOps. At the heart of our success is a diversely talented team of 14,000+ experts who thrive on innovation. With 32 delivery centers distributed across five continents, our presence in both mature and emerging markets enables us to respond quickly to customers' needs on a local, regional, and global level.

Contact us today to learn how we can help you get started with DataOps.



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