snp technologies inc.

Unlock business-changing insights with Azure Synapse Analytics and Power BI

Executive Summary

The volume of data and its pace of accumulation is only increasing. Almost every day, up to 2.5 quintillion bytes of data is created by humans, edge, IOT devices, and machines, according to Domo. Companies that can harness this data can significantly differentiate themselves and future-proof their business advantage.

However, aside from a few companies, most are limited by the ability to effectively use their data due to legacy on-premises infrastructure, siloed data, and lack of skills. These challenges often mean that companies are only able to use a fraction of their data for analysis.

This book shares how Microsoft's Azure Synapse Analytics and Power BI provides an analytics continuum to companies: from data management, data warehousing, and data storage to business intelligence solutions, to effectively handle ever-increasing and varied datasets to improve insights.

Finally, this book gives you the best way to get started with SNP Technologies for transforming your company into an insights-driven business.

Table of Contents

01

What is happening around us

Page 04

02

The problem with the current data ecosystem

Page 05

03

Accelerate business value with a powerful analytics solution

Page 07

04

Best practices for data-driven organizations

Page 09

05

Unlock your data-driven transformation with SNP Technologies Inc.

Page 11

What is happening around us

The data volumes just keep on increasing. The boom in data growth was evident much before the pandemic. Covid-19 only accelerated the digital transformation initiatives of organizations and led to a massive proliferation in connectivity, user distribution, and a greater focus on the systems that kept everything running. In a McKinsey Global Survey,[1] executives reported that these changes are likely to stick for the long-term, which means that the amount of data generated by people, organizations, and machines/devices will only continue to grow at an exponential rate by the day.

According to IDC, data is expected to grow by 400% from 2020 to 2025 out of which 80% is going to be unstructured, and by 2025, each connected person will have at least one data interaction every 18 seconds.[2]

While data in itself is a commodity, the ability to generate analytical and predictive insights from this data and to put it at the heart of the operations is a significant competitive advantage. Today's disruptors are leveraging data to improve customer experiences, open new markets, make employees and processes more productive, and create new sources of competitive advantage – working toward the future of tomorrow.

According to a recent Forrester report, data-driven organizations are growing at an average of more than 30% annually.[3]

To become truly data-driven, companies should link a data-driven strategy to clear outcomes and also create a "data on cloud" strategy. They should identify high-ROI opportunities and enable data as a strategic asset. Finally, the business executives in an organization must be fully committed to developing and sustaining a strategic, data-driven culture.

Sources:

1. McKinsey Global Survey, How COVID-19 has pushed companies over the technology tipping point—and transformed business forever, 2020
2. IDC Whitepaper, sponsored by Seagate, The digitization of the World: From edge to core, 2018
3. Forrester Report, Insights-driven businesses set the pace for global growth, 2018

The problem with the current data ecosystem

Most organizations have aspirations to become an analytics and AI-driven companies, but fall short because of the vast difference between their vision and IT infrastructure. Aside from a few 'Data Masters', organizations are struggling to effectively use their data despite understanding its value due to outdated tools, siloed data, a lack of skills, misaligned teams, and shadow IT. These challenges often force organizations to only use a fraction of their data for analysis. We call this the "*dark data*" problem: companies know there is value in the data they have collected, but their existing data analytics tools are too complex, too slow, and just too expensive.

According to Gartner, nearly 97 percent of data sits unused by organizations. Gartner also reports that more than 87 percent of organizations are classified as having low maturity levels in terms of business intelligence and analytics capabilities.[1]

Source:

1. Gartner Report, Four Steps to Improve Data and Analytics Capabilities When Business Intelligence Maturity Is Low, 2018

The following factors cause current technologies to break down for modern analytics:

Low analytics maturity

The current solutions are not able to provide users with the information they need to be successful in their jobs. Most companies are operating multiple analytics systems. This means the current investments in BI platforms are often under-utilized as there is no single source of authoritative data. Further, the data teams are spending most of their time just stitching things together. Despite that, there are data corruption issues. It is imperative for any modern analytics platform to handle the reality of the modern data world - it should be able to support structured, unstructured, semi-structured, streaming, and other types of data at scale and effectively enforce Data Quality on all of that.

Scaling on-premises data systems is an expensive guessing game

As organizations really move to ingest much more data and turn around workloads and do new use cases, they have to usually choose between accepting slow query performance or investing time and effort for an expensive upgrade process. With compute and storage collapsed together, companies are simply not able to apply more compute to the same data and get things done faster. They need to apply more hardware, and are forced to scale out the entire cluster. This rigidity and inelasticity is a big limitation, especially keeping in mind that companies have to provision for peak capacity.

Lengthy updates and integrations to keep up

On-premise vendors keep coming up with a steady stream of updates to keep up with the advances in analytics. These upgrades are often mandated to ensure the support contract is retained. Each software upgrade takes months at a time and are resource intense, increasing delays and robbing the team of time to innovate by just trying to keep up.

Insufficient for supporting the innovation agenda

The current analytics platform has been put together over decades in many cases and involve a complex web of ETL jobs, Apps, and BI reports with inter-dependencies and customized legacy code. This has created a fragile analytics platform where any change introduced to the system creates a risk of significant business disruption. This is no way to run the heart-beat of your Digital Transformation initiatives.

Accelerate business value with a powerful analytics solution

Microsoft Azure brings the best of analytics and is the only cloud provider to bring the capabilities of data unification and limitless analytics together, enriched with the power of AI and ML, all in a single management workspace with common security and governance.

85% of organizations leveraging Azure Analytics + Power BI report measurable benefits from having well-integrated analytics databases and storage, data management stack, and BI tools.[1]

Source:

1. The Total Economic Impact of Microsoft Azure Analytics with Power BI, Forrester

1. Achieve limitless scale

Azure Analytics guarantees you an industry-leading performance on your demanding workloads. All of the ecosystem, from warehouses to data lakes, provides you limitless scalability, be it for provisioned or serverless, and is always working to intelligently optimize the workload performance with out-of-the-box features such as adaptive caching, query optimization, networking enhancements, etc.

2. Unlock powerful insights

Azure Synapse deeply integrates with Power BI and Azure Machine Learning. This enables you to significantly reduce project development time and enable data professionals to apply intelligence over all their most important data—such as data from Dynamics 365, Office 365, to SaaS services that support the Open Data Initiative.

3. Build a unified experience

Get a unified experience where data prep, data management, data warehousing, big data, and AI tasks can be done in a single, unified workspace. This gives a consistent version of data for everyone and all analytics use cases, but with zero management and maintenance, and an SLA backed with hard finance.

3. Ensure rigorous security

Azure provides fine-grained access control to ensure data stays safe and private. It protects sensitive data in real time, monitoring and responding to threats as they arise with industry-leading security and privacy features, at no extra cost to you.

Business agility requires seamless data collaboration across the entire organization

Business analysts + **IT professionals** + **Data scientists**

Frictionless collaboration

Best practices for data-driven organizations

Companies across industries understand that to thrive today, they need to be data-driven and are thus investing heavily in data and analytics technologies. As per a Fortune 1000 executive survey by New Vantage Partners, 62% of firms reported Data and AI investments of $50Mn+.

However, despite significant investments, most companies are struggling to keep up with increasing demand from business users and growing data volumes. Given these challenges, here are some actions to bear in mind:

1. Define your data strategy, in alignment with your business strategy

Companies can be overwhelmed with the amount of data they have. The best approach is to first outline the key business objectives: customer acquisition, retention, fraud management, supply chain optimization etc., start small with high-value opportunities to demonstrate fast, positive impact, and then build on them to upgrade the organization's tools, people, and processes.

2. Develop your organization's analytics skills with a centralized and decentralized approach

Create a centralized center of excellence **(COE)** to drive advanced analytics and machine learning projects that require scarce skills and experience. At the same time, focus on developing analytics capabilities throughout the organization through training, resources, incentives and a supportive community.

3. Deploy an integrated data and analytics platform to accelerate value with analytics

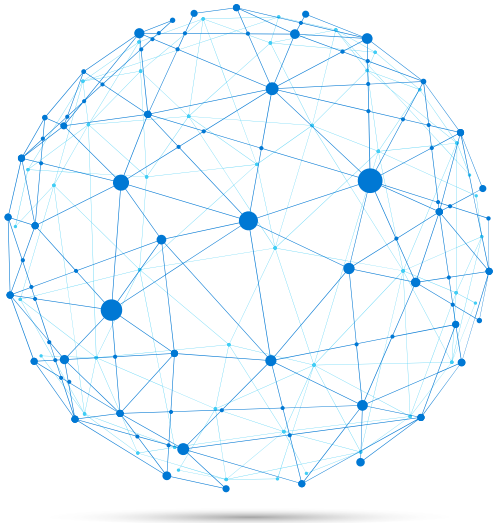
Choose a platform that excels at each step of the analytics process from data acquisition to delivering insights. This enables you to streamline the handoff between each step and enhance collaboration between data engineers, analysts, data scientists, and also developers and DevOps professionals.

4. Get management involved early

As per the survey by New Vantage Partners, 92.2% companies reported that the biggest impediment continues to be cultural challenges.[1] Only when the business executives are committed to developing and sustaining a strategic, data-driven culture would the organization be able to leverage the full power of data.

5. Create powerful, active data governance

According to Gartner, more than 50% of organizations lack a formal data governance framework.[2] This limits data access, entrenches silos, and proliferates shadow IT. Instead, you need to build or adopt a data governance framework that streamlines access to make data both easily and securely available to the users.



Sources:
1. NewVantage Partners, Big Data and AI Executive Survey, 2021
2. Gartner Report, Four Steps to Improve Data and Analytics Capabilities When Business Intelligence Maturity Is Low, 2018

snp technologies inc.

Unlock your data-driven transformation on Microsoft Azure with SNP Technologies Inc.

SNP Technologies Inc. and Microsoft have been strategic partners for over a decade, delivering innovative solutions that help customers harness the power of cloud by delivering tangible business results on the Microsoft platform ensuring our customers have the insights, agility, scalability and security they need to transform their business.

As an established Gold partner, SNP Technologies Inc. supports the Microsoft vision to enable digital transformation for the era of an intelligent cloud and an intelligent edge and empower every person and every organization on the planet to achieve more.

Microsoft

MICROSOFT AWARDS

- **2021** Partner of the Year for Business Excellence in Solution Assessments
- **2019** US Partner of the Year for Intelligent Cloud – OSS on Azure
- **2019** Partner of the Year Finalist

Microsoft Gold Partner

Gold DevOps
Gold Data Platform
Gold Data Analytics
Gold Cloud Platform
Gold Datacenter
Gold Cloud Productivity
Gold Application Development
Gold Application Integration
Gold Collaboration & Content
Gold Security

Microsoft

ADVANCED SPECIALIZATION

- Windows Server and SQL Server Migrationto Azure
- Modernization of Web Applications with Azure
- Azure Virtual Desktop
- Kubernetes on Azure
- Networking Services
- Cloud Security

Take the first step with a 4-Week Microsoft Azure Analytics Assessment

Gain an in depth understanding of the opportunities available in your environment to improve productivity, reduce cost and optimize investments.

In this assessment, we will provide a hands-on consulting engagement, in which we will first understand your current data infrastructure and then share how you can leverage the Azure Data Estate (Azure Synapse, Power BI, Azure Data Factory, and Azure Data Lake) to design a scalable, secured and high performing data platform and BI system.

Get in touch with us:

Prakash Parikh, COO, SNP Technologies
Prakash@snp.com

Website Facebook Linkedin Twitter

Our delivery process

Discover
Understand your data estate to identify the scenarios where Power BI with Azure Synapse can be leveraged.

Brief
Provide an overview of the Azure Data Estate and how you can leverage it to design a scalable, secured, and a high performing data platform and BI system.

Next steps
Provide the roadmap to a proof-of-concept and subsequently a final implementation.

@2021 All rights reserved. Not for further distribution without the permission of SNP Technologies.

snp technologies inc.