

FLEXCARE FACT

Did you know that Clip Training is part of FlexCare? Clip Training is an employee training and enablement tool. They have great videos around the entire M365 stack that you can leverage through your FlexCare agreement. Pricing begins at \$25/month for 50 users. If you are interested or want to learn more about Clip Training, please see your Account Rep.



ThinkEdge

The Power of the Edge: Harnessing Real-Time Data for Maximum Impact

Don Taylor
ThinkEdge BDM – NA Channel



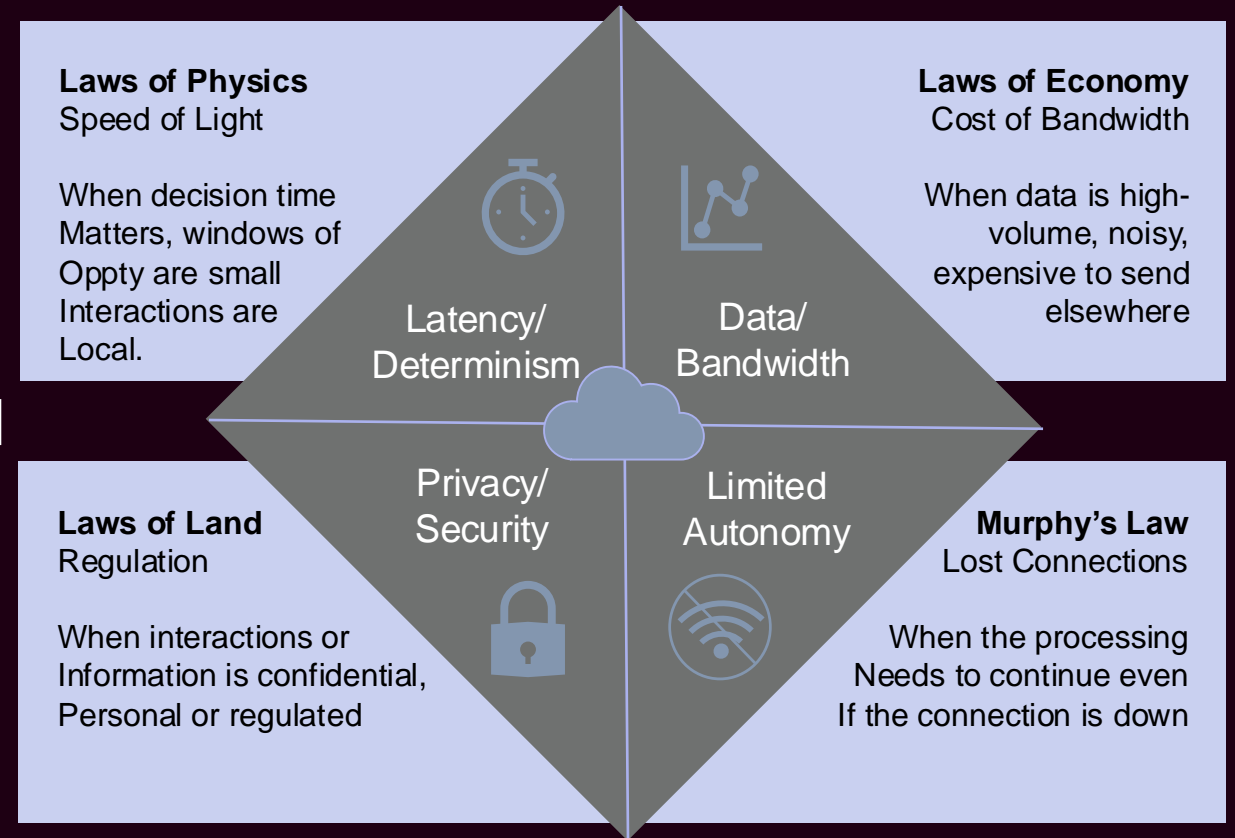
Lenovo Internal. All rights reserved.

Edge Computing

What is it?

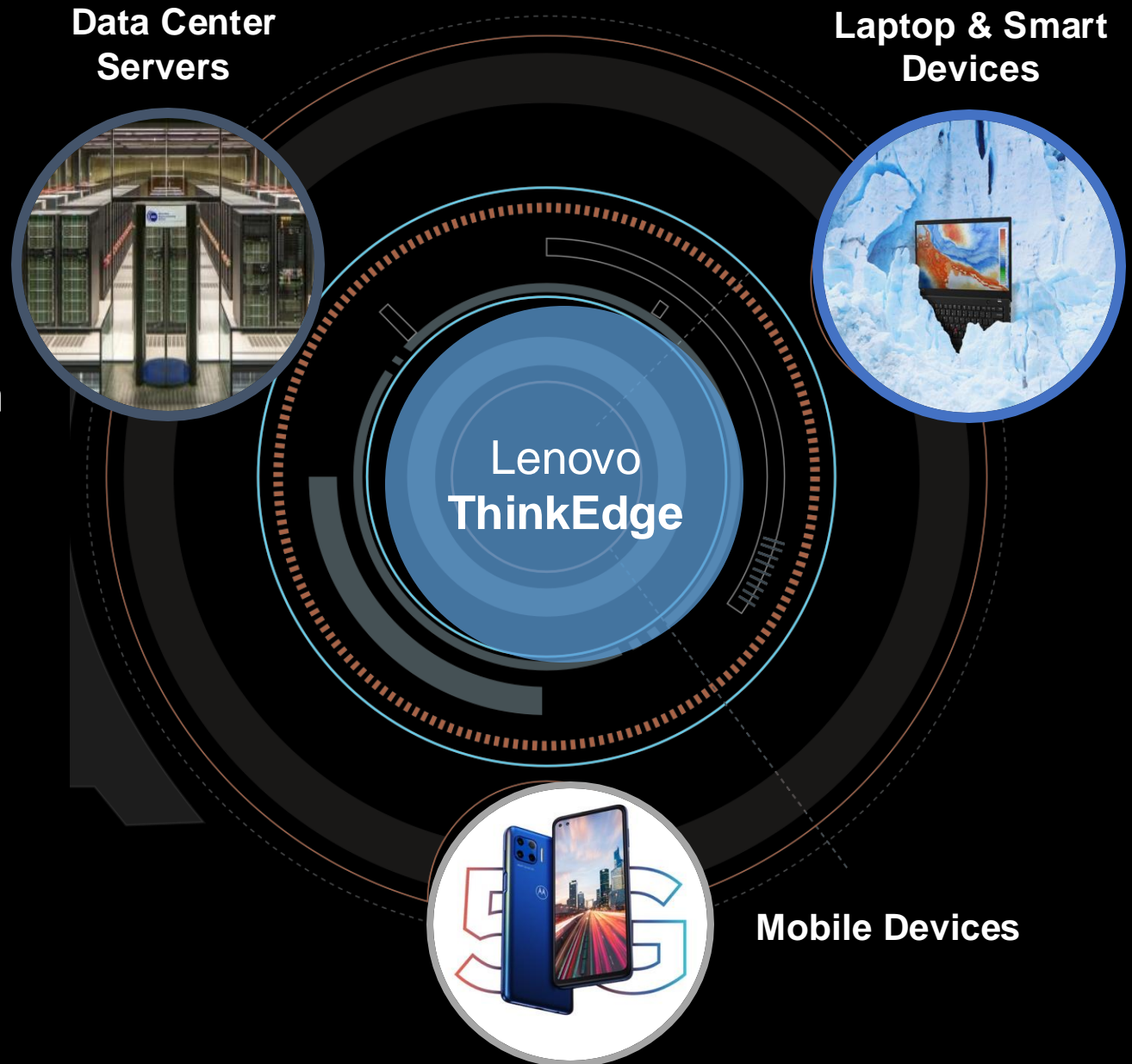
- ❖ Computing capacity **outside of the Datacenter**
- ❖ Closer to where data is **generated** and **acted** upon. Often data collected by cameras and sensors – not keyboard/mouse
- ❖ Highly **Distributed**

What drives it?

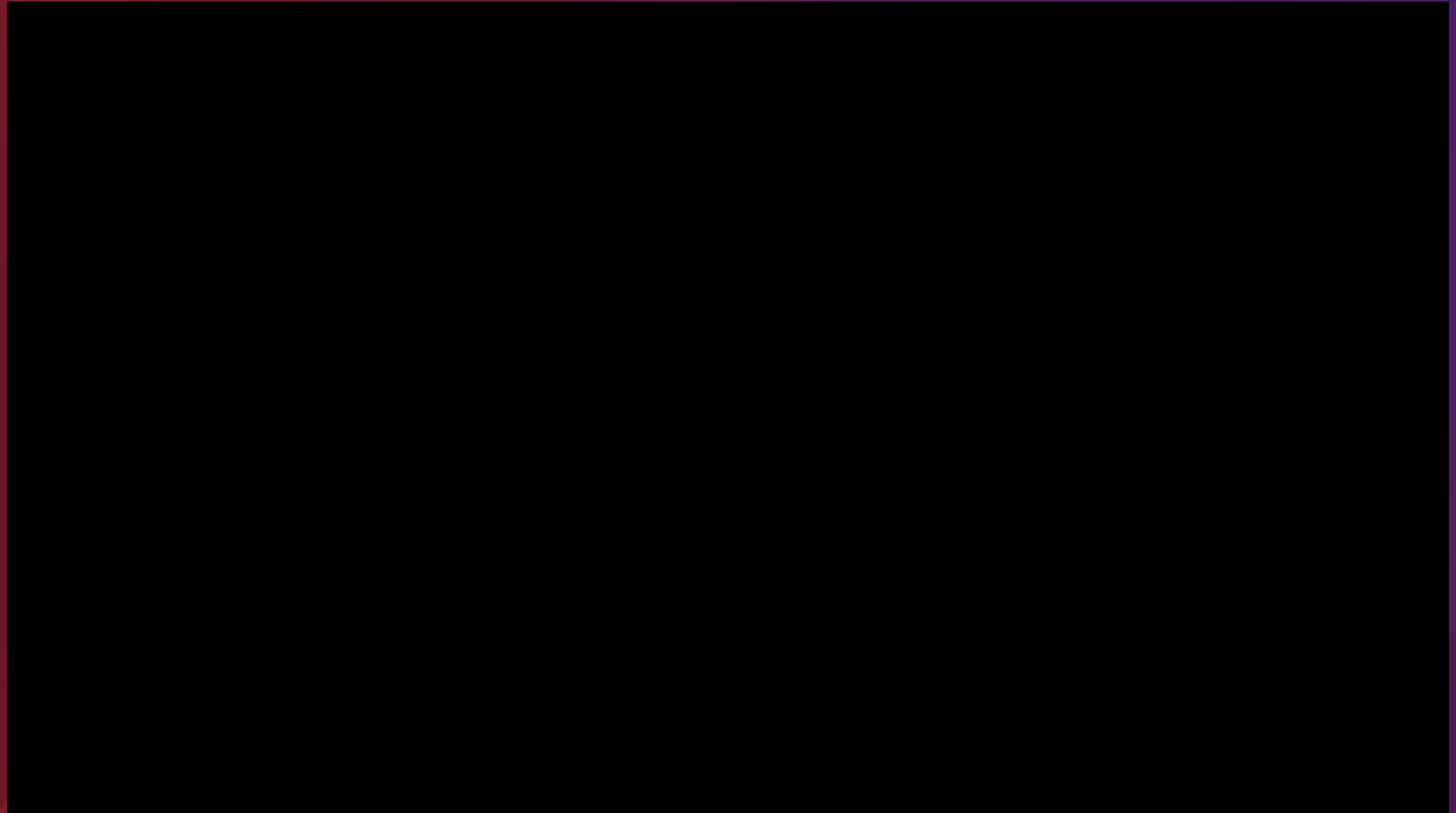


Why Lenovo?

ThinkEdge It is a computing platform designed specifically to operate outside of a traditional data center. ThinkEdge is smaller, quieter, stronger and more secure with diverse networking functionality.



EDGE COMPUTING HAS UNIQUE REQUIREMENTS...



ThinkEdge

EDGE COMPUTING HAS UNIQUE ENVIRONMENTS...



- Extreme temperature
- Shock & vibe
- Dust filtering
- Low acoustic



- Fully encrypted data
- On-site authentication
- Movement & tamper protection



- Wireless options
- Optimized indoor antennas



- Single tool for DC & edge
- Automate deployment
- On-going lifecycle

ThinkEdge



SE30



SE50



SE70



SE350



SE450

ThinkEdge Portfolio

Edge Client



SE10*



-40C to +70C
Intel ATOM
Up to 32 GB RAM



SE30



-20°C to +60°C
Core™ i3, i5
Up to 16GB RAM



SE50



0°C to +50°C
Core™ i3, i5, i7 Up
to 32GB RAM



SE70



-20°C to 60°C
NVIDIA Jetson
Up to 16GB RAM

Edge Server



SE350



0°C to 55°C
Xeon® D-2100
Up to 256GB RAM



SE350 V2*



0°C to 55°C
Xeon® D-2700
Up to 256GB RAM



SE360 V2*



-20°C to 65°C
Xeon® D-2700
Up to 256GB RAM



SE450



-5°C to 55°C
Xeon® SP 3rd Gen
Up to 1TB RAM



SE455 V3*



-5°C to 55°C
AMD Genoa
Up to 512GB RAM



SR630 V3, SR645 V3



0°C to 35°C

Gateways

Base Station / DC Closet

Data Center

Diverse Portfolio

From ultra compact gateways to data center grade products.

Highest Performance

CPU & GPU rich systems for ultimate performance.

Flexible Deployment

In harsh environments with ruggedized devices & unique cooling capabilities.



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Edge AI use cases

Improving operations, workplace safety, customer experiences and many more to come.

AI Inferencing to grow up to 80% of AI HW forecast spend in 2027



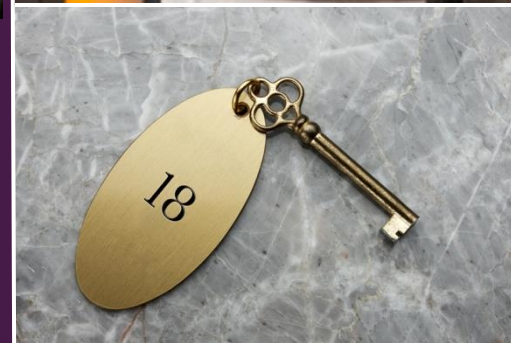
Computer Vision for Workplace safety



Detecting pre & post cleaning results



Drive through automation with computer vision and voice-to-text



Local applications & data

Food management & order intake



Energy efficiency



Shrinkage detection and traffic patterns

Insights and Outcomes – Industrial Safety

People vs. Process....

Customer:

Large Industrial Manufacturing

Workplace Health & Safety (WH&S) – People, Vehicles, Forklift, Heavy Machinery, Etc.

US Industrial Mfg. Annual Incident Rates

- Strain/Sprains – 25 cases / 10K employees
- Cuts/Lacerations – 11 cases / 10K employees
- Amputations – 2.5 cases / 10K employees

Challenges:

- Availability and Reliability
- Space and Environmental Constraints

Technical Solution

- Existing RTSP camera network.
- Local IVA Models
- Proximity Breaches and Exclusionary Zones



Insights & Outcomes

- 31% reduction of incidents in the first 3 months.
- Warning & threat detection
- Metrics on safety infractions vs. incidence

Insights and Outcomes – Quick Service Restaurant

Accuracy, Efficiency -> Happy Customers

Customer:

Large quick service restaurant chain

65% of revenue is generated at the drive-thru, Industry wide drive-thru traffic is up over 26% post-pandemic.

- Labor shortage creating long delays
- Long lines = loss business potential

Challenges:

- Latency
- Lack of space for heavy infrastructure
- Demanding availability and reliability

Technical Solution

- ThinkEdge Server Deployment
- NLP model to automate voice-to-text for expedited ordering
- License plate and vehicle type vision AI model for promotion



Insights & Outcomes

- **Highly accurate orders**
- **Transit times < 5 minutes**
- **85% of orders w/out intervention**

Insights and Outcomes – Commercial Fishing

Fishing for Outcomes

Customer:

Commercial Fishing Customer

Sorting thousands of fish per day, adhering to strict guidelines & requirements.

Violations of harvesting certain sizes and species result in fines in excess of \$100k / occurrence.

Challenges:

- No Internet Connectivity
- Harsh Environment
- Lack of any modern computing resources

Technical Solution

- ThinkEdge servers in cluster
- AI model validating size/species
- Count and tonnage of haul



Insights & Outcomes

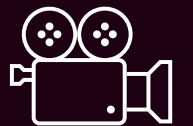
- Validation of size and species within 99.8% accuracy
- Savings of on average of **>\$100K per vessel / season**

Meet Grupo Pinsa

“We had a vision for making fleet and fishing production more effective, and Lenovo proved to be the perfect partner to bring it to life. Lenovo ThinkEdge SE350 servers have been a great enabler for our business.”



Sergio Alcaraz Pérez
IT Infrastructure
Manager
Pesca Azteca



GRUPO PINSA USE CASE



Insights and Outcomes – Environmental Protection

Counting at scale, Protecting biodiversity

Customer

Nordic Road Directorate works to monitor roadsides, detecting invasive species that out compete native species reducing biodiversity.

- Manual, skilled and labor intensive
- Patchy coverage limits the understanding

Challenges

- Mobile Platform
- Shock and Vibration from car and road
- Avoid costly vehicle modifications

Insights & Outcomes

- 20 images per second
- Positive results only sent to cloud
- Usable by non specialist drivers

Technical Solution

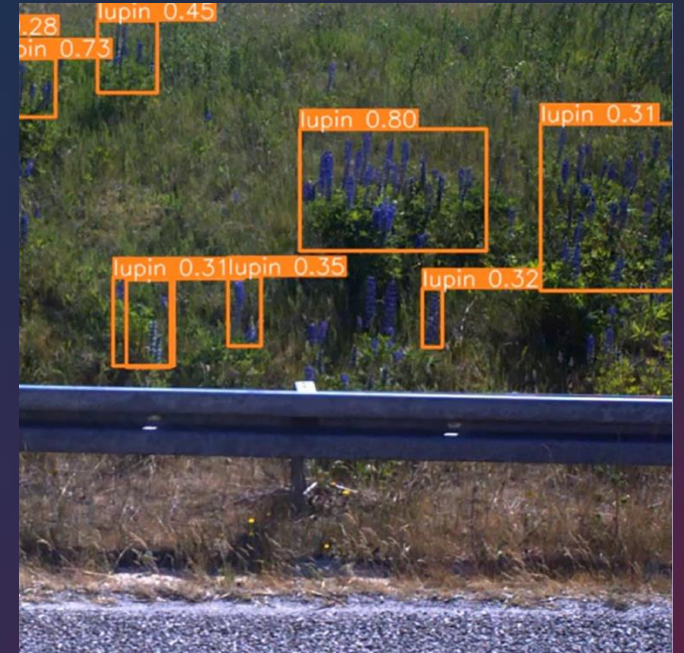


ThinkEdge SE70



Mounted camera on survey vehicle

TRIFORK.





where it's actually created at the edge.

Lenovo seamlessly provides Lifecycle Services from the Data Center to the Edge

- Offers a fully supported and managed Edge Infrastructure experience
- Keeps IT staff focused on core business innovation
- Procures and deploys new machines faster than ever
- Provides expert technical support anywhere, from the data center to edge locations



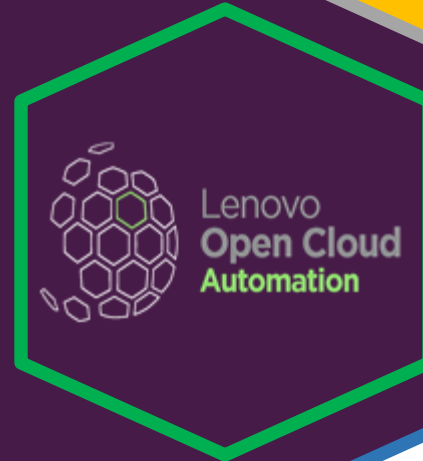
Edge Computing - Full Picture

AI Innovation Labs
delivering value to
our customers



BP ecosystem to
push forward and
add value in
customer
conversations

Scalable software,
securely
automating edge
deployments



Services delivery in all
markets with TruScale



Innovative edge computing portfolio
for on-premise deployments

Smarter
technology
for all

Lenovo

Diversity, non-discrimination

thanks.