

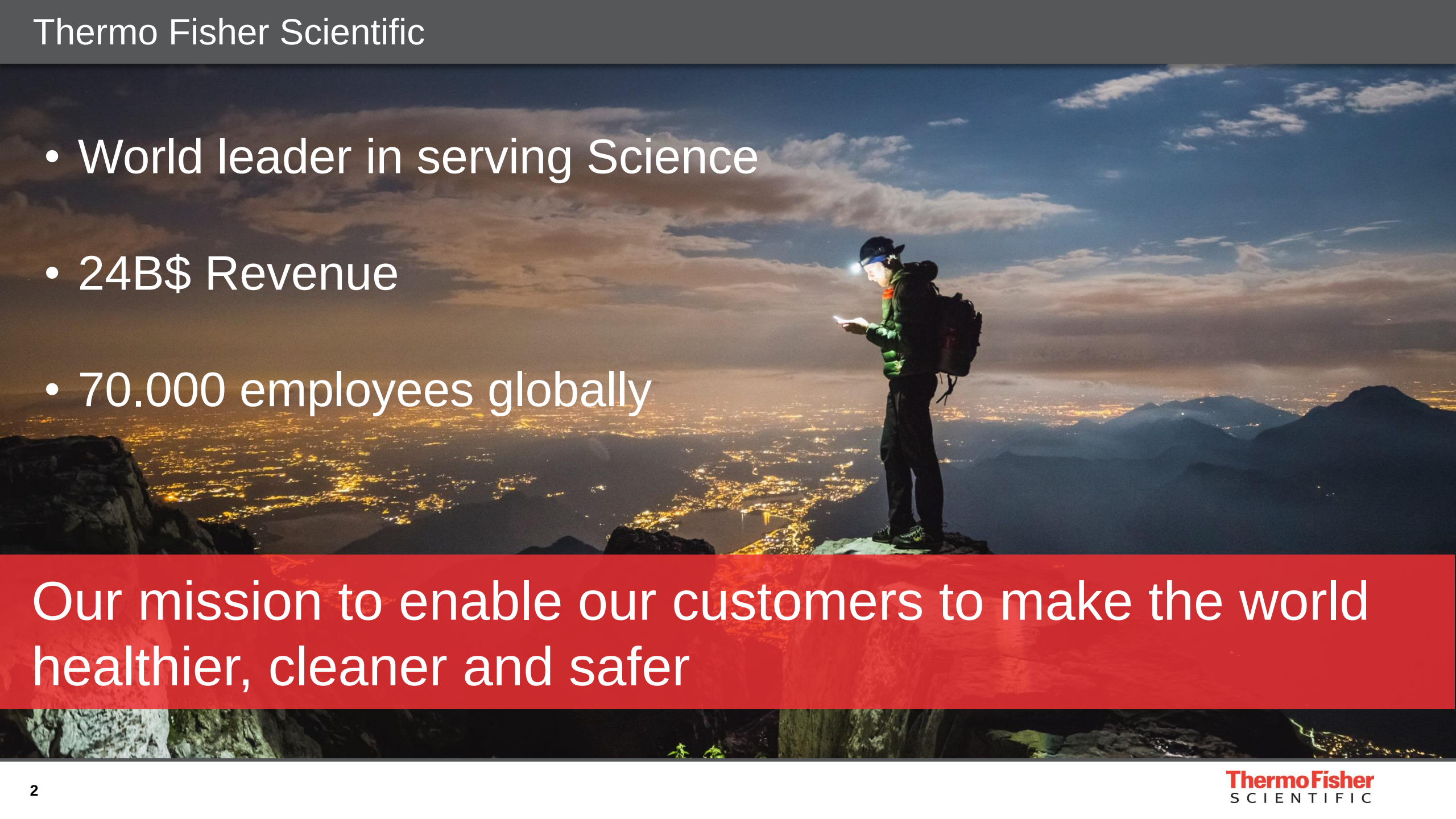


The Digital Transformation of Service

Sebastien Dorel
Sr. Director Central Service
Materials and Structural Analysis Division (MSD)

The world leader in serving science

- World leader in serving Science
- 24B\$ Revenue
- 70.000 employees globally



Our mission to enable our customers to make the world healthier, cleaner and safer

Unique scale and depth of capabilities

Enable our customers
working in...

Healthcare	Life Sciences	Applied Markets	Pharma and Biotech
• Clinical Diagnostics • Immunodiagnostics • Microbiology • Transplant Diagnostics • Healthcare Supplies Channel	• Mass Spectrometry • Electron Microscopy • Molecular & Cellular Biology • Genetic Sciences • Clinical & Next-Generation Sequencing	• Chemical Analysis • Chromatography • Electron Microscopy • Next-Generation Sequencing	• Bioproduction • API • Formulation • Clinical Trials • Manufacturing • Global Logistics, Labeling
Laboratory Equipment, Chemicals and Scientific Supplies Channel			
Enterprise-Wide Services and Digital Science Solutions			

Unsurpassed and evolving portfolio mix



Immunodiagnosics



Clinical
Diagnostics



Microbiology



Transplant
Diagnostics



Clinical Oncology



Genetic
Analysis



Reproductive
Health



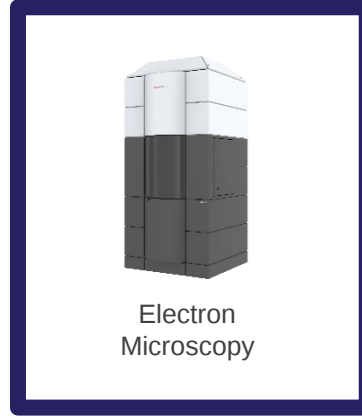
Mass
Spectrometry



Human
Identification



Cell Analysis
Cell Culture



Electron
Microscopy



Chemical
Analysis



Chromatography



Lab
Equipment



Lab
Consumables



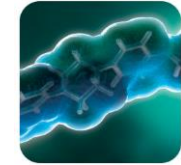
Laboratory
Chemicals



Scientific Supplies



Bioproduction



API



Formulation



Manufacturing



Clinical Trials

Healthcare

Life Sciences

Applied Markets

Lab Equipment,
Chemicals and Scientific
Supplies Channel

Pharma and Biotech

Enterprise-Wide Services and Digital Science Solutions



The Digital Transformation of EM Service

Electron Microscopy Service



\$300M+

Service revenue



1,000+

Application and
Service Experts



13,000+

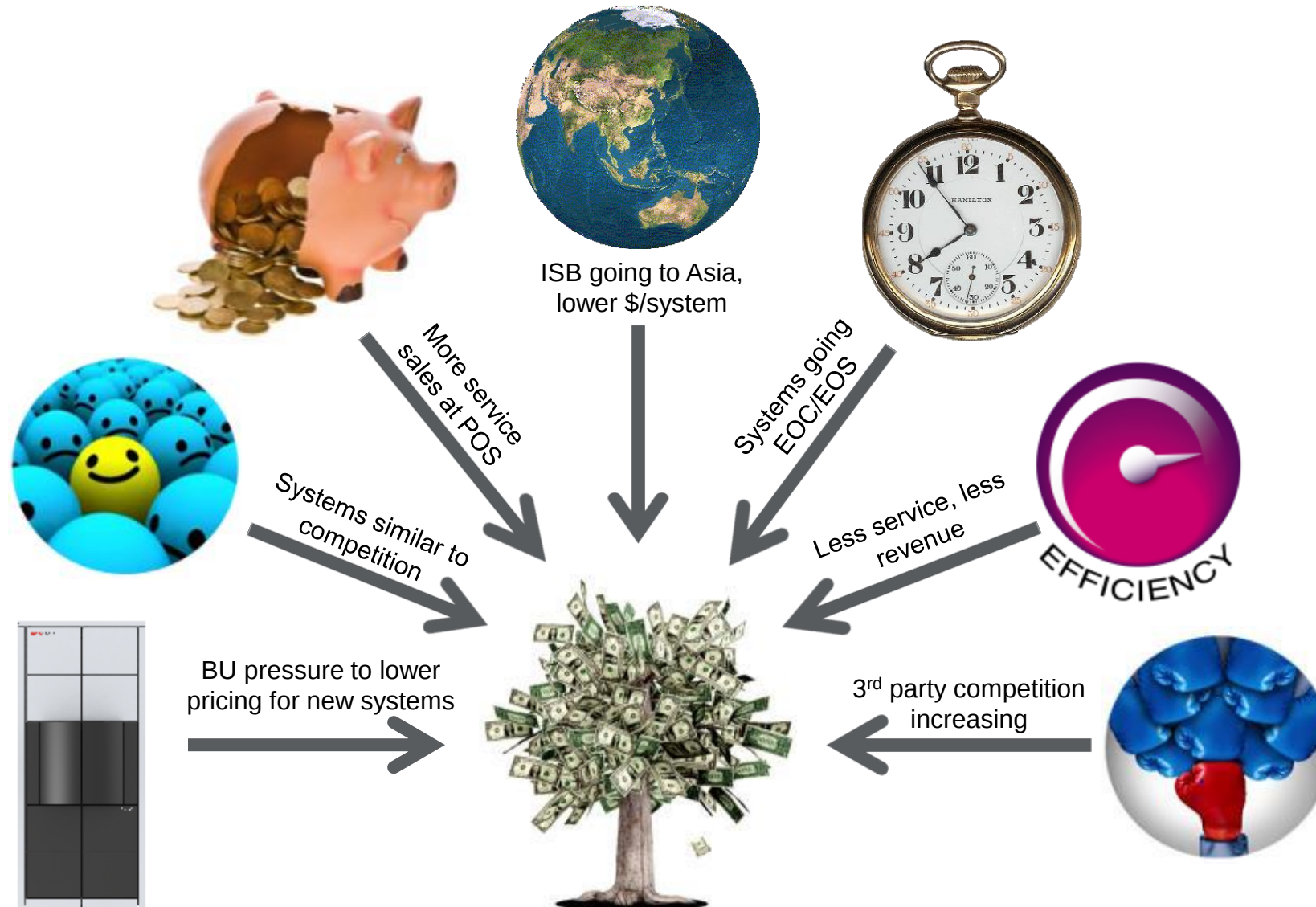
Microscopes in
our Install Base



95%

Parts shipped
next-day

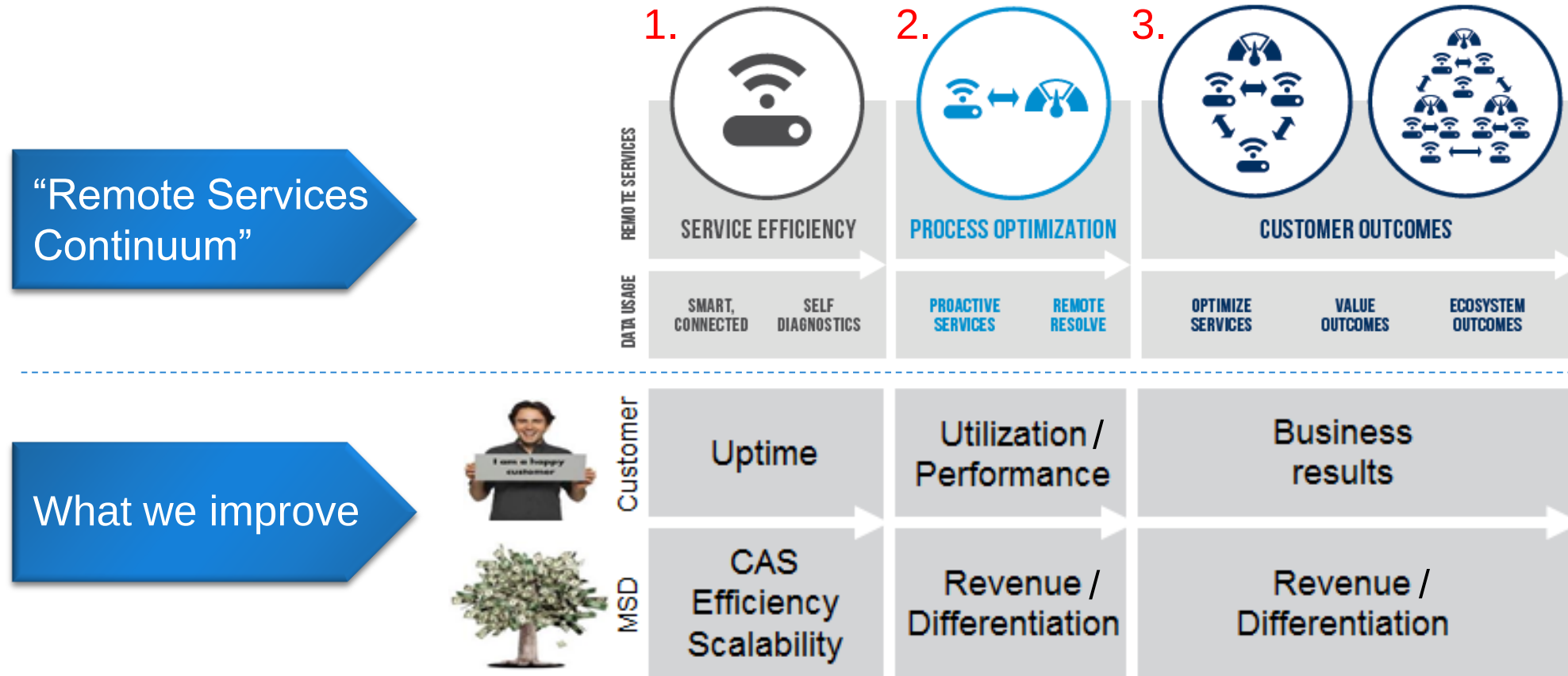
Pressure On Traditional Service Revenue



Vision:

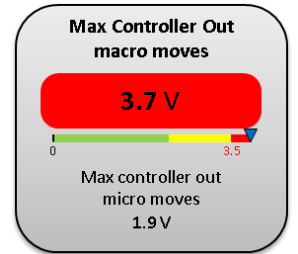
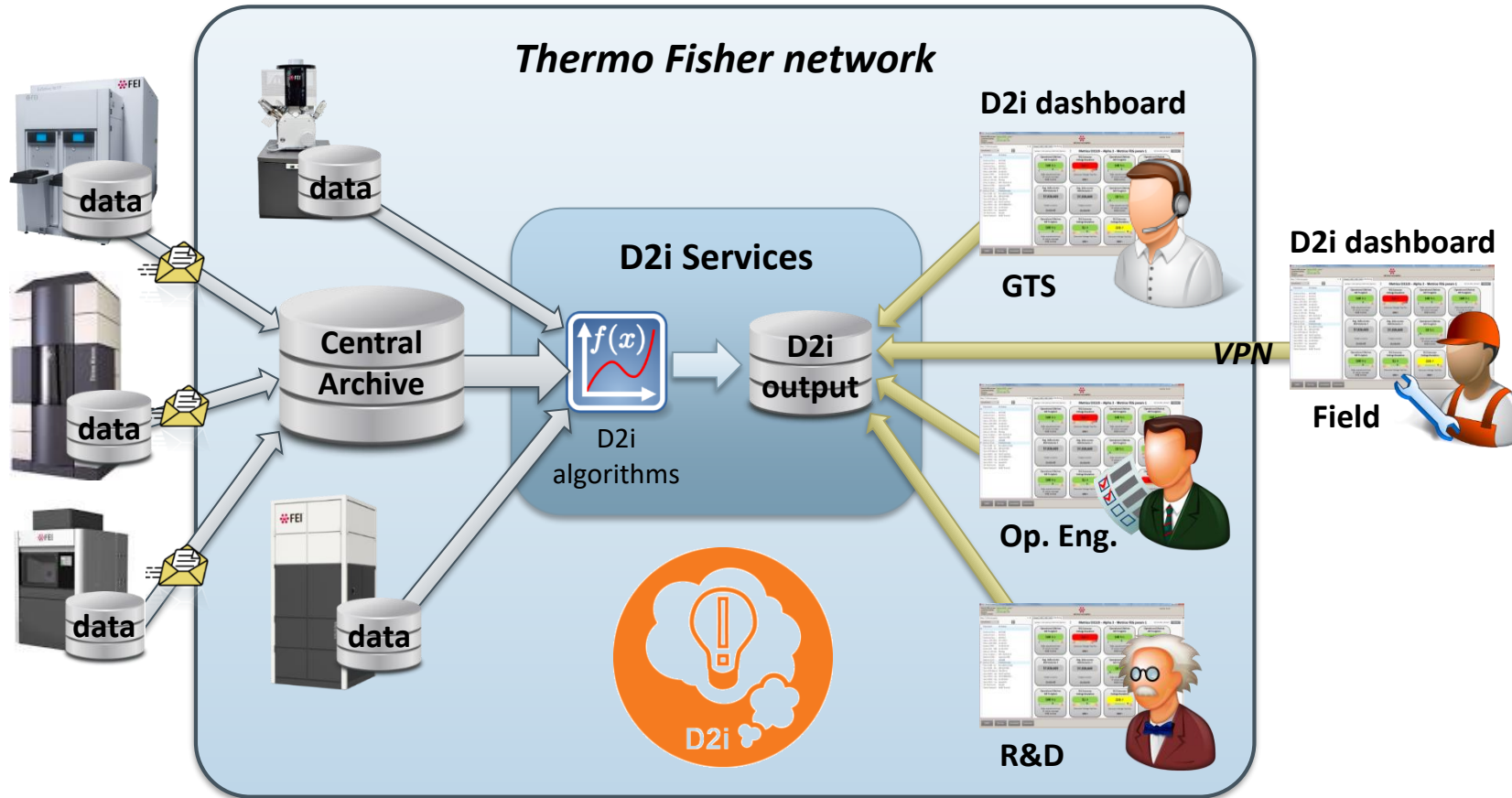
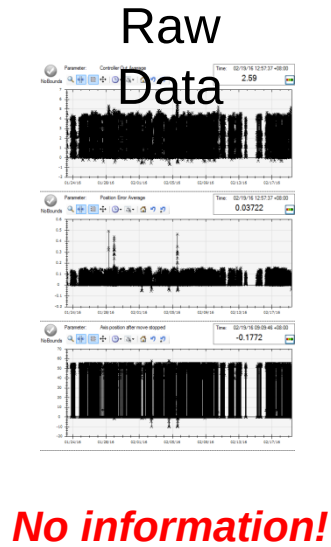
Service is a key reason for customers to select Thermo Fisher Scientific

Mission: Enable **customer success** by creating and delivering **solutions** that leverage **digital science** to drive **customer allegiance** and **financial results**



- Answer customer's higher expectations: first uptime then value add-services (optimization > outcome)
- Focus on selling additional value (increasing revenue), productivity will increase with more penetration

D2i technology as key enabler

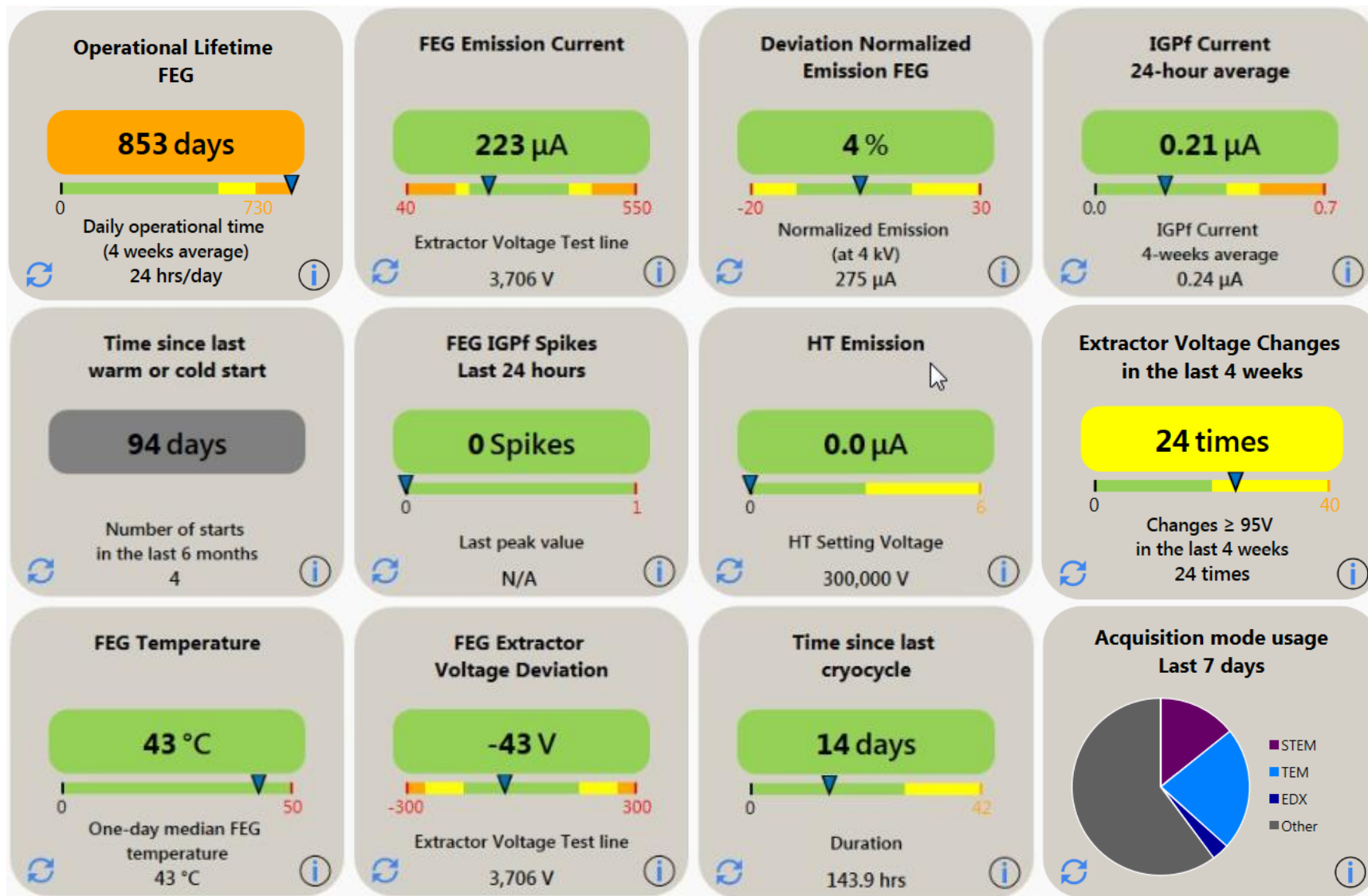


Pro-active action on the system!

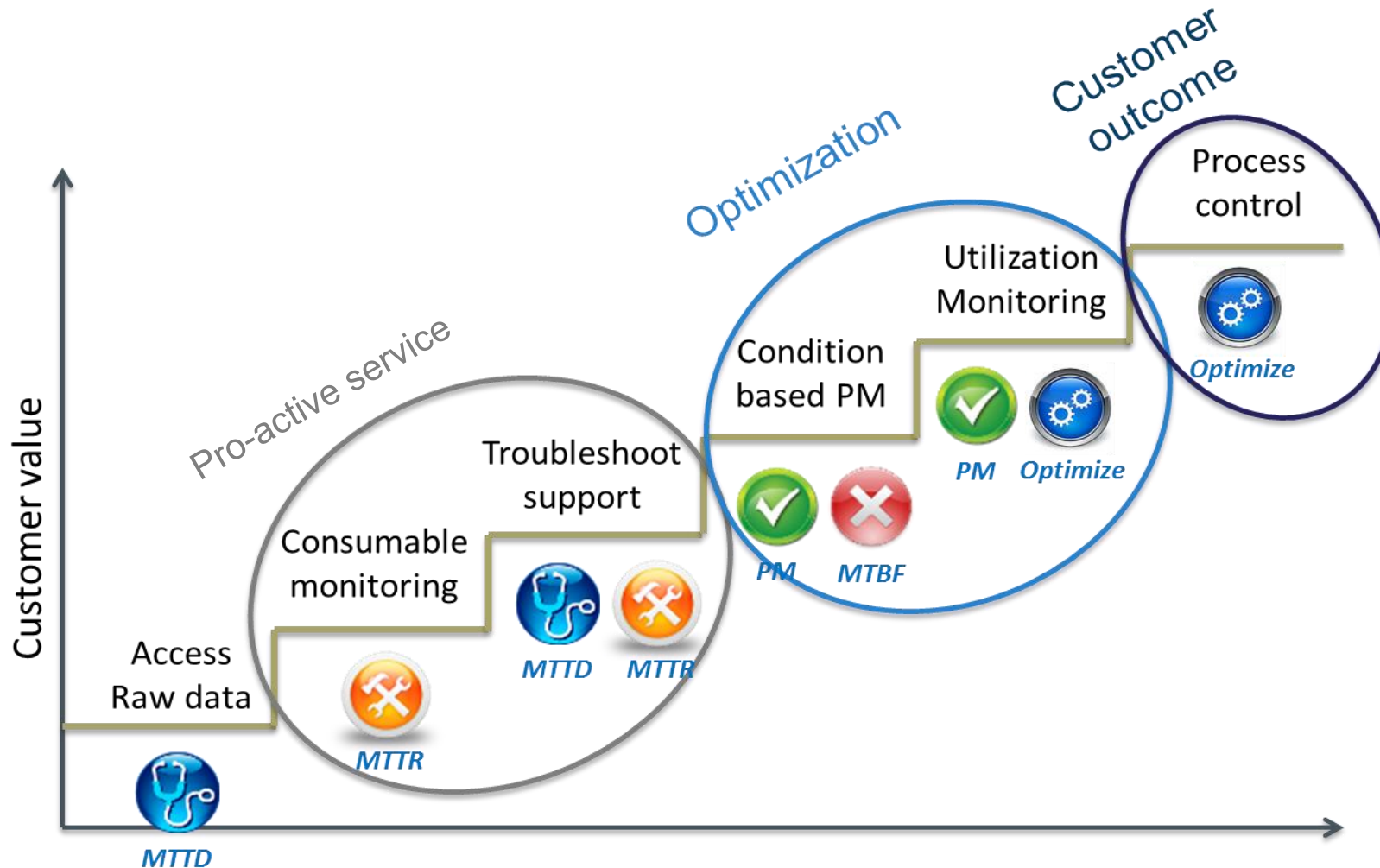


D2i: Data to Information

D2i Dashboard - Sample



D2i parameters development roadmap



Moving from parameters around 'Pro-active service' to 'Optimization'

D2i success story

Who: Semiconductor customer

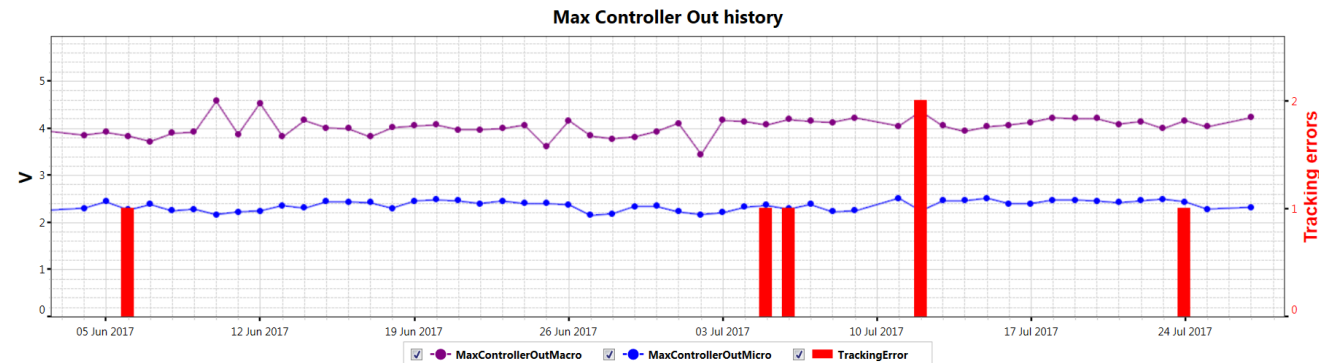
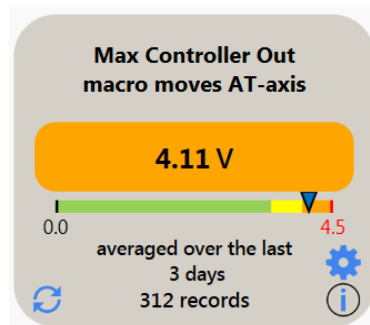
Where: The Americas

What: Helios 1200/Max controller out AT-axis
D2i parameter triggered

Why: Damaged ceramics caused increasing AT-axis controller out voltage/tracking errors

How:

- D2i parameter “Max controller out macro moves AT-axis” turned orange, triggering GTS and local team to inspect
- Checklist was executed and local team determined ceramics and motor were damaged.
- Ceramics and tilt motors were ordered and replacement was scheduled with customer.



Results:

- AT-axis motor and ceramics ordered and replacement action scheduled *before* customer reported any issues
- D2i insights prevented 1- to 2 days of unscheduled downtime by scheduling diagnosis and replacement action proactively.

D2i success story

Who: Cryo-TEM Customer

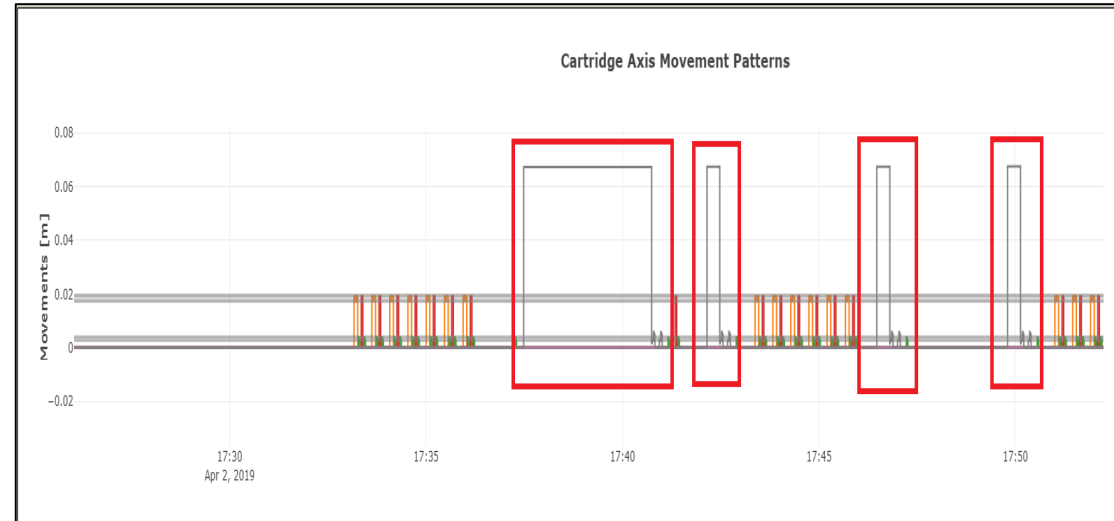
Where: Field

How:

- Several autoloader algorithms signaled an unusual motion profile
- Because all known pattern movements had been mapped, D2i alert was generated
- In-depth analysis showed several occasions where the cartridge axis moved abnormally
- This indicated an unusual event prevented the axis from its programmed movement, so a site visit was scheduled proactively to assess and fix, as needed

What: Autoloader axes moved unexpectedly, despite pre-programming patterns

Why: Loose autoloader cassette assembly

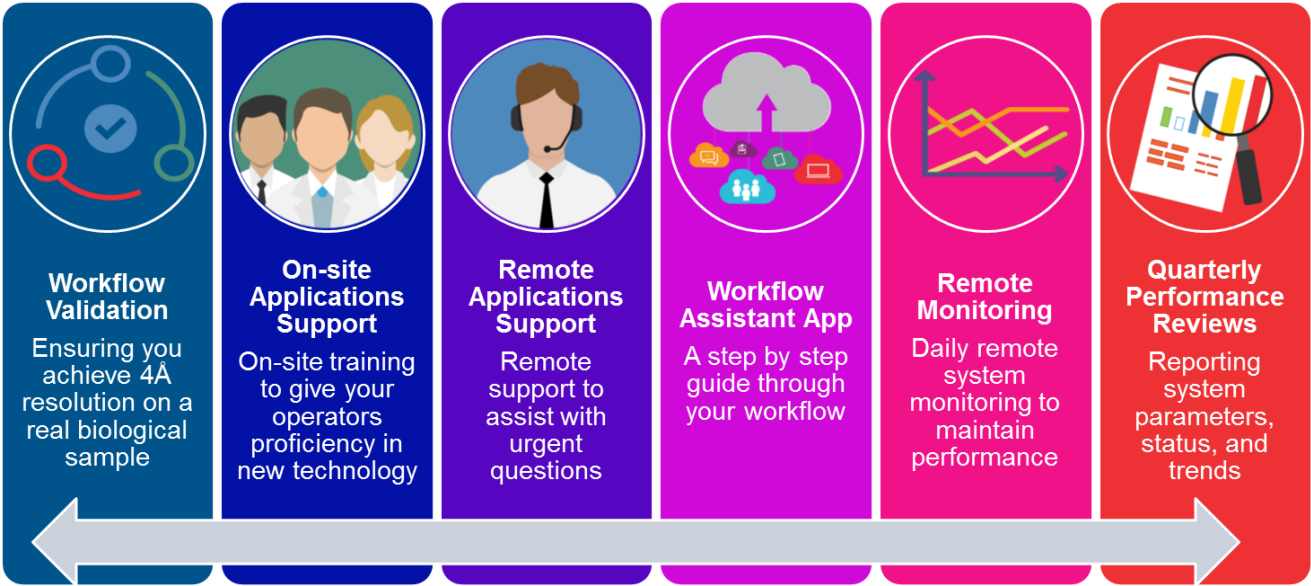


Results:

- Thanks to a D2i notification, a field service engineer was dispatched and discovered a loose cassette screw, which obstructed the movement of the cartridge gripper arm
- The engineer corrected the issue before it interfered with the customer's use of the system
- If left undetected and unresolved, this issue could have resulted in an error that led to the loss of up to 11 samples
- Proactive notification via D2i preserved samples and protected uptime

Bundled into value propositions of our Digital Services

“Accelerate” bundle offering for Life science



Value prop: accelerate onboarding of life science customers using SPA workflow

“Accelerate” bundle offering for Semiconductor

Digital Service	Uptime Guarantee	After-Hours Service	Applications Support
			
✓	✓	✓	✗
Accelerate Portfolio			Continue to sell as a sales item

Value prop: guaranty uptime without the need of dedicated onsite service crew

➤ **Critical to overcome geographical scaling challenge in China!**

A wide range of customers are adopting our digital services



香港中文大學
The Chinese University of Hong Kong



INDIANA UNIVERSITY



REGENERON



Duke
UNIVERSITY

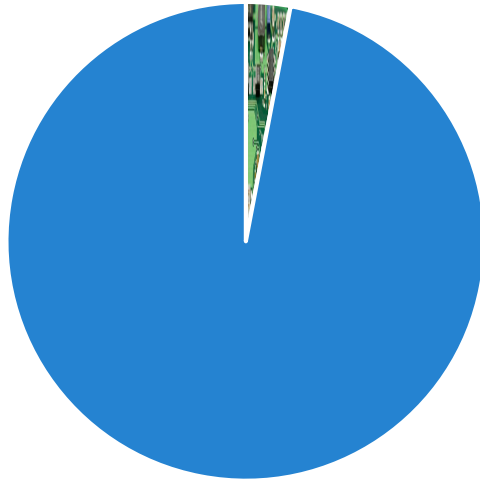


University of Pittsburgh



Revenue growth of the Digital Services

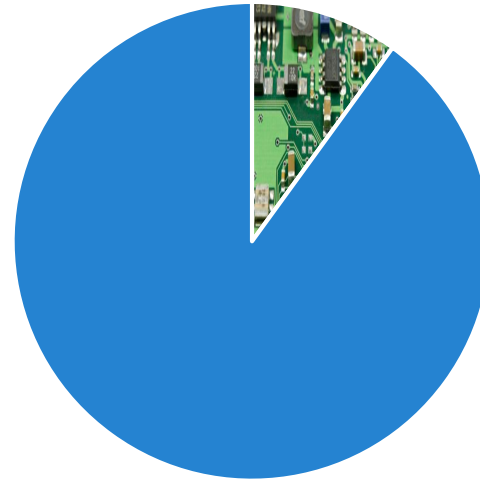
2019



■ Digital ■ Traditional

<5%

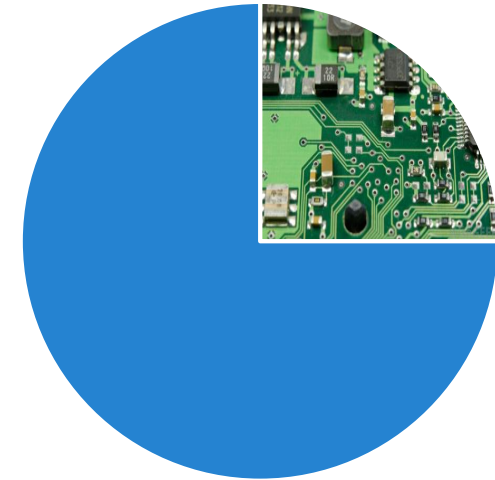
2024



■ Digital ■ Traditional

15%

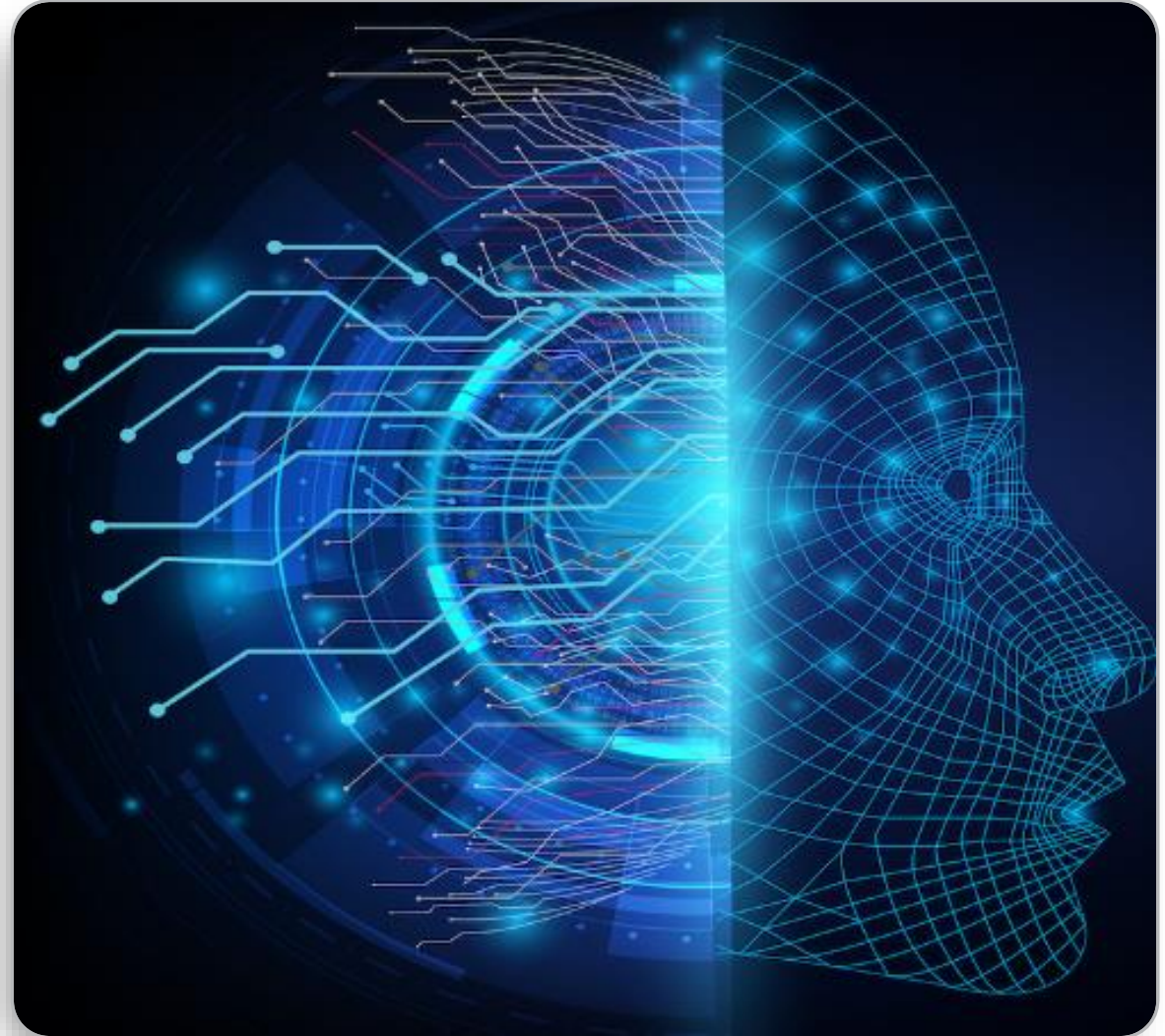
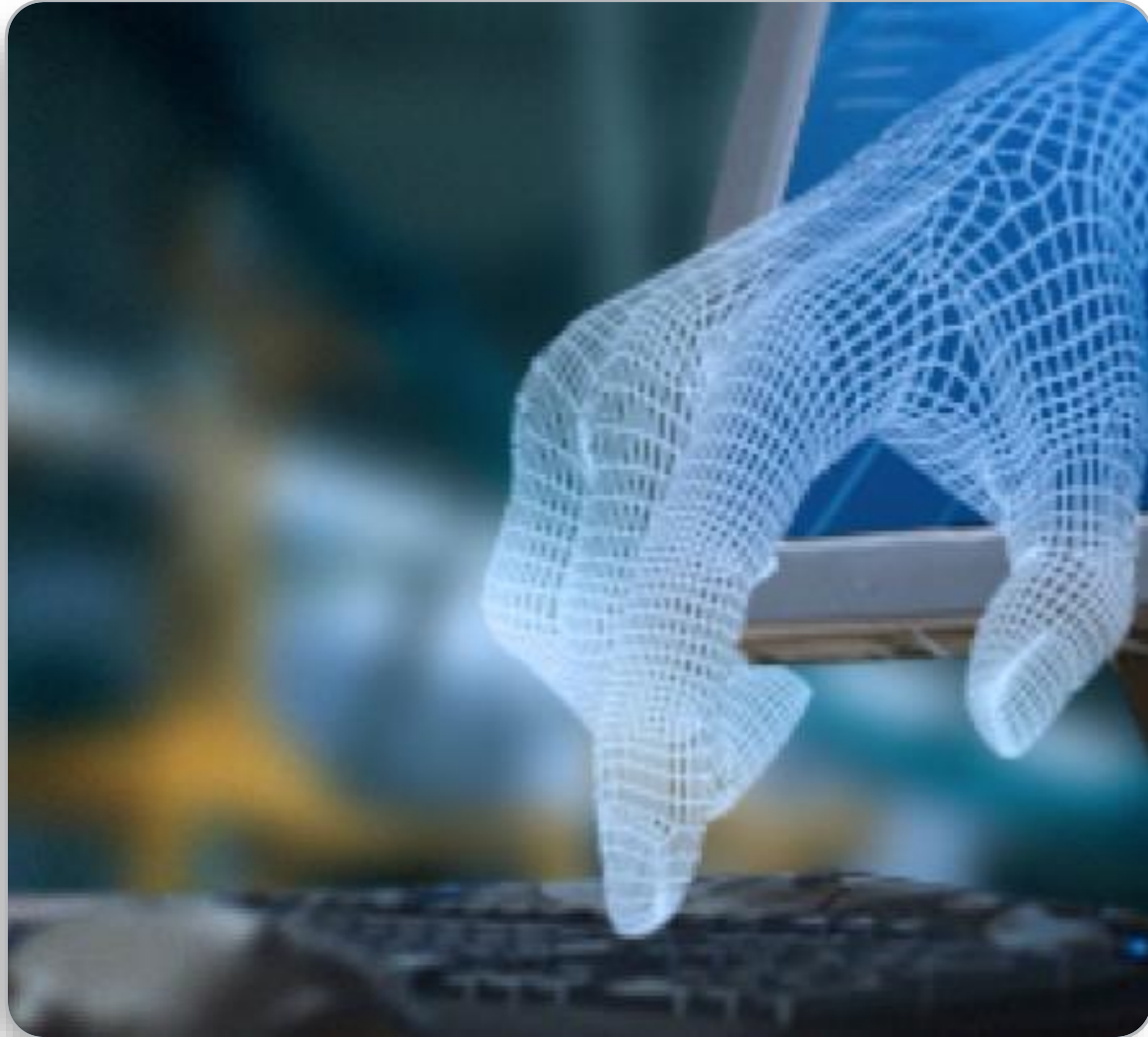
2028



■ Digital ■ Traditional

25%

Next steps: Remote Service delivery and Machine Learning (decision support)





Lessons learned

This is disruptive innovation

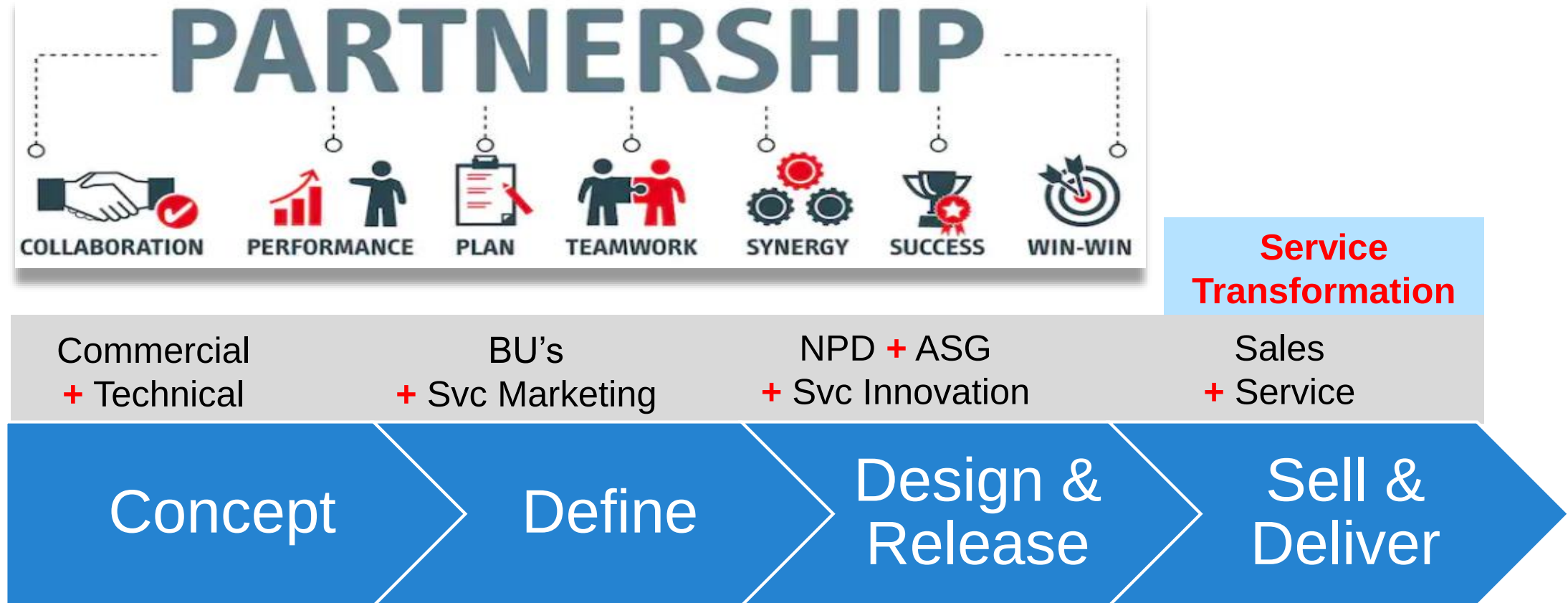


Manage as **Internal Startup** and focus on niche market



- Bring **Commercial and Technical** people together
- Position program as Top Line initiative
- Remote monitoring capability used in bundle, not sold standalone

Digital Value must be managed End-2-End



Break the silo's, create partnership across functions and transform Service delivery

Riding the waves of change as Thermo Fisher Scientific EM Service



We need a strong Culture of Change



Change Management has become a key enabler to our business

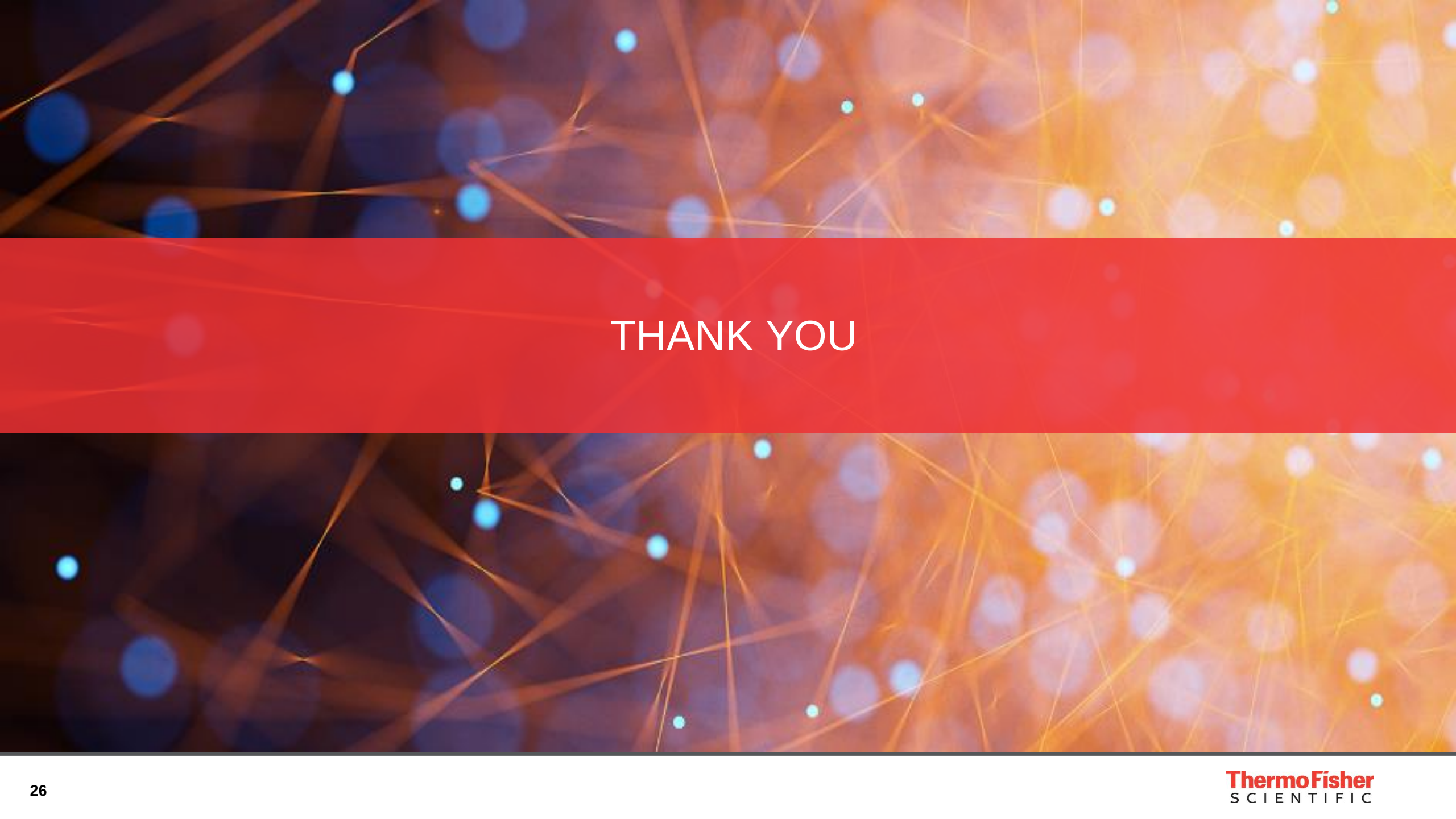
Our goal:

Ride the **Digital Wave** and **Transform Service** to ...

- Enable **Customer Success** by creating and delivering **Integrated Solutions**
- And maximize **Customer Lifetime Value**

Lessons learned:

- Manage as **Internal Startup** and focus on niche market
- Bring **Commercial and Technical** people together
- Bundling capabilities into real value propositions is key to transition from free to fee
- Think **End to End**
- Execution of the services is a big challenge and generally underestimated
- **Change Management** required across the entire business

The background of the slide is an abstract composition of thin, intersecting orange and yellow lines that create a web-like pattern. Scattered throughout this network are small, glowing blue and white dots, some of which are slightly out of focus, giving a sense of depth. A solid red horizontal band cuts across the middle of the image, serving as a backdrop for the central text.

THANK YOU