

Digital transformation in Agri-Food industry - Trends & Opportunities

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WHY

Business
context

WHAT

Digital
opportunities

HOW

Digital Operational
framework

Agri-Food business is evolving...

Megatrends

- Assured & enhanced product quality
- Shift from “cost-plus” to “value-based”



Customers

- Product personalization
- Relationship to food
- Need for sustainability



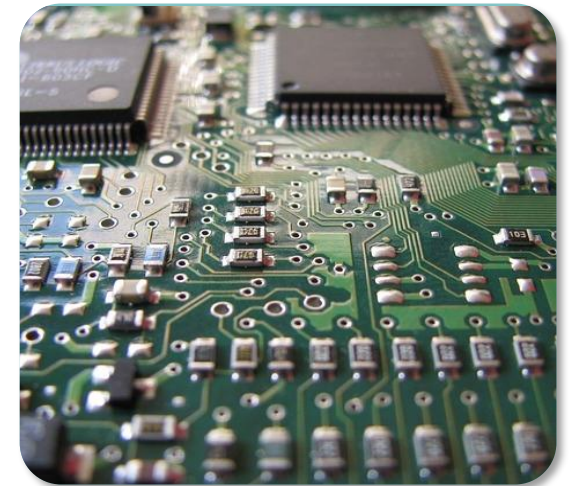
Competitors & Investors

- Traditional & piranha
- New (e-)retailers
- Cost cutting



Technologies

- Computing power
- Connectivity
- Artificial Intelligence



The new business requirements and the new Technology capabilities will result into major shifts in the Supply chain

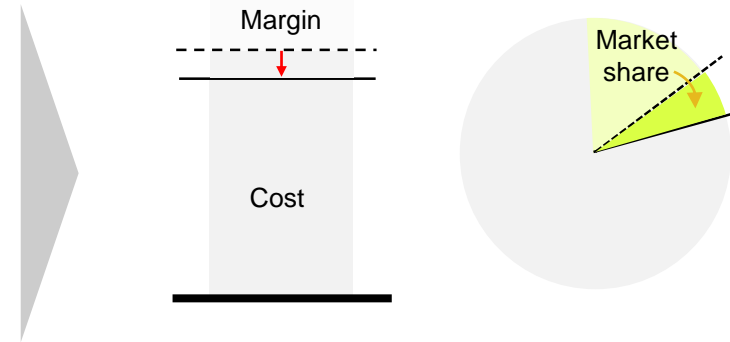
Identified paradigm shifts, either already happening or about to happen

<i>From ...</i>	<i>Paradigm shifts</i>	<i>... To</i>
Mass products		Consumer-tailored experiences
Fragmented product information		Real-time Farm-To-Fork transparency
Traditional trade		Omni-channel
Silo optimization		Collaborative extended enterprise
Task automation		Agile man-machine interaction
Human decision		Machine judgment
Loyalty-based employment		Competence as a service

Digital technologies can unlock substantial potential in Cost, Quality, Flexibility as well as New business models

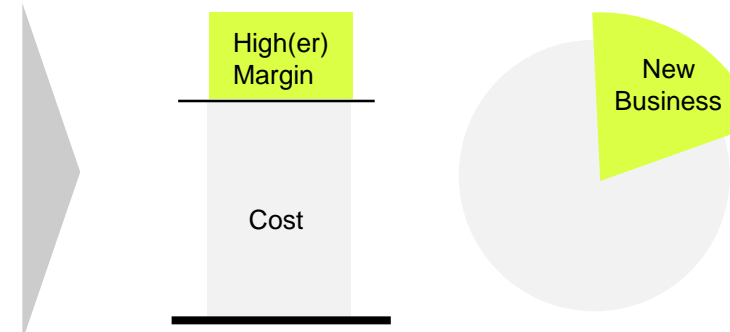
Improve further...

- **Cost** reduction : with optimized Product recipe, Raw Materials and Energies usage, increased asset productivity and reliability...
- **Quality** improvement : with increased Customer service, Quality consistency and faster Finished Product release...
- **Flexibility** increase : with intelligent production scheduling and advanced process automation



Develop new...

- **New Business models** development : with connected platforms engaging our Suppliers, Customers and End Consumers, Faster innovation



Examples of Digital solutions already available in Agri-Food industry


Cost & Quality

Predictive Process Monitoring



TrendMiner
A SOFTWARE AG COMPANY

Automated Process Center-Lining



BRAIN CUBE

Yield & Energy Efficiency



Rockwell Automation
PlantPAX[®] MPC

Automated Machine Learning



DataRobot

Productivity & Reliability

IIoT Sensors for OEE



Schneider Electric *Wardensware*

OEE Visual Management




REDZONE

Predictive Maintenance




PRESENSO.

Collaborative robotics



Customer service & Innovation

Customer Service



SAP

PLM from Idea To Industrialization



3DEXPERIENCE[®]

Mfg. Flow Simulation



FlexSim

and many more...

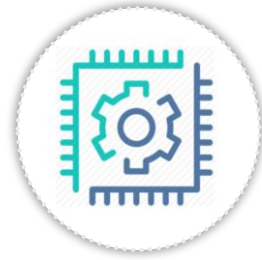
The digital technologies are enabling new capabilities



To generate Data from everything

Connectivity & Data

- E2E ERP integration
- Industrial IoT and MES
- Blockchain DB



To process data to make decision

Intelligence & Analytics

- Machine/Deep Learning
- Advanced analytics
- Advanced Process Control

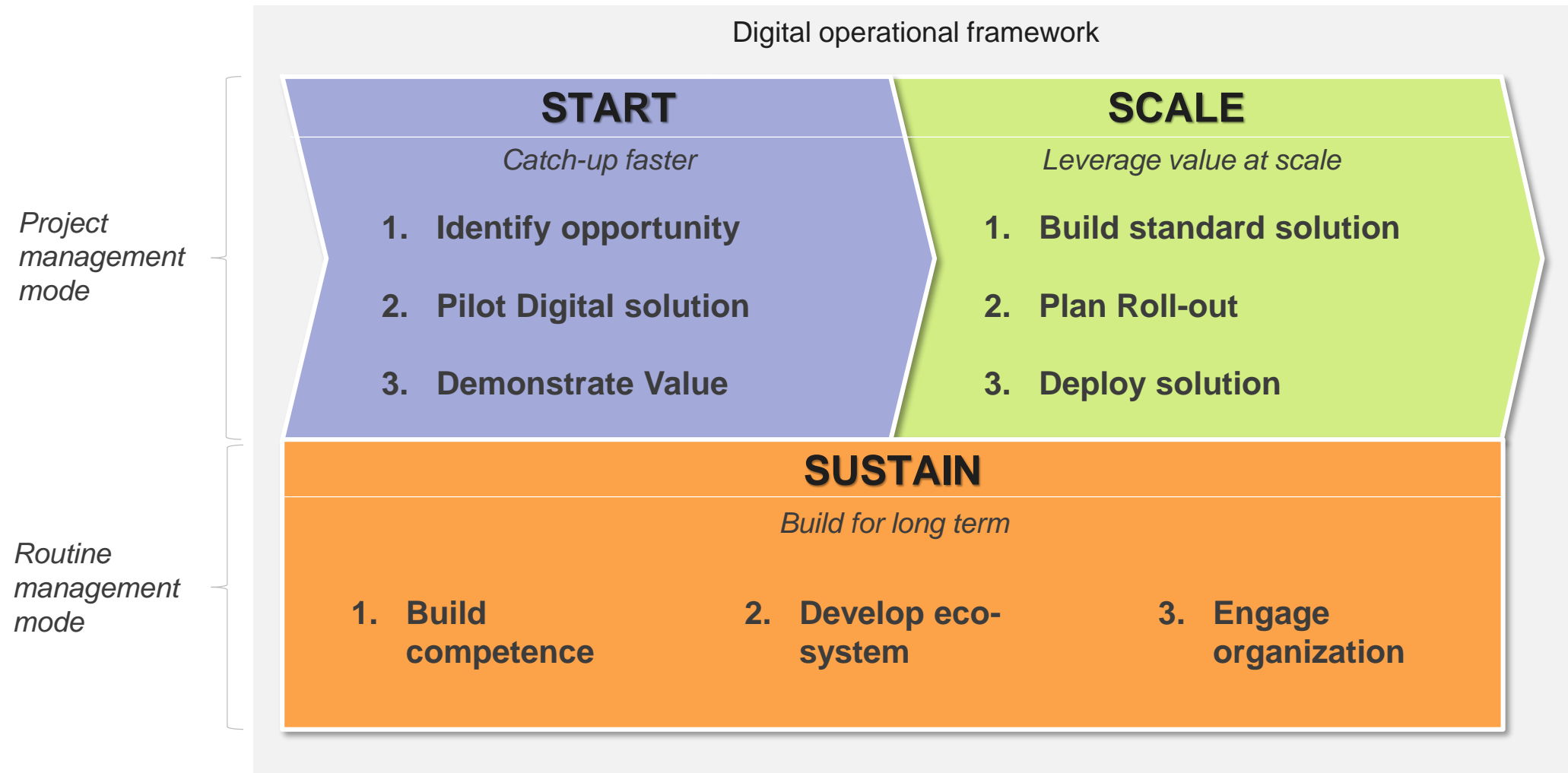


To blend Digital and Physical activities

Cyber-Physical Systems

- Smart industrial robotics
- Robotic Process Automation
- Operations Flow Simulation

Start - Scale - Sustain : Digital operational framework, to capture business value in a fast and durable way



End