

StanleyBlack&Decker

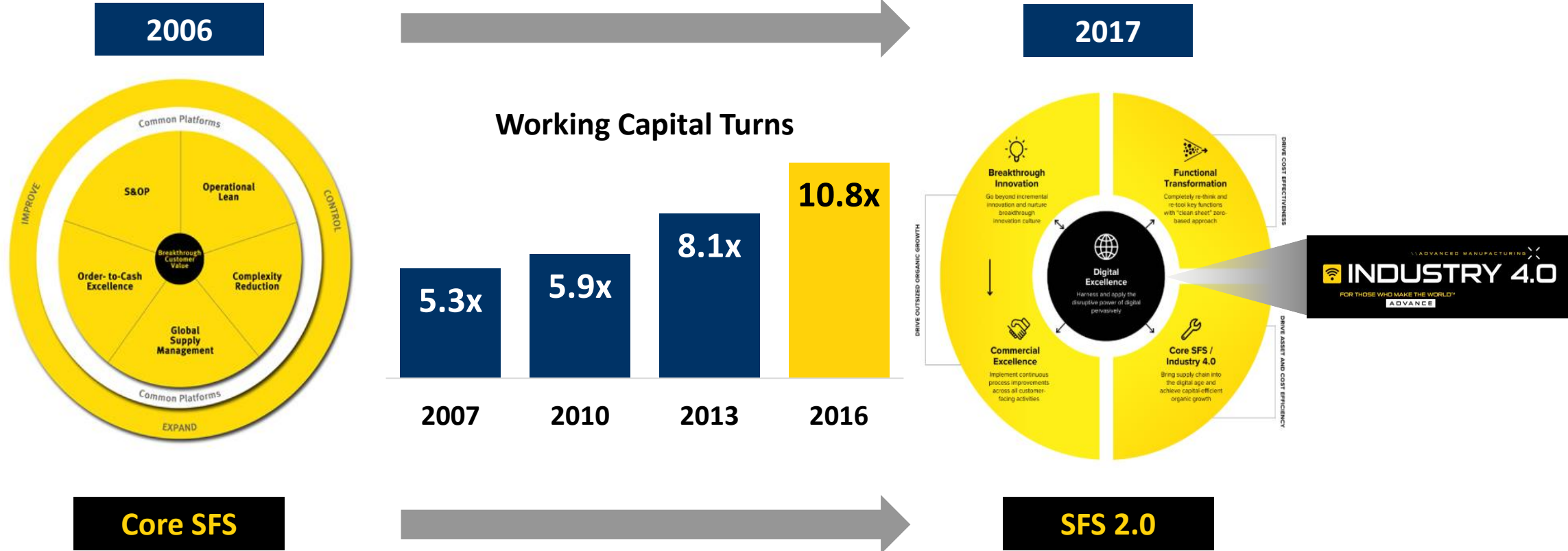
Stanley Black & Decker Investor Day
May 16, 2019

Industry 4.0

Sudhi Bangalore | Vice President, Industry 4.0

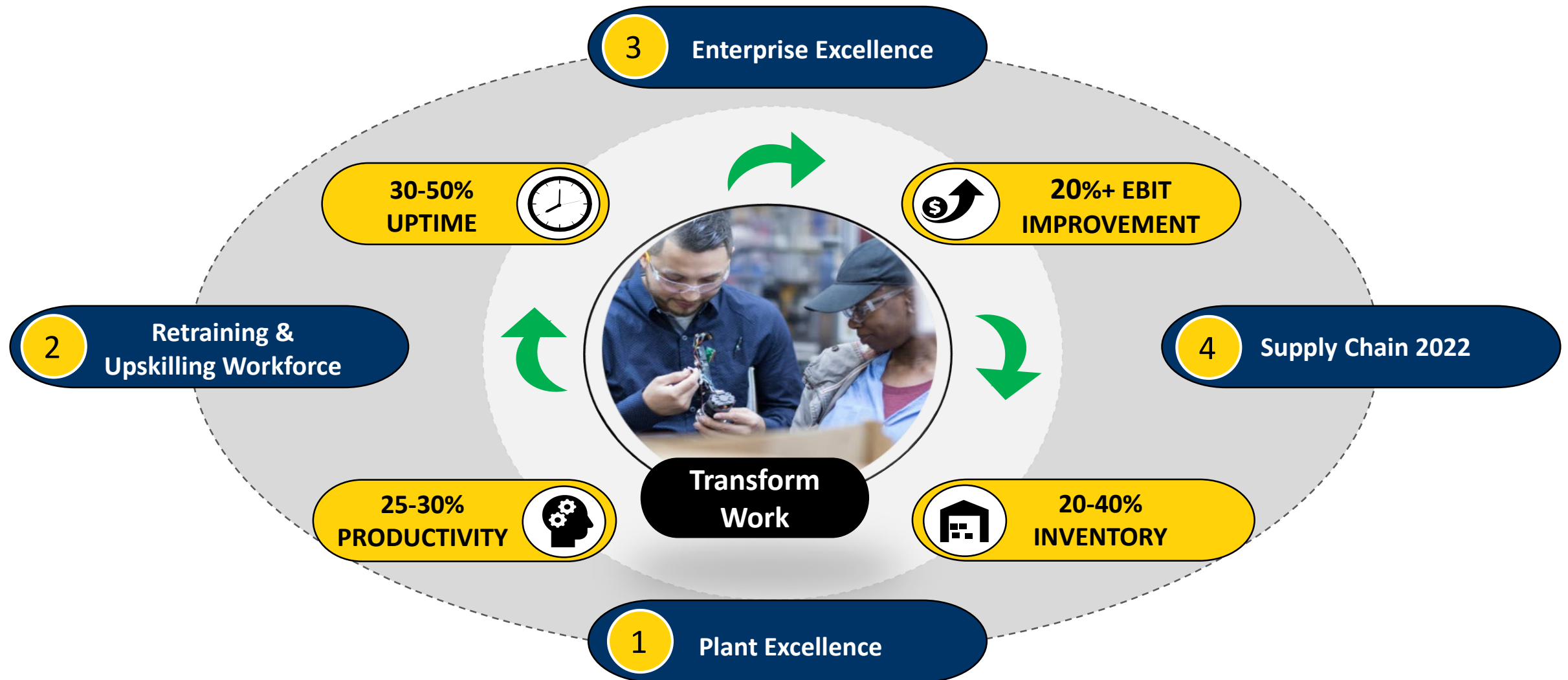
Evolution From Core SFS

Foundational Elements Of Core SFS Remain Embedded Throughout The Organization...



...As We Accelerate Our Progress Through Industry 4.0

Leverage Technology For Accelerated Productivity Improvements



Driving Value At Plant Level While Transforming Capabilities Across The Company

Industry 4.0 Technology Solutions



AI & Machine Learning

- Yield Optimization
- Predictive Algorithms
- Pro-active Maintenance Work



Digital Apps

- Guided Digital Work From Remote Experts



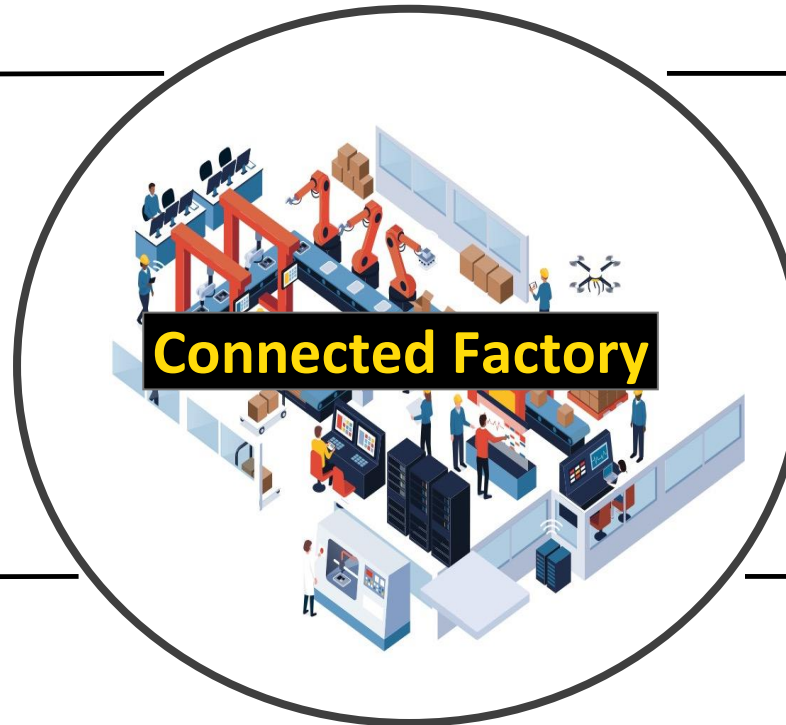
Robotics

- Eliminate Repetitive Tasks
- Real Time Fault Detection & Resolution



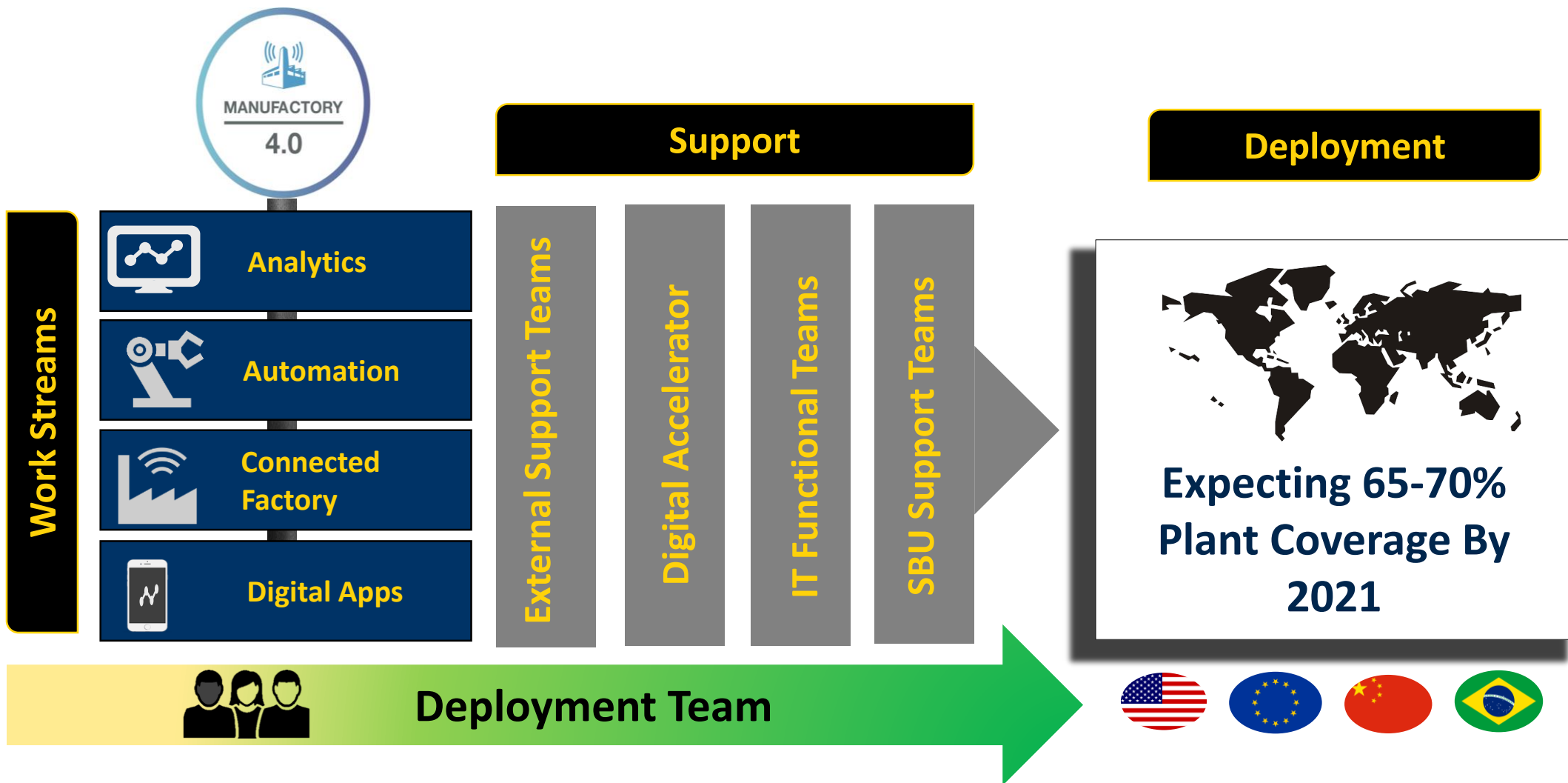
Digital Twins

- Remote Problem Solving Expertise
- Benchmarking & Optimization



Prioritized Technology Solutions To Deliver Maximum Value

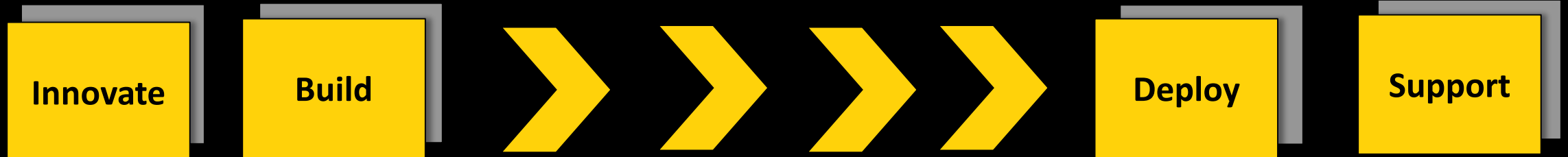
Organized For Rapid Deployment



Manufactory 4.0: Our Advanced Manufacturing Center Of Excellence

Companies & Individuals Need To Expand Their Capacity To Absorb Rapid Change & Adapt Faster Than Ever Before...

- **23,000 Square Feet State Of The Art Technology Solutions Center**
- **Over 120 Industry 4.0 Experts & 13 Ecosystem Partners Focused On Innovations**



...Manufactory 4.0 Serves As The Heartbeat Of Our Company's Industry 4.0 Efforts

Industry 4.0 In Action (Deployed Scalable Solutions)

Connected Factory

Fort Mill – LiveView Application

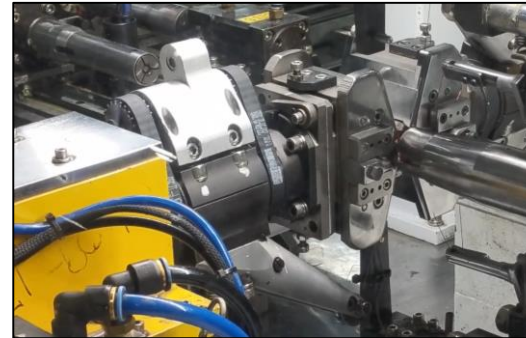


- First LiveView Deployment
- Production & Quality Data

Roll Out: 3 Months
Payback: 18 Months

Analytics

Greenfield – Motor Winder

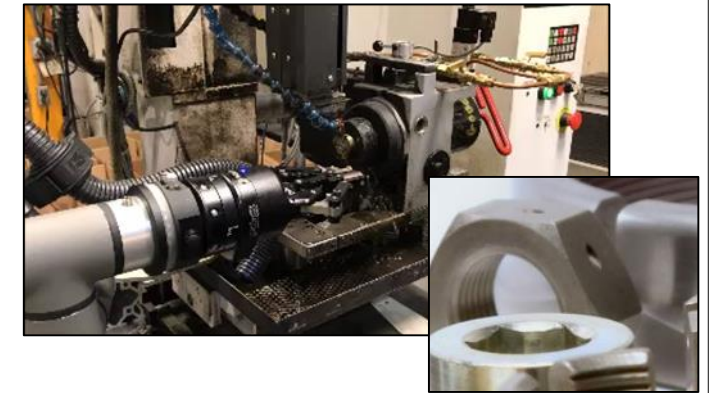


- Slowed Winder Speed
- 12% Yield Increase
- Applicable To Multiple Plants

Roll Out: 4-6 Months
Payback: 15 Months

Automation

Decatur – Cross Drill Cobot



- Increased Productivity 20%
- Decreased Backlog
- Capital Cost Avoidance And Labor Efficiency

Roll Out: 1-2 Months
Payback: 12 Months

Deploying Scalable Solutions & Building Momentum

From Three Pilots To Enterprise Excellence

2017



3 Lighthouse
Factories
Piloted



2021

Connectivity

65 – 70% Plant Coverage
~475 Data Kits
~1,900 Assets

Robotics

~250 Cobots | ~60 Mobile Robots
8 Standard Assembly
Automation System

Intelligence & Analytics

~24 Plants
~40 Apps

Connected Factories Enabling Increased Productivity, Growth & Customer Satisfaction

Summary

Industry 4.0 Related Technology & Our Digital Capabilities Have Matured...

Deploying Industry 4.0 Capabilities To Digitize Our Manufacturing & Enables Global Real Time Visibility And Awareness Of Operational Performance

Ability To Dramatically Improve Planning And Response Time For Plants And Customers

Talent & Process In Place To Identify & Deploy Projects With High Rate Of Success

...Core SFS + Industry 4.0 Will Result In Accelerated Productivity



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THANK YOU