

Predix

The software platform
for the Industrial Internet



Industrial Internet vision



“ I always think about what’s next. The ability in our world to go man-to-machine, to marry real-time customer data with real-time performance data of our products... that is the holy grail.”

Jeffrey Immelt, GE
CEO



Forces shaping the Industrial Internet

1 Internet of things

A living network of machines, data, and people

2 Intelligent machines

Increasing system intelligence through embedded software

3 Big Data

Transforming massive volumes of information into intelligence

4 Analytics

Generating data-driven insights and enhancing asset performance

Challenges from fragmented development



Industrial Internet: business value



Efficiency and cost savings

The ability to model and understand the physical world makes it easier to optimize assets and processes

New customer services

Data and the insights it provides will enable new customer services and business models

Risk avoidance

Increased visibility
and control help
address
environmental, health,
and human safety
issues

Shared capabilities portfolio

Commercial strategy



Optimizing the software portfolio to maximize market success

Architecture



Defining new business and delivery models for software and services

Advanced Research



Developing and deploying scalable predictive solutions to enable Industrial Internet programs

Cloud Services



Providing a unified, service-based solution on a protected, fully-automated network

Cyber Security



Focusing on security management strategies to prevent, detect, and fix risks to data, assets, and intellectual property

User Experience (UX)



Driving revenue and growth by increasing adoption and demand

Data science



Transforming raw data into insights and opportunities, through descriptive, predictive, and prescriptive analytics

Development



Developing applications and solutions around asset optimization and operations optimization

Cloud

for efficiency
and agility



Going mobile:
anytime/
anywhere

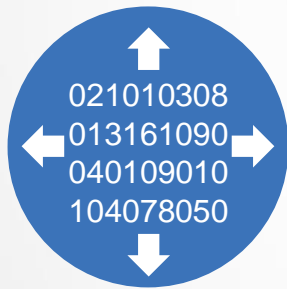
Access



End-to-end
Security



Predictive
insights from
Big Data



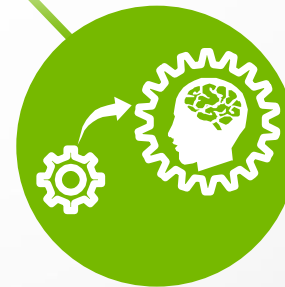
Industrial Internet platform requirements



Consistent and
meaningful
**User
experience**

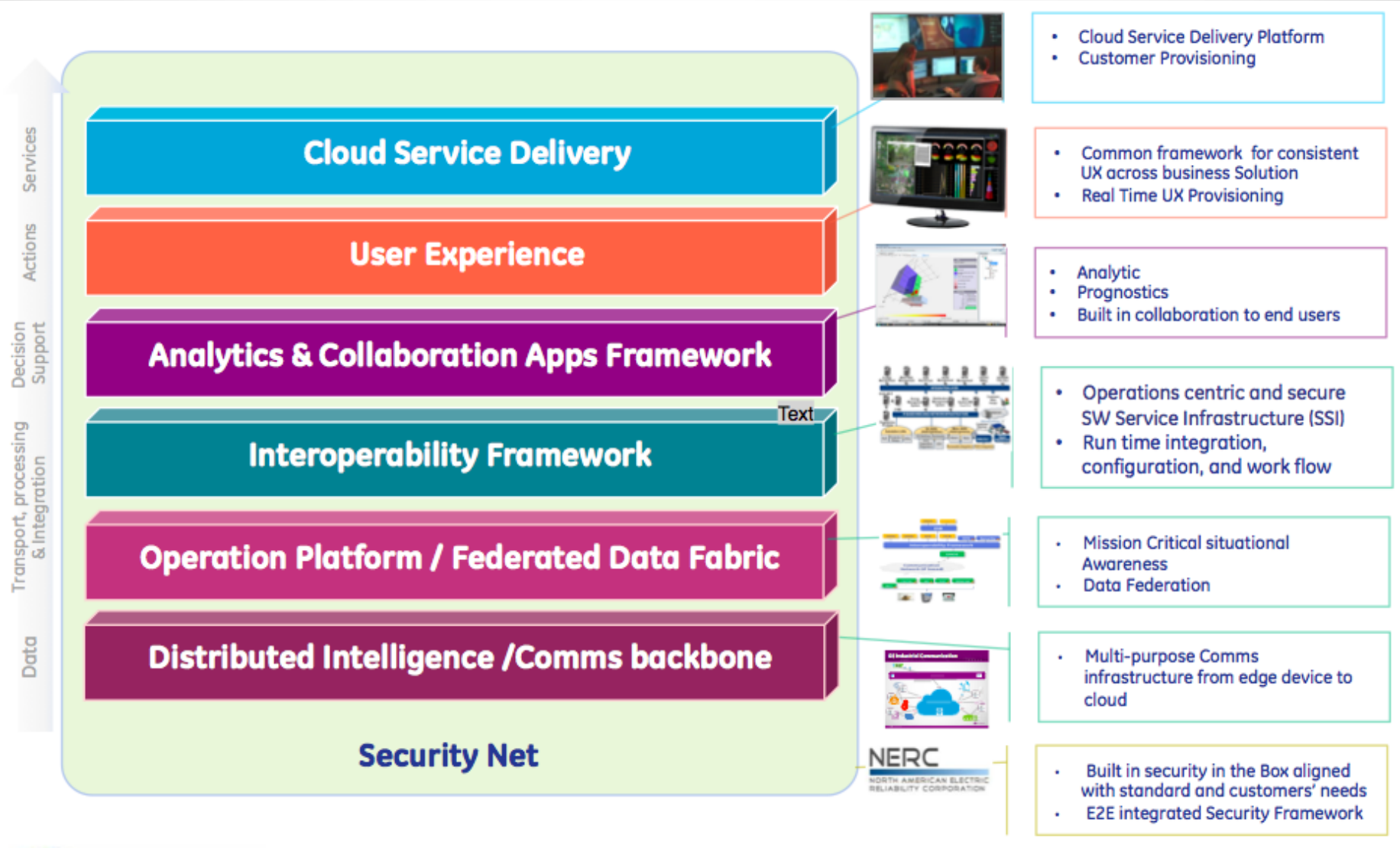


Cloud based Integrated
**Asset
Management**



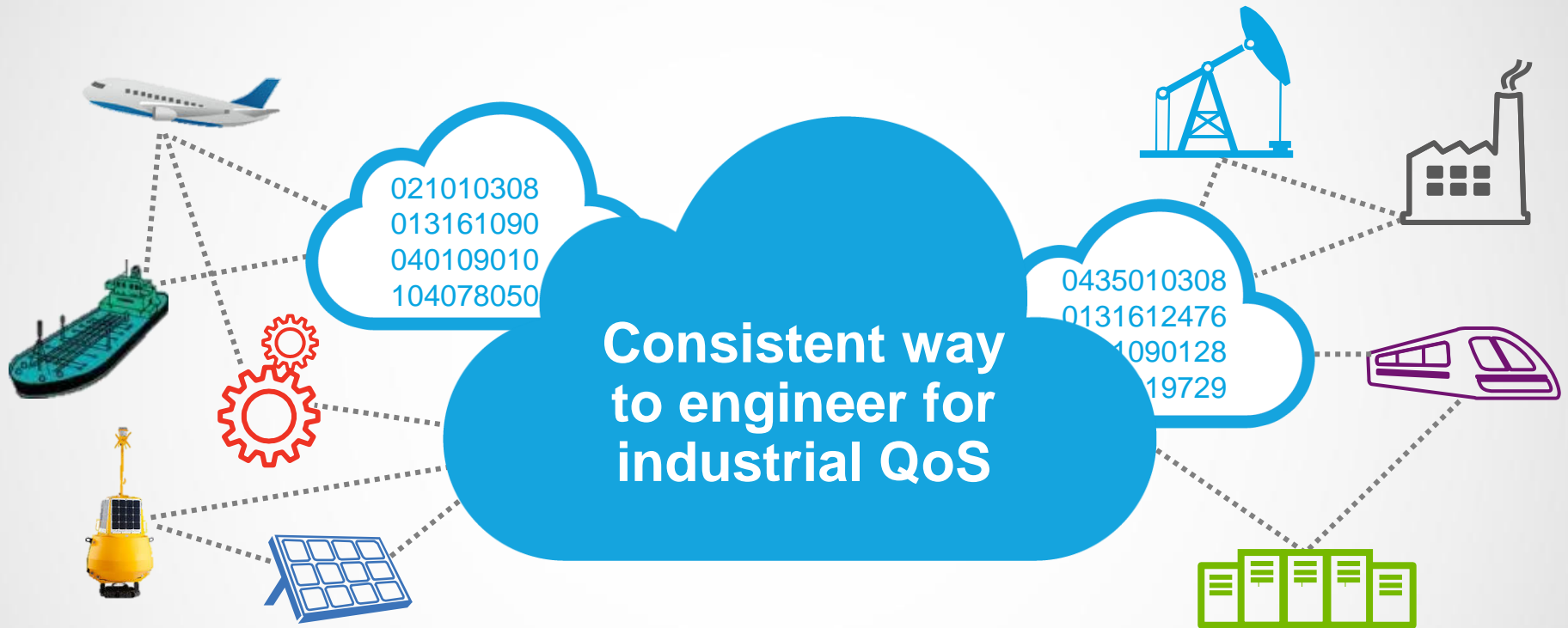
Transition to
“Brilliant machines”

Architecture Technology Stack



Predix capabilities

Wide-area M2M fabric



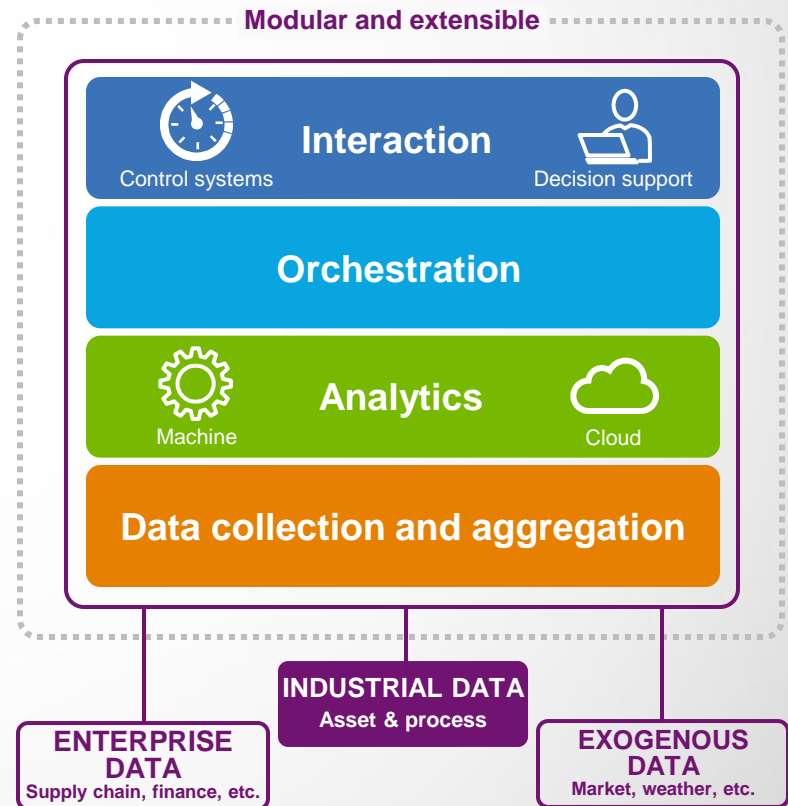
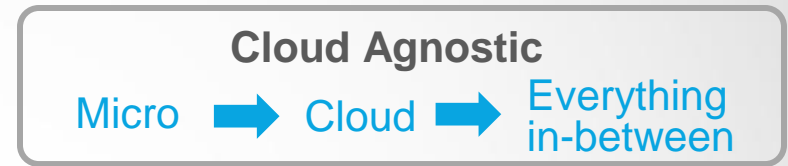
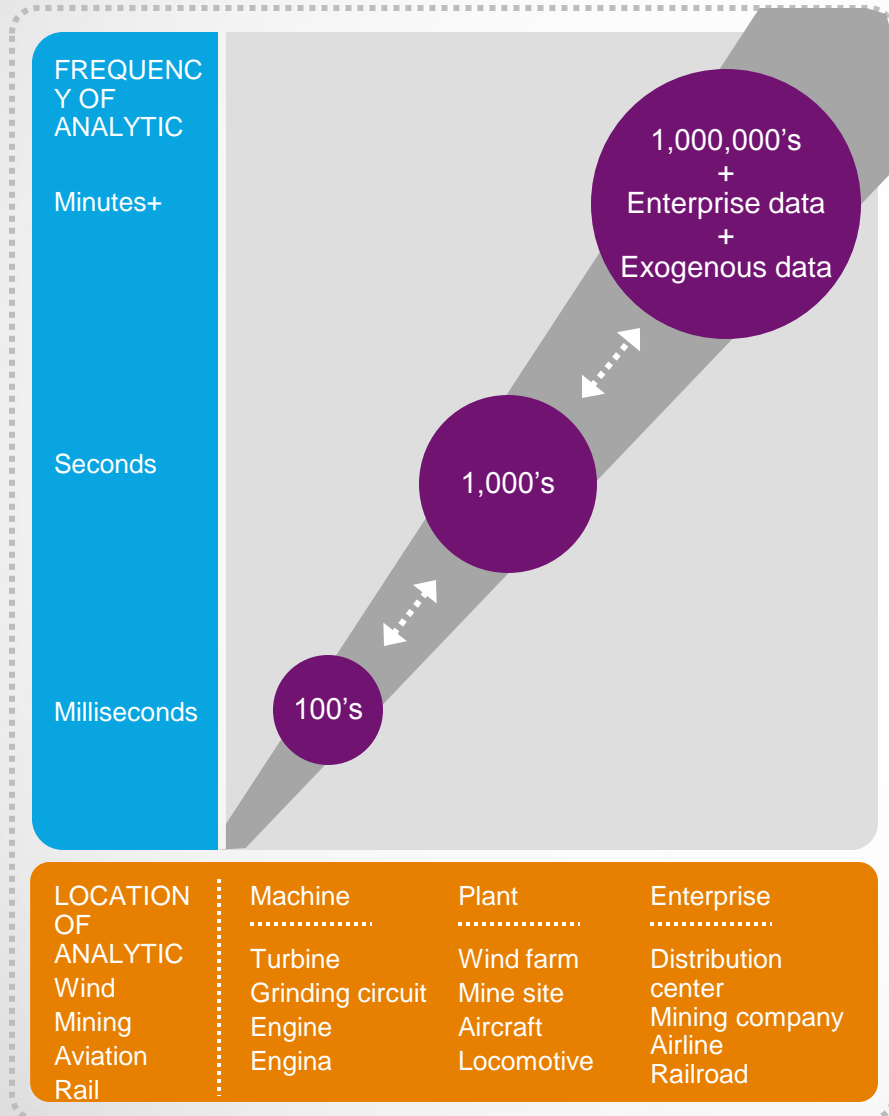
Converges Big Data and Big Control into industrial sector's new digital content

Safe, secure way to connect machines, plants, and metros

Real-time delivery networks, real-time information exchange

Time-sensitive networking: precise synchronization and traffic shaping

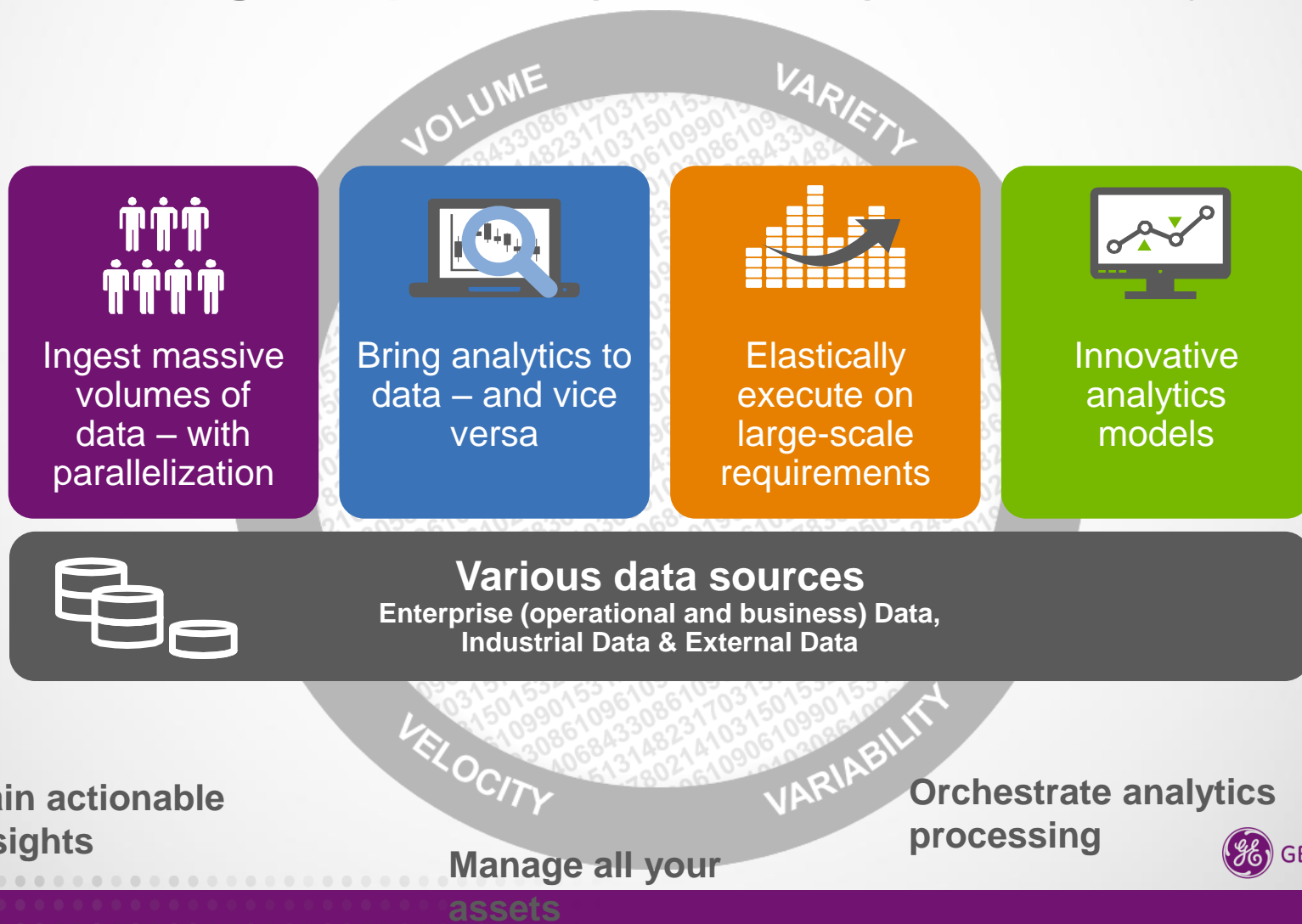
Analytic requirements of industrial companies



Predix capabilities

Industrial big data analytics

Delivering sharper insights to “big model” projects



GE Predix Application Examples



Oil & Gas

- Subsea Integrity Management
- Field360
- ReliabilityMax
- Non-destructive Testing (NDT) Remote Collaboration



Aviation

- Flight Efficiency Services
- Fuel Management
- Intelligent Operations Services



Transportation

- RailConnect 360 Monitoring and Diagnostics
- ShipperConnect
- Movement Planner System



Power and Water

- PowerUp
- Flex Efficiency Advantage
- LifeMax* Advantage



Energy Management

- Grid IQ Insight
- Proficy MaxxMine



Healthcare

- HoF SimSuite
- GE's Cloud Imaging*
- Hospital Operations Management (HOM)
- DoseWatch

Predix capabilities

Extensible and customizable



Safety



Security
Threat Assessment



Maritime
Awareness



Economic
Optimization



Environmental
Analysis



Transportation
Optimization

Predictivity Solutions

Solutions for industrial asset and operation optimization

Aviation
specific

Energy
specific

Sonar

O&G
specific

Public
Safety

Transportation
specific

Waterways Platform

Co-Innovating with Proven Players

Leveraging proven know-how and technologies



- Work with the best
- Share risk and reward

Guiding
Principles

- Develop distinctive technologies
- Pursue new markets

Thank you

