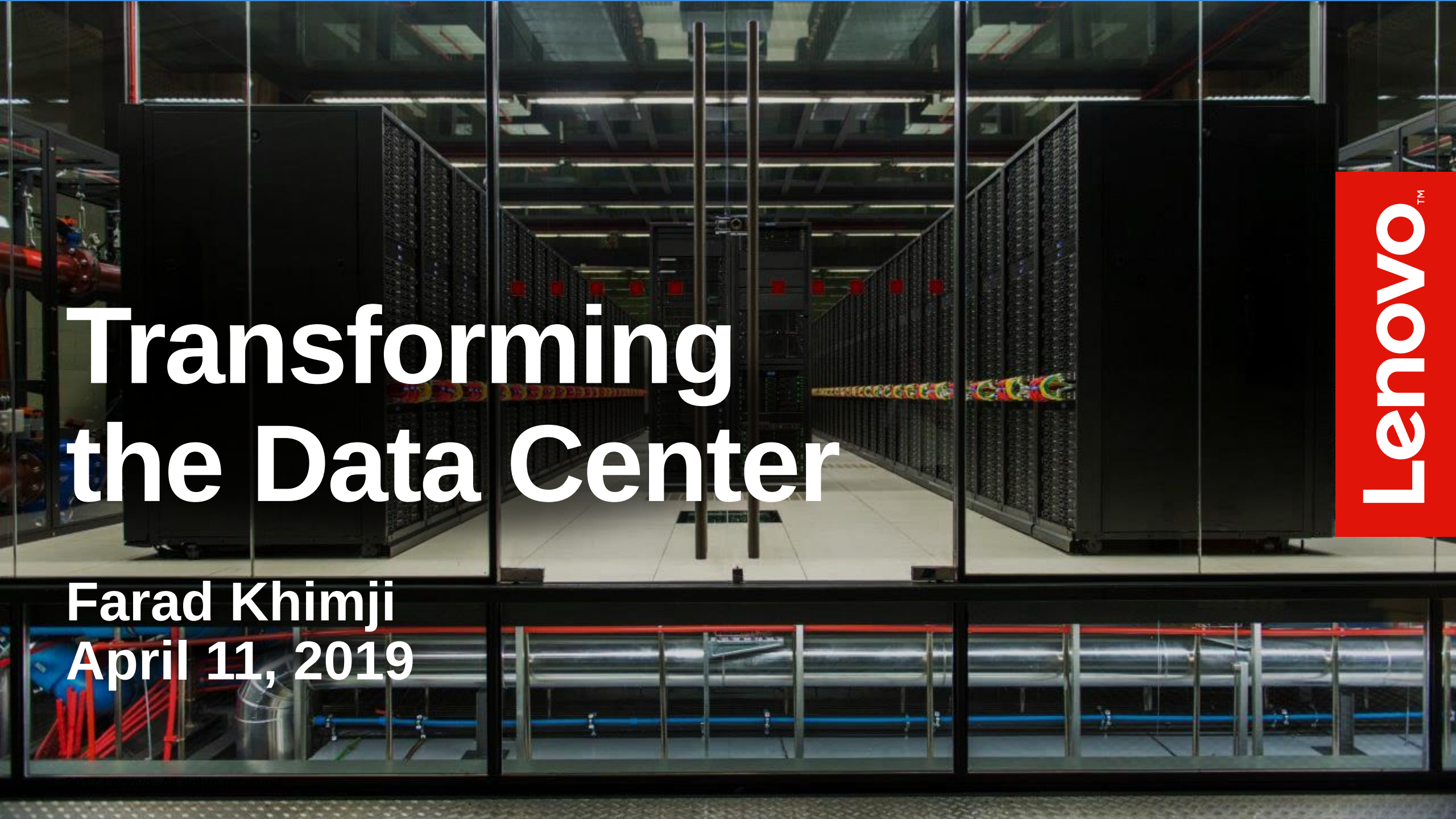

Transforming the Data Center

Farad Khimji

April 11, 2019

Lenovo™

THE REALITY WE ALL FACE

In an ever changing IT world, having a solid foundation is key

Digital Transformation is mandatory

Turning your IT operations & strategy into a competitive advantage is key

Cybersecurity is key

Security all depends on a foundation of security technologies.

Monetizing data & analytics is a must

Data is your most valued asset and getting value and insights are key

Quality & Quantity drive business

Speed to market and service sets a business apart.

Ever Changing Landscape

27%

Of all companies will use **Blockchain** by 2020

30%

Growth in **IoT** “things” to 20 Billion in 2020

72%

Will roll out **Digital Transformation** strategies within the next two years

50%

Growth in adoption of **AI** and Cognitive technologies

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Planning for the Future

While Managing for Today

FLEXIBILITY

52%

Need to create a more nimble technology platform.

FINANCING

49%

Work with restricted budgets.

CHANGING BUSINESS MODELS

39%

Want to work more with trusted partners.

The Wall Street Journal, CIO Blog, May-2017

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KEY REASONS TRANSFORMATIONS FAIL

1. Inability to experiment quickly (53%)
2. Legacy systems (52%)
3. Poor collaboration between IT & business (49%)
4. Lack of a corporate vision for digital (39%)
5. Insufficient budget (37%)

Harvard Business Review (2018)

FOCUSING ON INTELLIGENT TRANSFORMATION

Lenovo focuses on Intelligent transformation so you can focus on customer experience and growing your business.

Cloud Transformation

Private, hybrid, and public models offer on-demand delivery of resources and applications.

Business Analytics

Data organizations inquire about and analyze actionable business intelligence.

Artificial Intelligence

Computer systems perform tasks that normally require human intelligence.

Solutions

Accelerate deployment and reduce time-to-value with ready-to-run infrastructure.

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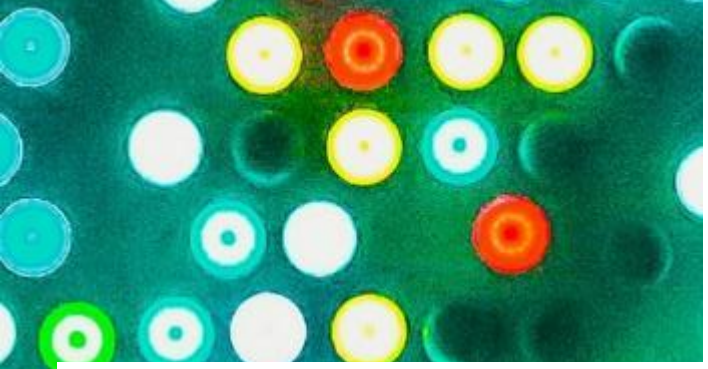


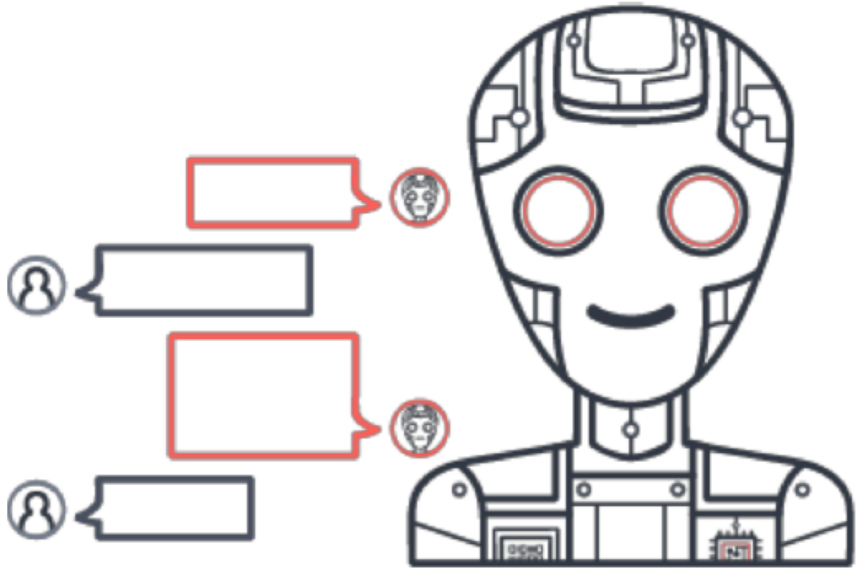
DATA + ANALYTICS IN ACTION

The Data Analytics Value Chain

- Uses historical & real-time data to generate insights & predictions
- Leverages algorithms to make predictions about the future
- Best actions & likely outcomes are determined for various cases
- For example, data might indicate that a systemic quality issue exists

SOME AREAS WHERE AI IS BEING APPLIED TODAY

- ✓ Advanced Data Analytics
- ✓ Customer Service
- ✓ Fraud Detection
- ✓ Speech Recognition
- ✓ Language Translation
- ✓ Facial Recognition
- ✓ Document Processing
- ✓ Cyber Defense
- ✓ Autonomous vehicles



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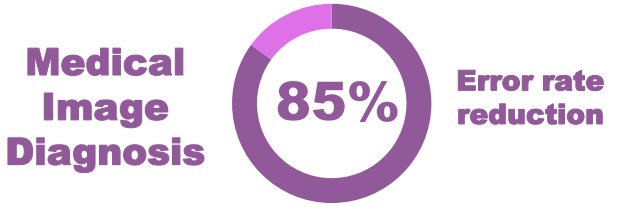
AI transforming enterprises

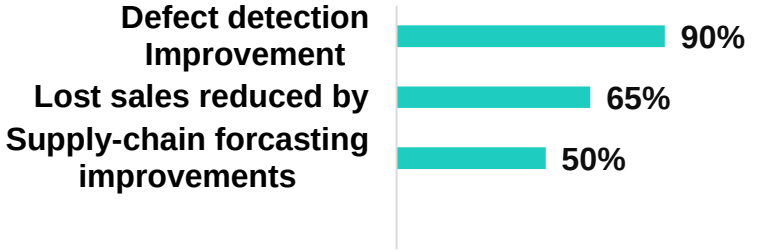
Reduce costs, make better decisions, gain competitive advantage and impact human lives

AI Core Capabilities	Use cases
Computer Vision	MFG Quality control Image diagnosis Automated retail checkout
Natural Language Processing (NLP)	Training/document management Call Center / Chat Bots
Predictive analytics	Machine maintenance, Commercial IoT & Fraud detection
Knowledge graphs	Knowledge management, document search Compliance checks

Healthcare



Manufacturing



Finance

25-50%

Time savings with credit decisions

$60 Billion

Global fraud savings

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Who is Lenovo

The future is here today

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Data Center Group Vision

Be the most trusted data center partner – empowering customers' **Intelligent Transformation** and solving humanity's greatest challenges.

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DCG's 26 years of innovation

A history dedicated to continuous increases on performance, agility, and reliability

1992
x86 Server
IBM PC Server

1999
1st 1U Tier 1 Rack Server
1st Light Path Diagnostics

2002
1st Scalable 16-socket X86 server

2005
1st high availability hot-swap memory

2007
1st to decouple memory from processor

2010
1st x86 server to break 1M tpmC

2012
1st warm water cooling technology

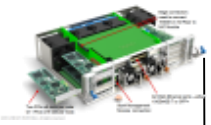
2014
1st integrated memory channel flash storage

2014
1st 45 °C operating servers

2017
1st Mission-critical 8 way server in 4u form factor

2017
Front/Rear access to all server components

2017
Flexible I/O



2018
Thermal Transfer Module

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#1

World's largest TOP500 Supercomputing provider

Nearly One-Fourth of the World's 500 Most Powerful Supercomputers are Now Running Lenovo

Lenovo works together with leading institutions to help solve humanity's greatest challenges

Source

Lenovo DCG is Open

INNOVATION

FLEXABILITY

DEEP PARTNERSHIPS

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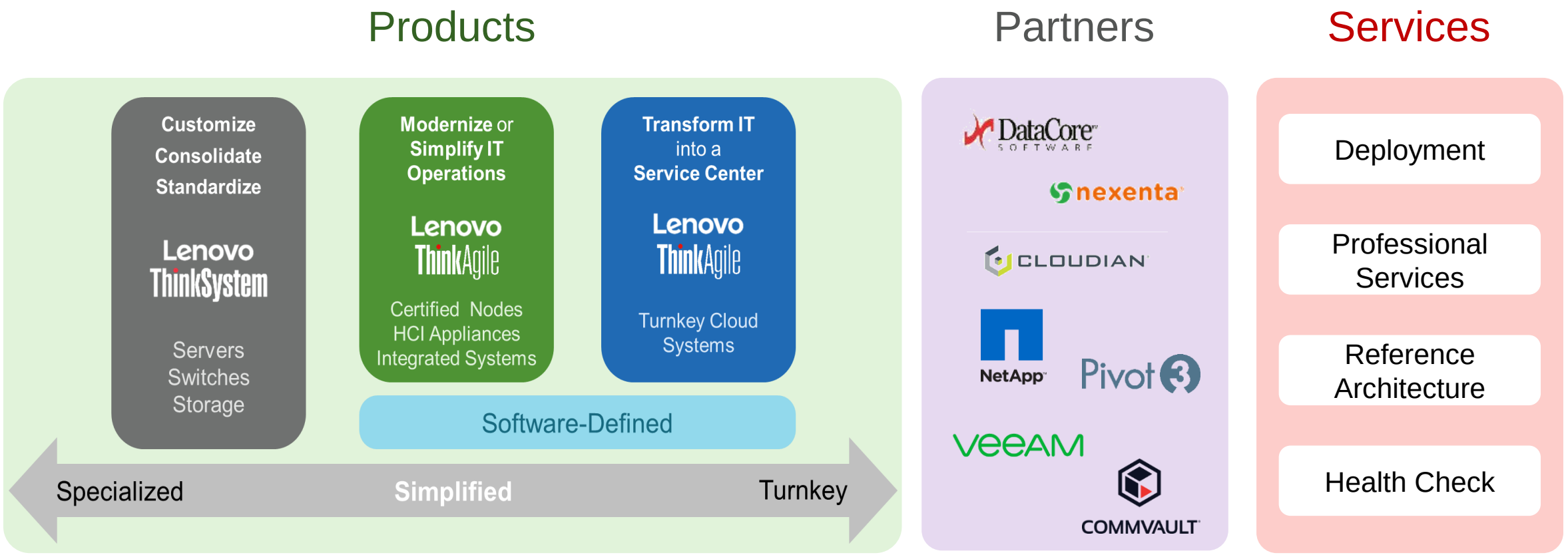
Highlighting Lenovo's Flexible Data Center Solutions



Microsoft NUTANIX vmware cloudistics redhat SUSE

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Lenovo DCG Portfolio Spans The Entire Data Center

World class portfolio for end-to-end data center requirements

Server
Highest reliability in the industry

ThinkSystem

Rack & Tower

Mission Critical

Dense

Blades

Storage
Unbeatable Price Perf. & latest innovations

ThinkSystem ThinkAgile

Entry SAN

Mid-range SAN

All-Flash & Hybrid SAN

Direct Attach & Archive

Storage Switches

Networking
Best performance at lower cost

ThinkSystem ThinkAgile

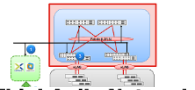
Embedded

Top of Rack

Campus and Core

Cloud Network OS

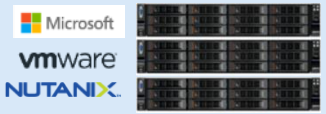
Network Orchestration



SDI
Transformative IT

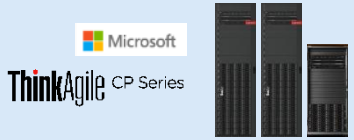
ThinkAgile

Certified Nodes



Integrated Appliances

Integrated Systems



Solutions
Best of breed Engineered Solutions

ThinkSystem ThinkAgile

Cloud

Big Data

Analytics

Database

VDI

Software-defined Storage

HPC
The Racing Arm of Lenovo IT

ThinkSystem ThinkAgile

Ultradense

Artificial Intelligence at Scale

WaterCooled

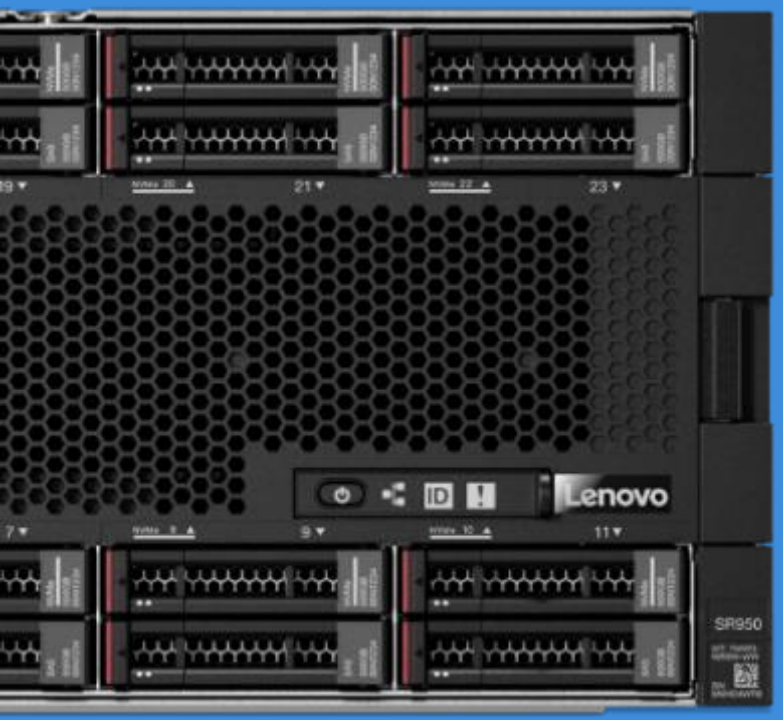
Computing Orchestration

End to end services that span from basic to consultative engagements

HPC / AI

Different Discovers Better

Next-generation IT can be used as a foundation of any HPC or AI infrastructure, Lenovo provides the flexibility to build and maintain your mission critical environment allowing you to focus on the business at hand.



Solving the world's problems

Developed robust and flexible systems involved in projects that help solve some of humanity's greatest challenges.

Leading provider of supercomputers

Lenovo is the #2 provider in the world for Supercomputers (and closing on #1 quickly)

Making Artificial Intelligence simple

Lenovo is making AI tech simpler for Enterprises with an end to end approach.

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Hyperscale Different Designs Better

Lenovo has dedicated end to end teams, industry leading engineering and technical capabilities, a highly rated supply chain that offers outstanding quality, flexibility & responsiveness and internal services & support …

WE DESIGN IT, WE BUILD IT, WE DEPLOY IT…all around the world

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Customer Focused

Our **customer centric business** provides in-depth engagements, self-owned design, manufacturing and service support globally to understand needs and quickly deliver customized platforms

Innovation by Design

Lenovo provides **innovation on demand** by rapidly developing industry-leading technology that provides customers lower TCO and value add

Optimized Fulfillment

Lenovo Hyperscale offers a exceptional customer experience through an optimized launch process for frequent changes and dynamic fulfillment

Lenovo

Solutions

Different Partners Better

Increase business agility, extract insights from your data, and improve business outcomes with Lenovo solutions. Lenovo works closely with software partners to provide engineered, tested, and certified solutions in Cloud, Data, Analytics, Client Virtualization and more.

Faster Time-to-Value

Lenovo Solutions are designed and validated to simplify configuration and deployment of business solutions, resulting in lower TCO and faster ROI

Engineered, Tested and Certified

Lenovo Solutions are developed to scale based on your requirements using foundational ThinkSystem and ThinkAgile platforms and enterprise software applications

Expertly Developed and Built

Lenovo Solutions eliminate the guesswork and experimentation in determining the right combination of software and hardware to achieve your desired business outcomes

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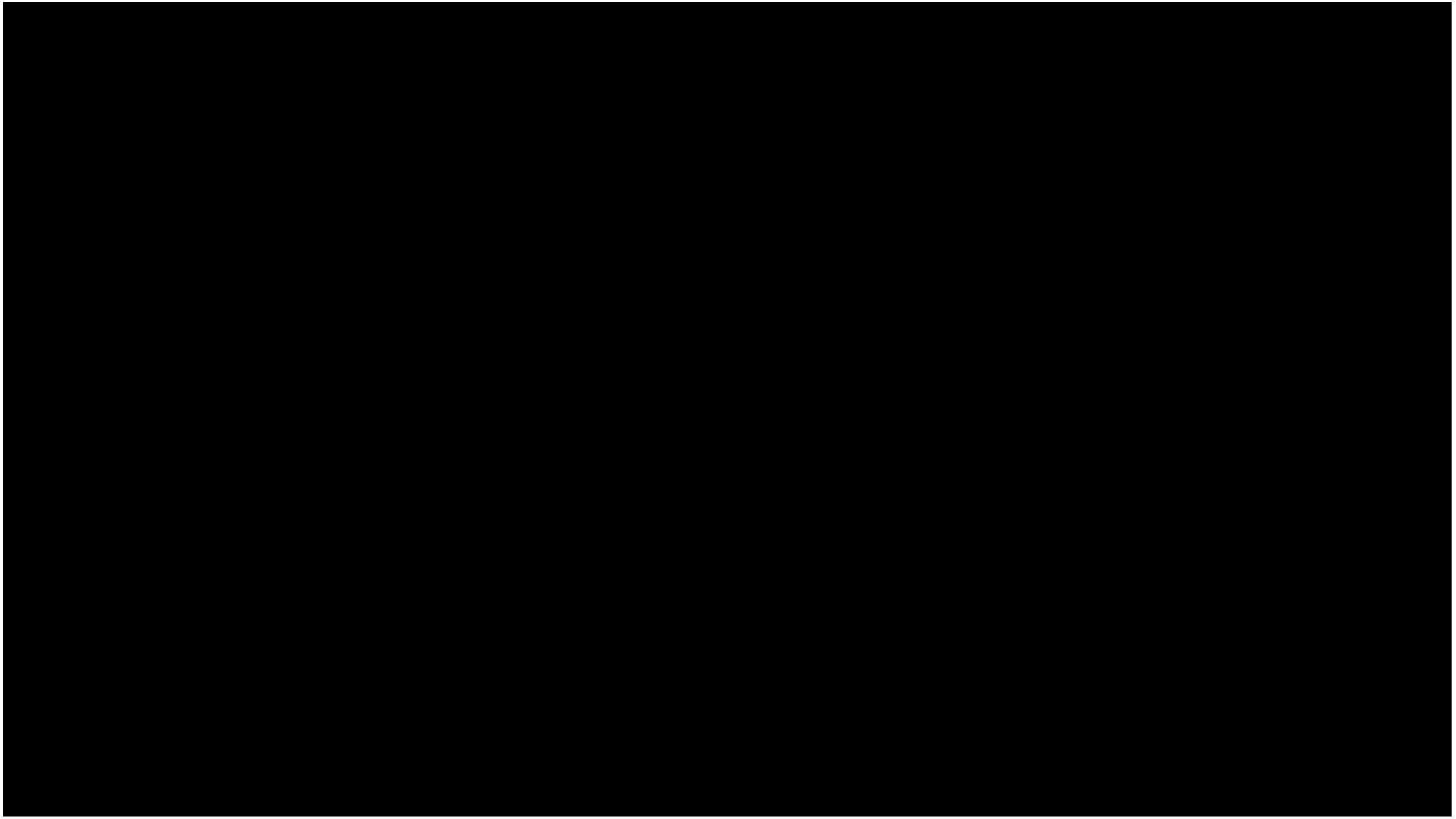
INDUSTRIAL REVOLUTIONS

1. Mechanize production – hands to machine

2. Modern enterprise using electric power & telegraph communication that made business faster and more complex

3. Digitize the enterprise using computers and the internet – creating more global businesses with customers at the end of a cable, not a handshake

4. Ultimately, could we build a new world without disease, war and poverty? The power of big data and Artificial Intelligence may be the revolutionary technology to make that possible.



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Lenovo Provides Your Business with:

The #1 rated IT vendor for reliability and customer satisfaction	The ability to use future-defined IT & traditional infrastructure offerings to be more profitable	The resources to be faster to the marketplace than your competitors	A partnership that makes your IT part of your revenue growth and not just an expense

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thanks.

Lenovo

Different is better

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