


**snp** technologies inc.

A hand holding a tablet displaying a 3D model of a robotic arm in a factory setting, overlaid with a digital interface. The background shows a blurred industrial environment with robotic arms and machinery. The tablet screen shows a detailed 3D model of a robotic arm with various data points and labels overlaid on it. The overall scene is dimly lit, emphasizing the digital overlay on the physical world.

**Unlocking business-changing  
insights for intelligent  
manufacturing**

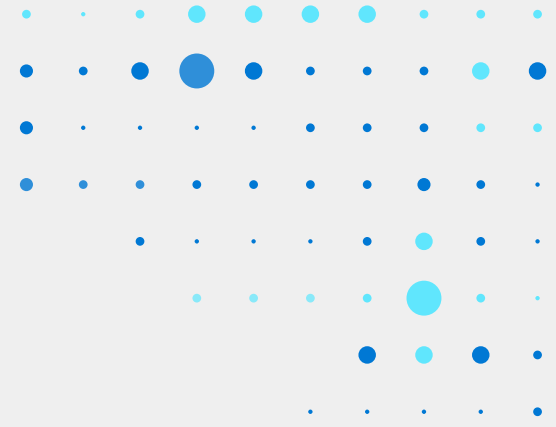
# Executive Summary

Manufacturers are facing an increasing pressure to transform themselves and introduce scalability and cost efficiency into their operations. Every manufacturer is capable of this transformation but needs to embrace a data-driven approach to operations, processes, and technology.

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.

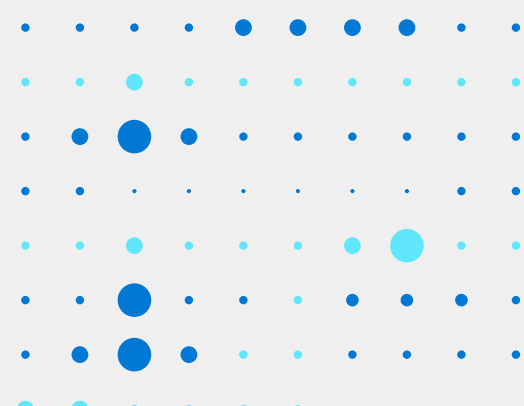
This book shares how Microsoft's Azure Synapse Analytics and Power BI provides an analytics continuum to manufacturers, empowering them to process a tsunami of data in near real time and deliver actionable insights to improve product innovation, create intelligent supply chains, and enhance factory productivity.

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



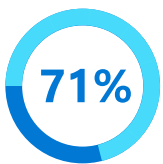
# Table of Contents

<b>01</b>	Manufacturing is evolving. Your data platform needs to evolve too.	<b>Page 04</b>
<b>02</b>	Unlock growth and exceptional customer outcomes with a powerful analytics solution  Key solutions enabled by Azure Synapse Analytics and Power BI: <ul style="list-style-type: none"><li>• Connected product innovation</li><li>• Factory of the future</li><li>• Intelligent supply chain</li></ul>	<b>Page 05</b>
<b>03</b>	Unlock your data-driven transformation on Microsoft Azure with SNP Technologies Inc.	<b>Page 09</b>

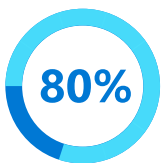


# Manufacturing is evolving. Your data platform needs to evolve too.

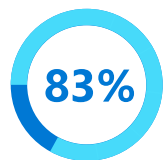
Today, manufacturers are under even a greater pressure to innovate and find new sources of growth due to trends such as globalization, vertical integration, and margin pressure. Manufacturing is no longer based on product offerings alone. It is now also about the best and most profitable business models and enhancing the customer experience. Modern manufacturers are responding to these trends by transforming themselves and are seeing compelling results.



B2B companies lose customers due to a lack of deep engagement <sup>1</sup>



manufacturers expect that improved factory connectivity will help them to increase output <sup>2</sup>



manufacturers see a profit boost from selling services in addition to products <sup>2</sup>

These modern manufacturers have been able to shift the customer and the product to the center of the value chain, rethink their business models and engineer smart products that go beyond just function to provide new services that deliver ongoing value to customers.

At the heart of this transformation lies data and the ability to generate analytical and predictive intelligence from it. Unfortunately, for most manufacturers, their current systems aren't open or designed for data-intensive operations and agile evolutions, making innovation costly and time consuming. They are often rigid and create silos that prevent them from unlocking the insights hidden in that data.

Between both business processes and technology, manufacturers need a consistent and holistic approach to data—including everything from how they manage data to how they distribute insights to employees. Only with a consistent approach can they scale efficiently, and enable agile innovation. Finally, their business executives must be fully committed to developing and sustaining a strategic, data-driven culture.

Sources:

1. [Gallup poll](#)

2. [Annual manufacturing report, Columbus Global](#)



# Unlock growth and exceptional customer outcomes 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.<sup>1</sup>

Source:

1. [The Total Economic Impact of Microsoft Azure Analytics with Power BI, Forrester](#)

# Key solutions enabled by Azure Synapse Analytics and Power BI

## 01 Connected product innovation

Historically, the relationship between a manufacturer and its products ended at the point of sale. Today that's changed, with intelligent products at the edge— from large industrial equipment to spray nozzles used in agricultural irrigation—all connected back to the cloud, creating a digital feedback loop. Those devices at the edge also provide a new connection to customers, allowing manufacturers to offer better services, such as proactive maintenance and remote monitoring, and generate new revenue streams.



By 2024, over 14 billion devices will be used in factory and industrial automation applications, and an additional 11 billion will be dedicated to tracking portable and fixed assets, as per [Frost and Sullivan](#).

Delivering connected products and services offers several strategic advantages to manufacturers:

### Continuous product optimization and quality

Steer towards an "informed" product innovation cycle. Gain new insights into products' performance, understand a customer's experience, and gather a myriad of other rich data to form the foundational inputs for new product innovation.

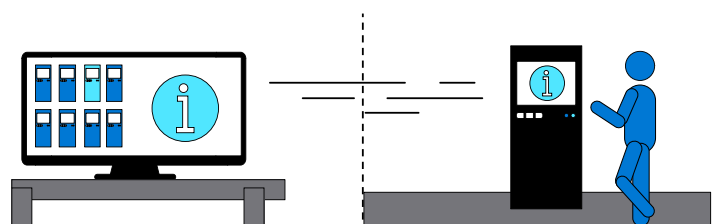
### Innovate product design in real-time

In addition to connected products, transform the manufacturing process itself. Create a repository of data, generated from IoT sensors embedded on machines with edge-based technologies as

well as from IoT-enabled products, to innovate product design and performance in real-time.

### Deliver sustainable value

Enhance the customer experience by providing data on product utilization, usage statistics, benchmarks, and feedback on usability issues, becoming more responsive to customer needs and ensuring loyalty.



## 02 Intelligent supply chain

With products and supply chains becoming more complex than ever—with more players, regulatory considerations, and security risks—manufacturers need more transparency and intelligence just to survive. Further, in today's market full of feature-saturated products and super-competitive prices, manufacturers are exploring ways to customize products and services to build stronger relationships with customers.

The growing need to drive agile and responsive end-to-end operations requires manufacturers to streamline processes, identify logistical risks, respond quickly to fluctuations in demand, and reduce costs.



86% of buyers will pay more for a better customer experience and greater transparency, as per [Walker](#).

Delivering intelligent supply chain offers several strategic advantages to manufacturers:

### Maintain optimal inventory levels & manage costs

Aggregate real-time information throughout the supply chain and fulfillment process flows and make better forecasting decisions on-the-fly to preserve customer profitability and loyalty.

### Track assets throughout the logistics journey

Improve visibility into all the operational bottlenecks that exist between procurement, logistics and delivery and get real-time insights based on integrated data to take consequent actions for supply chain fulfillment.

### Increase responsiveness and agility across the supply chain network

Get real-time view of every route in the supply chain—down to individual carriers, legs, and ports and combine it with 24/7 monitoring of news, events, and social media signals, to identify and respond to potential impacts from external events.



## 03 Factory of the future

Far from just a concept based on longstanding aspirations of Industry 4.0, the factory of the future means going beyond the walls of production to transform the entire manufacturing ecosystem, connecting employees, processes, machines, data, and customers.



Manufacturers have already invested \$100M in smart factory initiatives, with those who have implemented smart factories seeing 17-20% productivity gains, as per [Capgemini](#).

Delivering factory of the future offers several strategic advantages to manufacturers:

### Agile product manufacturing environment

Gain continuous insights to make more informed decisions with the most relevant market data; manage complex heterogeneous inventories; and rearchitect manufacturing and quality control processes and drive new innovations.

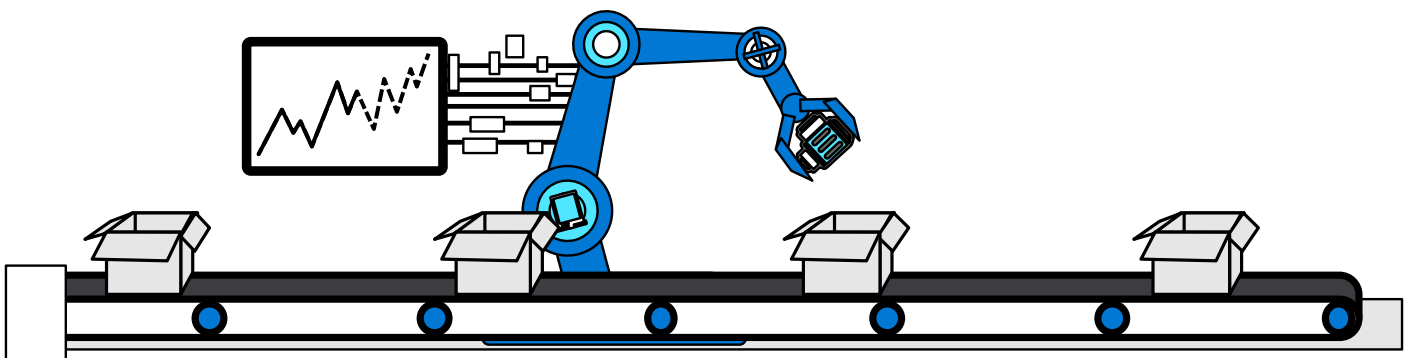
### Reduced downtime and material waste

Connect and monitor factory performance across the globe, using data from smart

assets and apply operational insights to take predictive actions and further optimize your production processes.

### Innovation abilities to meet demand

Handle shorter lead times, establish a tighter link between supply and demand, develop new business models as market demand and opportunities arise and expedite new product introductions to market, all with a connected network of free-flowing data.







## 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 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



- 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



### ADVANCED SPECIALIZATION

- Windows Server and SQL Server Migration to 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:

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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.