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THINKING BREAKTHROUGHS

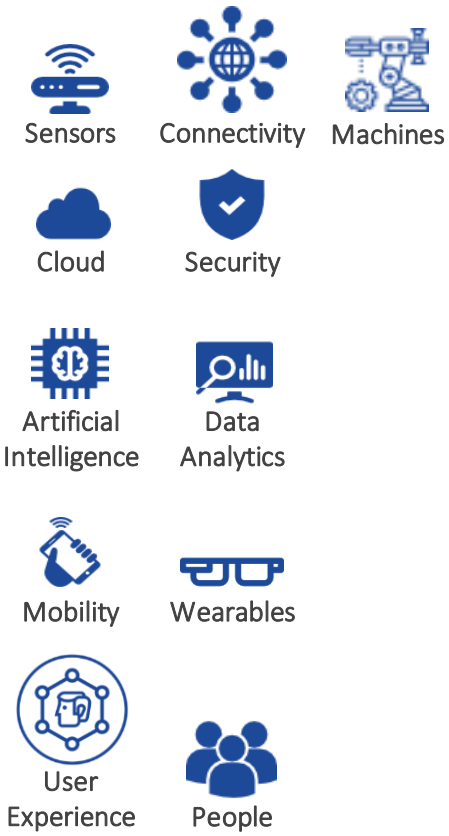
The vision of a connected enterprise

what we need, to achieve this vision...

and some thoughts on how to get there...

What is a connected enterprise?

- We deploy Industrial IoT technology and frameworks
- Our assets and data are accessible by a centralized API
- Our machines are sending data to the cloud for analysis
- We employ machine learning on our data
- We have a high level of RPA maturity
- All our data sources feed to a state-of-the-art data lake
- Our supply chain uses smart contracts across vendors and departments
- Our workers wear HoloLens units which guide their tasks
- Customers constantly send us data about our products
- We monitor social media for trends about our products



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What is a connected enterprise?

Technology	Process	People
Secure and connectable 'things'	Vertical and horizontal integration	Capability augmentation through new processes and technologies
Flexible automation of processes, monitoring, and interventions	Integrated and automated process chains	Skill acquisition
Data collection, storage, and intelligence	Connectable processes	Readiness of people for the connected enterprise
Communication and data exchange across the enterprise		Collaboration tools and frameworks

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Why do we need the enterprise to be connected?

- We deploy Industrial IoT technology and frameworks
- are accessible by a centralized API
- nding data to the cloud

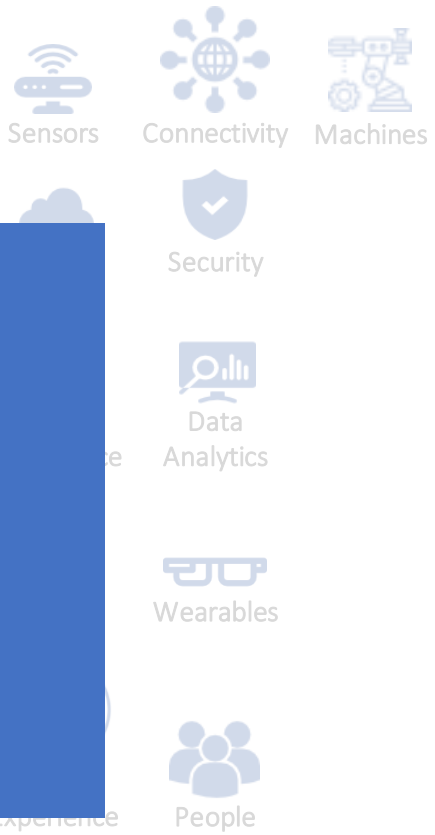
Secure and connectable 'things'

Flexible auto processes, m and interve

Data collectio and intelli

Communicatio exchange ac enterpr

Capability augmentation



The goal of a connected enterprise is to get itself ready – ready to be a smart enterprise.

- We monitor social media for trends about our products

Technology | Process | People

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Then, what's a "smart" enterprise – some examples, good or bad:

- We deploy Industrial IoT technology and frameworks
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- We have a high level of RPA maturity
- All our data sources feed to a state-of-the-art data lake
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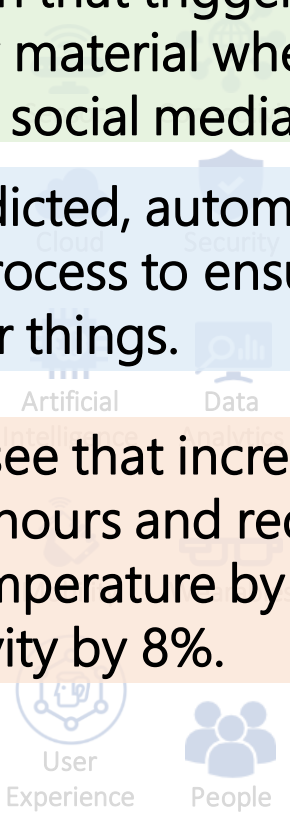
and this allows us to quickly put together a workflow application that triggers purchase of extra raw material when our product goes viral on social media.

and if a spare part burnout is predicted, automatically inform the spare part inventory process to ensure presence of the part, among other things.

which allows us to see that increasing training time by 10 hours and reducing the air-conditioning temperature by 2 degrees improved productivity by 8%.

by overlaying real-time predictions about the maintenance needs of our machines and providing the steps to carry out this maintenance.



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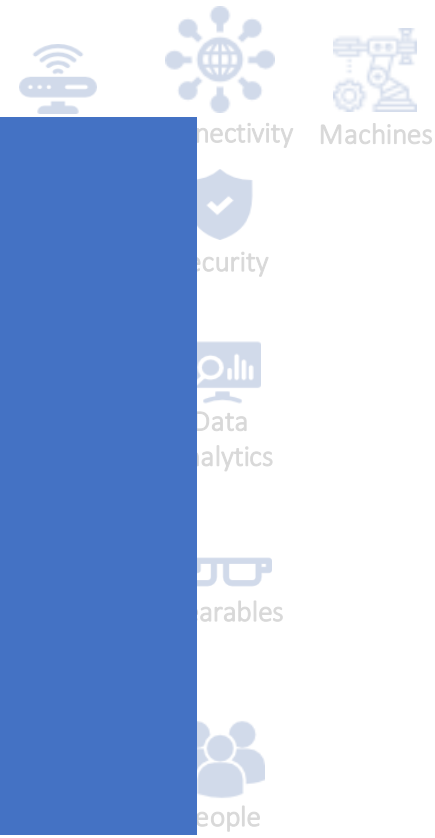
What is a “smart” enterprise?

- We deploy Industrial IoT technology and frameworks

What’s a Smart Enterprise?

- Real-time data to make automated decisions
- Rapidly test and deploy new business models
- Predict decay or breakdown
- Actionable analytics
- Prescriptive intelligence capabilities
- Rapidly adopt new technologies and try new ideas
- Real-time and automated monitoring, analysis, and steering capability end-to-end (device, edge, system, enterprise)



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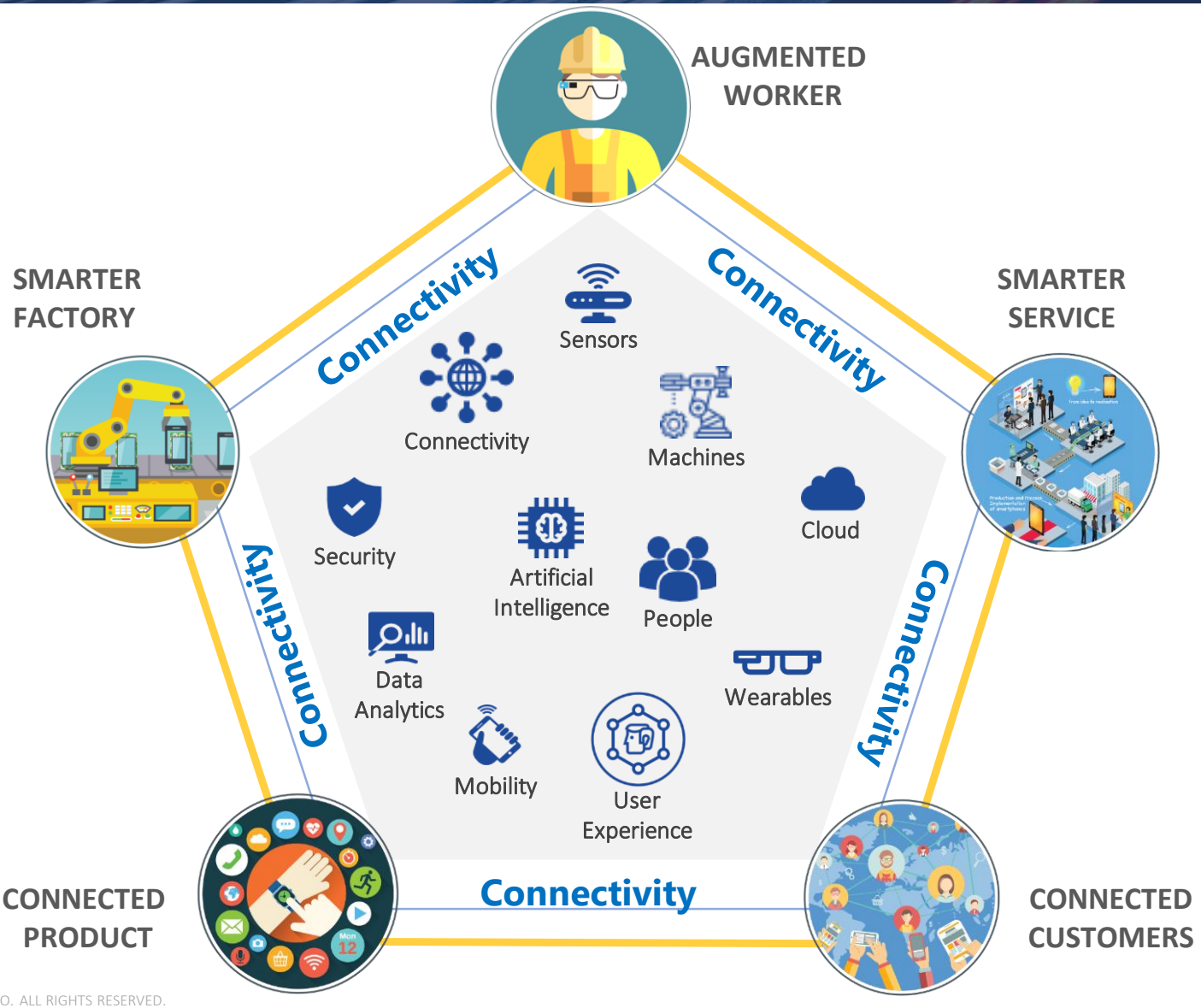
Let us see this again – a vision for a smart enterprise powered by connected technologies – what can we do with it?



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There's so much to do – so many things to try

So much to do, so little time!

How?

AINING & SUPPORT

COMMERCE ATTRACTION

EDICTIVE CONSUMPTION

ME PURCHASING PERIENCE

STOMER SERVICE 24/7

ET & ROUTE NAGEMENT

GITAL SIGNAGE

GMENTED SHOPPING PERIENCE

AINTENANCE & REPAIR

TA MONETIZATION

FTWARE-BASED-SERVICES

MAND FORECASTING

SUPPLY CHAIN RISK MANAGEMENT

FIELD SERVICE OPTIMIZATION

CUSTOMER SERVICE IMPROVEMENT

PREDICTIVE PURCHASING

CUSTOMER BEHAVIOR INSIGHTS

ENVIRONMENTAL TRACKING

ORDER, SHIPPING & RETURN SUPPORT

IN-STORE CONSUMER ANALYTICS

BEACONS IN CONSUMABLES

TREND PREDICTION & REACTION

SHOP FLOOR GUIDANCE

WORKER PRODUCTIVITY & SAFETY

SERVICE & SUPPORT OPTIMIZATION

MAINTENANCE & REPAIR

PRODUCT QUALITY & DEFECTS TRACKING

DEMAND FORECASTING

END-TO-END AUTOMATION

SPARE PART ORDERING & SHIPMENT

INVENTORY AUTOMATION

REAL-TIME INTERACTION WITH IOT

REMOTE ASSISTANCE

PREDICTIVE MAINTENANCE

NEW BUSINESS MODELS

WORKER PRODUCTIVITY

SUPPLY CHAIN OPTIMIZATION

DATA MONETIZATION

CONTINUOUS DEMAND SENSING

ENERGY COSTS OPTIMIZATION

PRICE ELASTICITY & SENSITIVITY

SOFTWARE-BASED-SERVICES

BETTER QUALITY ASSURANCE

CUSTOM PRODUCT DESIGN

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Enterprises need to be able to run experiments

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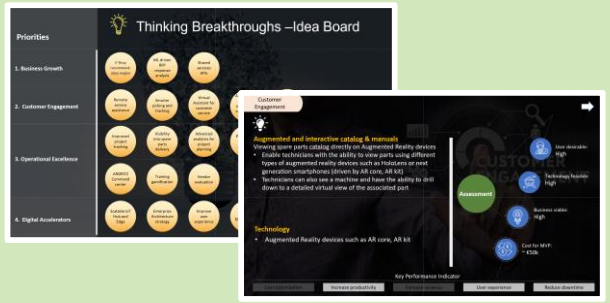
Enterprises need to be able to run experiments but in a structured way

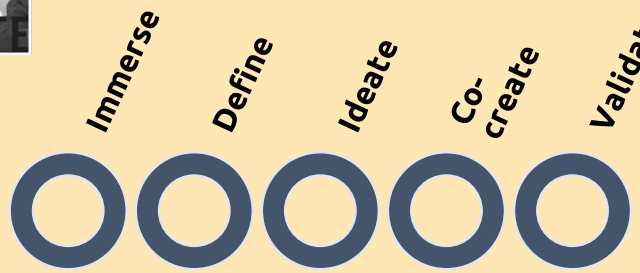
THINKING BREAKTHROUGHS

1. Identify business priorities
2. Define KPIs for priorities
3. Discover ideas for each priority
4. Filter ideas based on criteria:
   - Business viability
   - Technical feasibility
   - User desirability
   - KPI adherence
   - MVP cost
5. Present and implement using toolkits



INNOVATION TOOLKIT

a custom innovation process designed to rapidly create tangible solutions



DIGITAL MOBILIZATION TOOLKIT

Ideation + Digital Use Case

profit from an outside-in inspiration, leverage creative potential

Business Value

evaluate benefits and focus on most promising and feasible use cases

Prototype and Mobilization

it doesn't exist if you can't show it – mobilize stakeholders with a custom-made prototype/MVP

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THANKS

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