

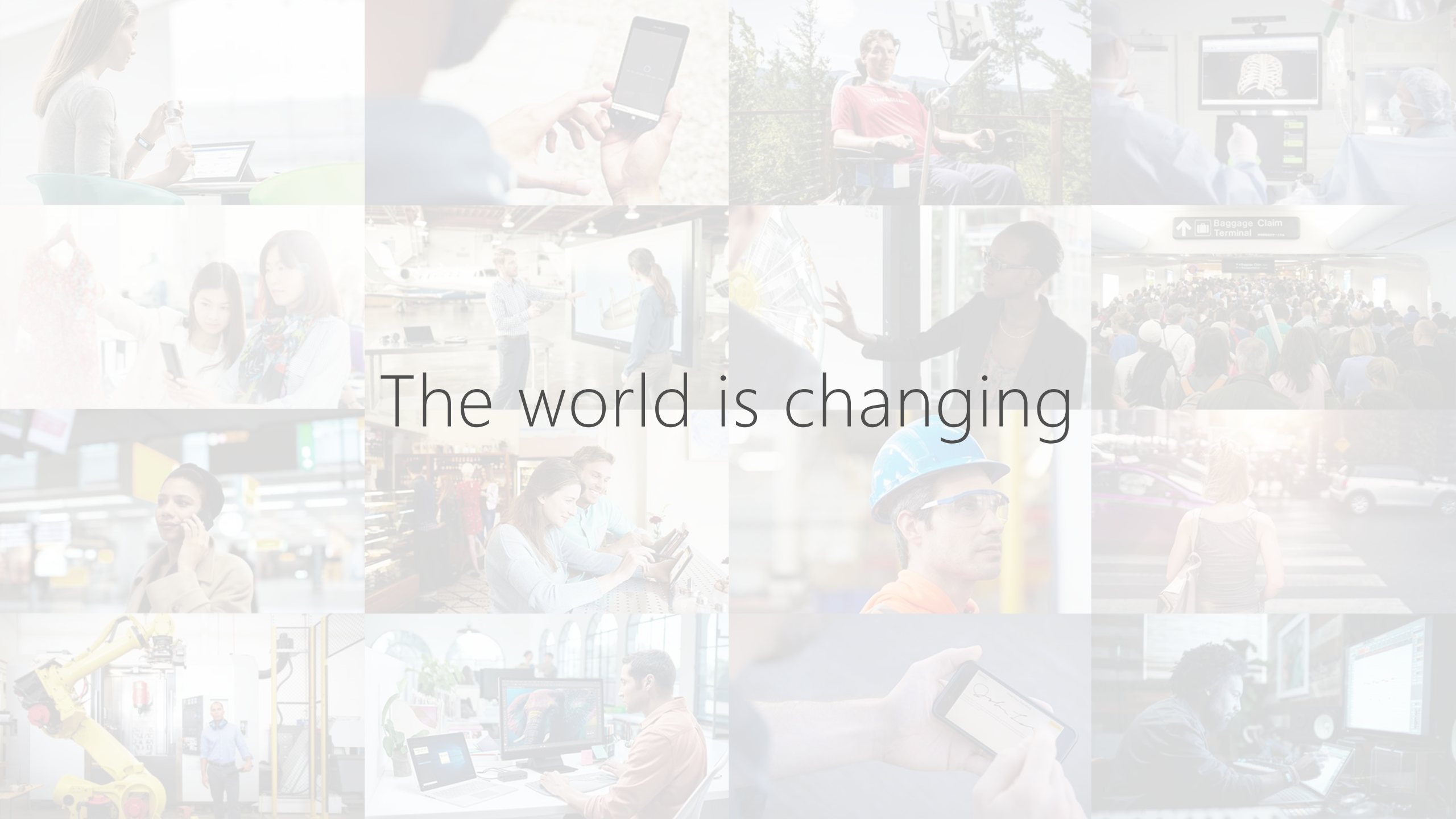
A complex network diagram with numerous nodes and connecting lines, rendered in light blue and white, covering the entire background. The nodes vary in size, with some being significantly larger than others, and the lines are a mix of solid and dashed.

Big Data & AI

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Microsoft Middle East and Africa



The world is changing



Data will grow to
44 ZB in 2020

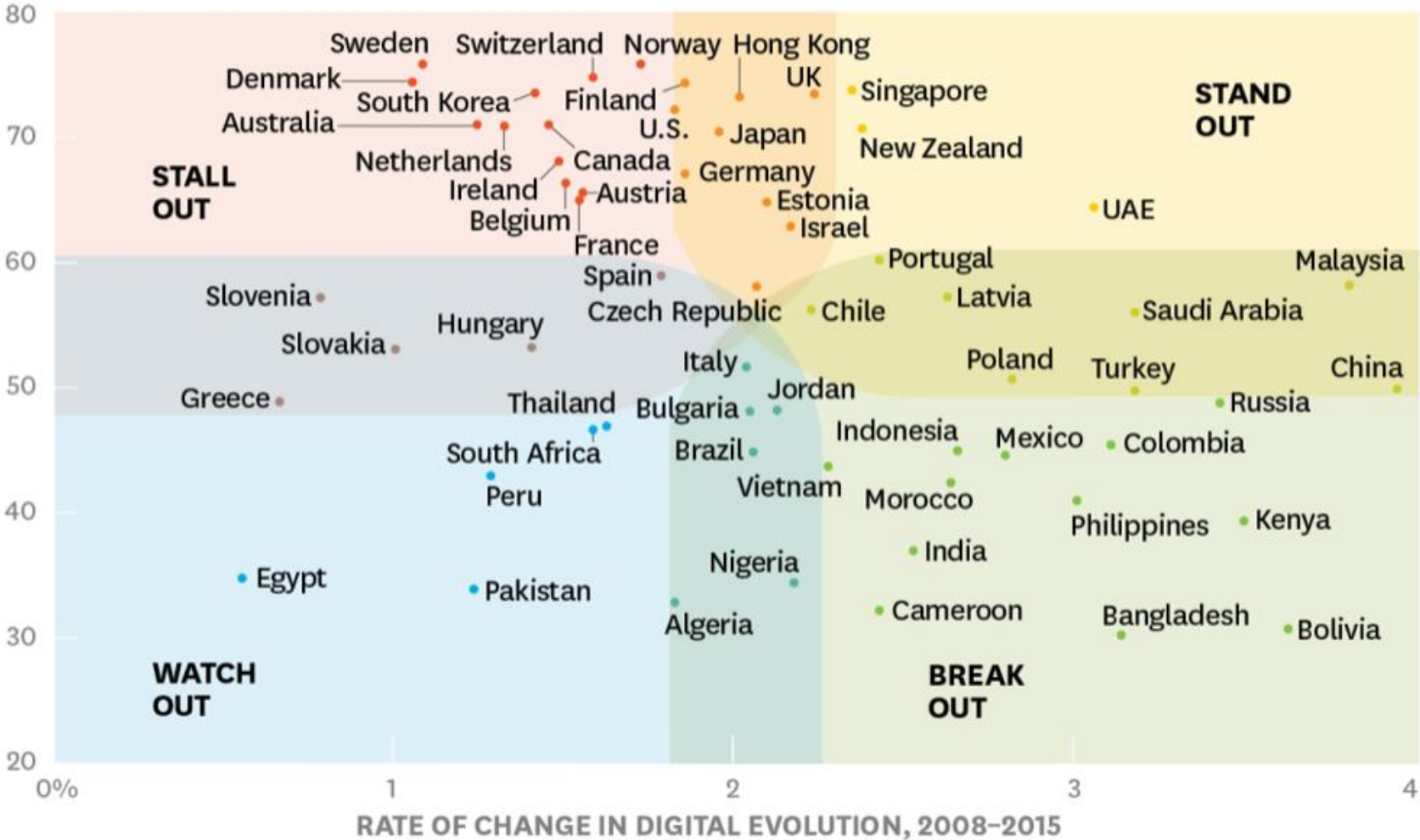
**Today, 80% of
organizations**
adopt cloud-first
strategies

AI investment
increased by
300% in 2017

Plotting the Digital Evolution Index, 2017

Where the digital economy is moving the fastest, and where it's in trouble.

HOW COUNTRIES SCORED ACROSS FOUR DRIVERS ON THE DIGITAL EVOLUTION INDEX (OUT OF 100)



SOURCE DIGITAL EVOLUTION INDEX 2017, THE FLETCHER SCHOOL AT TUFTS UNIVERSITY AND MASTERCARD

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There are barriers to getting value from data



Data silos



Incongruent
data types



Performance
constraints



Complexity of
solutions



Rising costs

Derive real value from your data

Data silos



One hub for
all data

Incongruent
data types



Support for diverse
types of data

Performance
constraints



Unlimited
data scale

Complexity of
solutions



Familiar tools
and ecosystem

Rising costs



Lower
TCO

On-premises, hybrid, Azure

Organizations that harness data, cloud, and AI outperform

Nearly double
operating margin

\$100M in additional
operating income

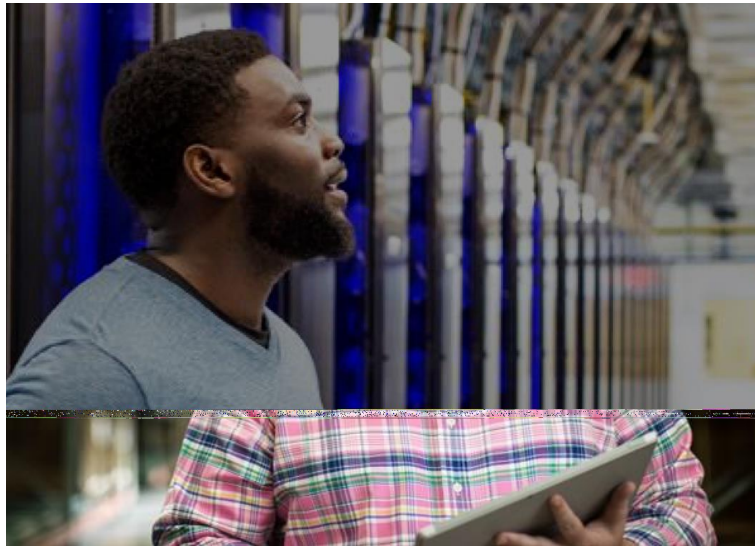
Foundation for AI

Data



Your data + Microsoft data

Cloud



Power of Azure

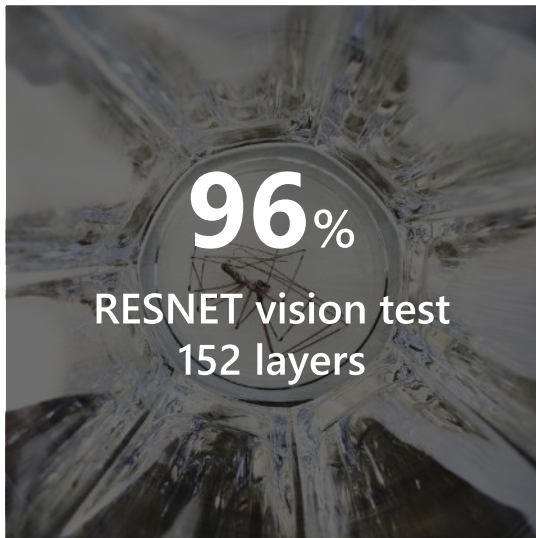
Models



Breakthrough advancements

Microsoft AI breakthroughs

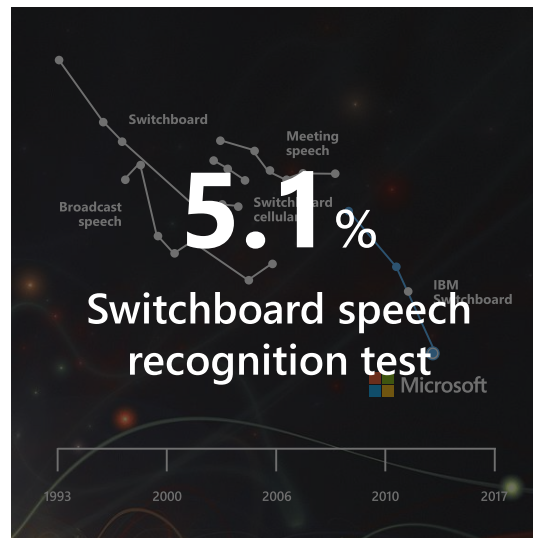
Vision



2016

Object recognition
Human parity

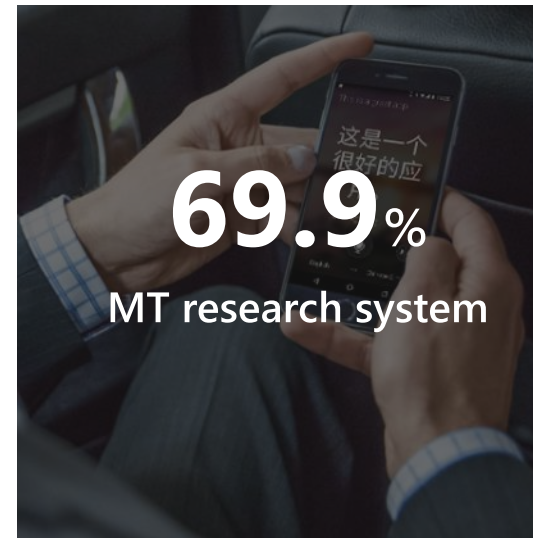
Speech



2017

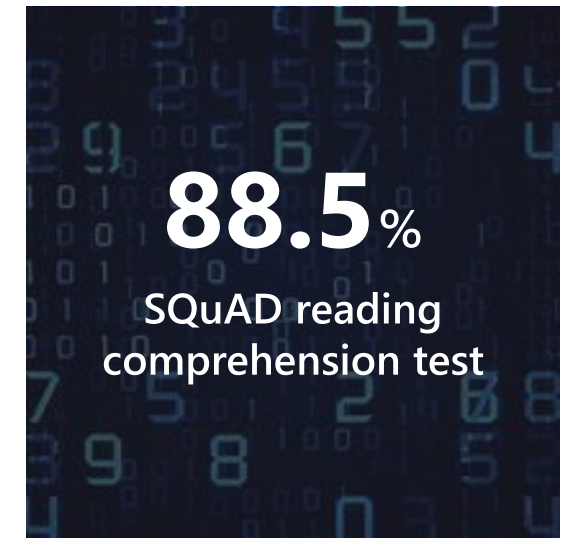
Speech recognition
Human parity

Language



March 2018

Machine translation
Human parity



January 2018

Machine reading comprehension
Human parity

BIG DATA & AI IMPACT ALL VERTICALS



Manufacturing

Eliminate downtime and increase efficiency by enabling better predictive maintenance for your capital assets.



Rolls-Royce

Rolls Royce decreases costs with Predictive Maintenance



Banking

Minimize losses with more accurate fraud detection and assess exposure to asset, credit and market risk using a holistic approach



Heartland Bank prevents fraud and boosts profits



Healthcare

Boost operational efficiency and improve patient care experience with intelligent detection and in time service.



The UK NHS transforms healthcare with faster access to information.



Government

Empower citizens and improve their engagement with relevant information and personalized citizen services.



City of Barcelona boosts citizen unsegmented with intelligent app



Retail

Turn individual customer interactions into contextual engagements and increase customer satisfaction with highly personalized offers and content



Jet.com transforms customer engagement with truly aerosolized experience

The Data+AI Journey

- 1 Develop an data and AI strategy aligned with your overall business strategy

- 2 Democratize data and make it an enterprise-wide capability

- 3 Establish appropriate governance

- 4 Put your data house in order

- 5 Find the right mix of solutions

- 6 Start with a clearly defined proof of business value

Design AI to Earn Trust & Respect Values



Fairness



Reliability
& Safety



Privacy &
Security



Inclusiveness



Transparency



Accountability

Microsoft's aim:

Make AI *available to everyone*



We are pursuing AI to empower every person and every institution ... so that they can go on to solve the most pressing problems of our society and our economy.

– Satya Nadella, CEO, Microsoft



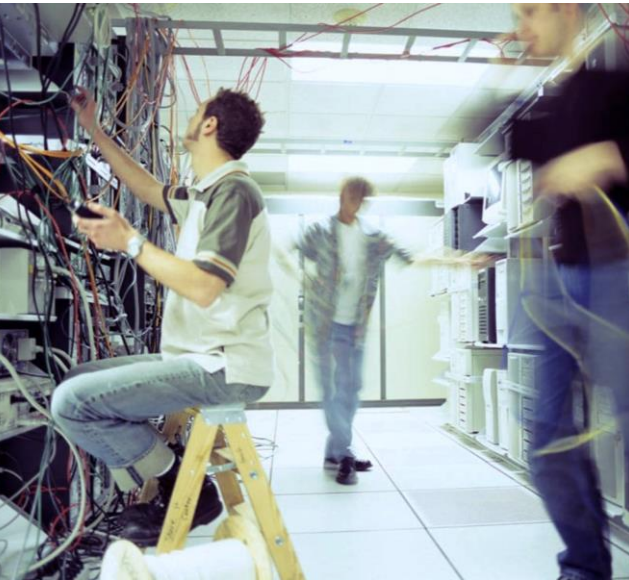
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Digital Transformation - CFO's Lense

Sameer Kulkarni
*Finance Lead – Partner Management Div.
Microsoft Middle East & Africa*

Today's finance challenges



Surging data +
legacy systems +
static reporting



Inadequate tools to
anticipate growing
business complexity



Manual, inefficient and
error-prone processes



Increasing regulations,
risks, and threats

Microsoft Finance Journey

Modern Finance – “Transform using MS Cloud”

- Financial Analysis & Reporting
- Business Process Automation
- Strategy & Forecasting
- Risk Management

Core Finance – “Discipline at the core, flexibility at the edge”

- Standard reporting
- Consistent taxonomies

One Finance

- Accounts payable
- Accounting transactions recording
- Procurement
- Statutory & Tax

Microsoft Solutions



Power
Pivot



Power Query
Power View

Azure
+
Dynamics 365
+
Office 365

2000

2005

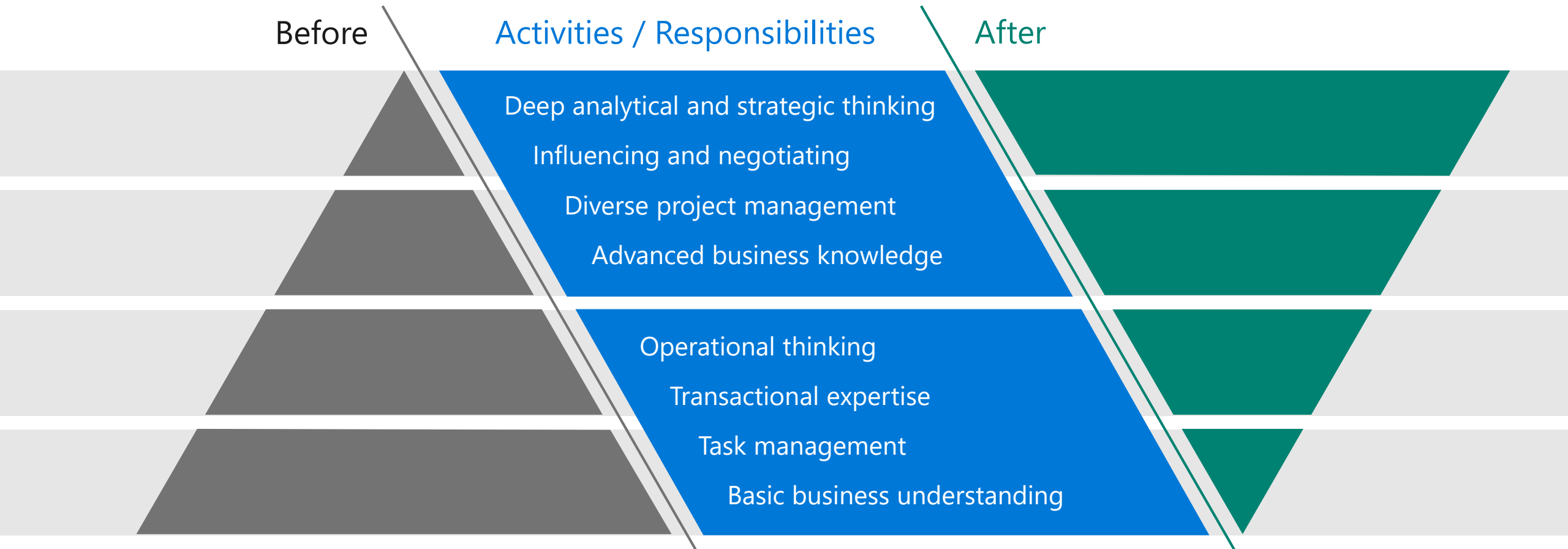
2010

2015

Today

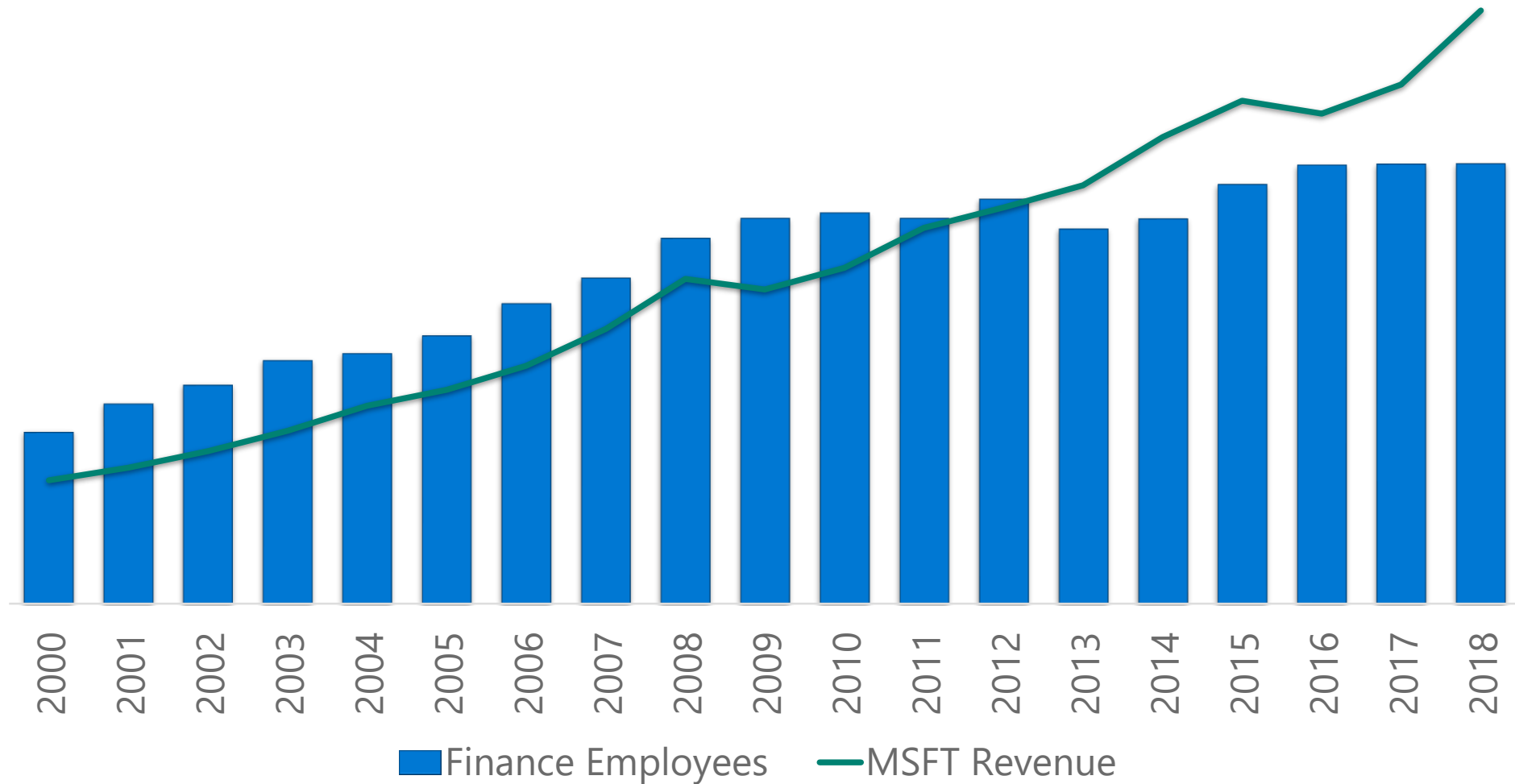
Empowering finance employees

Time spent on various activities in Finance

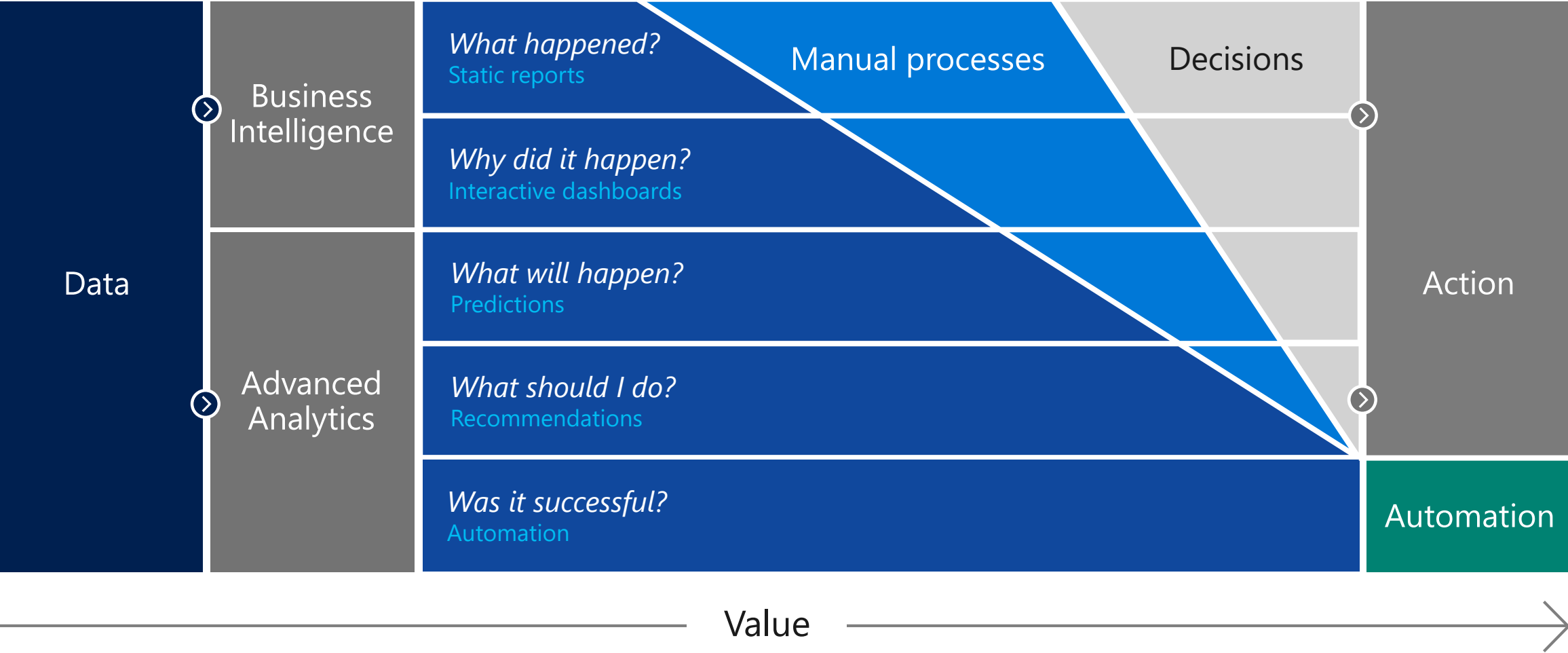


Modern Finance transformation increasing efficiency

Since 2009 headcount has grown only 14% while revenue is up 89%



Digital transformation journey



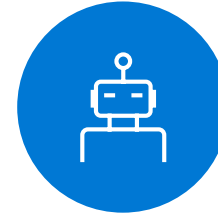
Modern Finance focus areas



Financial Analysis
& Reporting



Strategy &
Forecasting



Business Process
Automation



Risk
Management





Usage Scenarios



Modern
Business
Management
Portal



Machine
Learning
Revenue
Forecasting



Machine
Learning
Accounts
Receivable
Forecasting



Finance
Operations
Chatbot



Credit &
Collections
Chatbot



Compliance
Predictive
Analytics



Appendix





Machine Learning Revenue Forecasting

PROCESS CHANGE

Augmented current financial forecast with a machine learning forecasting solution combining best of human and machine intelligence

SOLUTION

Azure Machine Learning stored in Azure Data Factory and Azure SQL Database, and accessed with Power BI

TECHNOLOGY

Cortana
Intelligence
Suite

Azure Data
Factory

SQL Server

Azure SQL
Azure Machine
Learning

Power BI

RESULTS

- 1.6% mean absolute % error over 6 quarters
- 98.4% accuracy with ML vs. 97.1% using traditional methods
- Real-time, dynamic predictions

TIME TAKEN

8–10 weeks to build and implement



Finance Operations Chatbot

PROCESS CHANGE

Created a multi-lingual chatbot to automate procurement and payment support, reduce support costs, and improve customer satisfaction

SOLUTION

Azure Bot Service integrated with Skype for Business, providing responsive single user interface. Integrated with Cortana for a web-based, mobile application

TECHNOLOGY

Azure Bot Service	SharePoint
Bing Translation	Office 365
Skype for Business	Azure Blob Storage
SQL Server	Azure LUIS

RESULTS

- 30%+ support cost savings
- 30% queries resolved at 1st touch
- Multi-language support for tickets

TIME TAKEN

10 weeks to complete



Credit & Collections Chatbot

PROCESS CHANGE

Created a chatbot to reduce ad-hoc requests about customers' orders and credit status

SOLUTION

Azure Bot Service and Cortana Intelligence Suite providing responsive single user interface

TECHNOLOGY

Azure Bot Service

Microsoft Teams

Azure App Service

LUIS from Cortana Intelligence Suite

SQL Server

RESULTS

- Decrease response speed from 5–10 minutes to 5–10 seconds
- Reduce manual touchpoints: 12,000 queries/month
- Decrease labor effort: 1,800 hours/month

TIME TAKEN

2–4 weeks to build and implement



Risk Management

Compliance Predictive Analytics



PROCESS CHANGE

Built a risk analytics platform on Azure to provide comprehensive coverage of all sales transactions, with predictive machine learning based capabilities, driving a systematic review process, and focus on high risk transactions

SOLUTION

Data centralized in Azure SQL, leveraging data analytics, with an integrated action framework layer in Web Apps and Power BI providing front-end visibility

TECHNOLOGY

SQL Azure (PaaS)
Azure Analysis Services
Azure Blob Storage/Active Directory
Azure Web Apps (SaaS)
Power BI

RESULTS

- Automated risk heatmap
- Action driven high risk review process
- Coverage of all sales transactions
- 52% reduction in transaction review time
- Expedited risk investigations

TIME TAKEN

3–4 months to build and implement