

Session 1: Visions for the Transformation of Industrial Parks



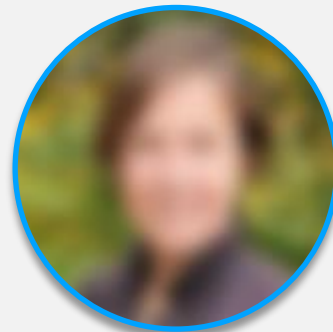
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From industrial park to cluster approach – *leveraging synergies for sustainable and digital transition*

Norbert Reichl

Food-Processing Initiative e.V.

6th June 2023

SIA-Conference, Cairo



Mark Twain

The secret of getting ahead is getting started.

The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and starting on the first one.

Short CV

- Diploma in economics, political sciences and economic psychology
- 25 years managing food innovation networks
- Experience with innovation and co-operation projects in the food sector on national and international level
- Married, 2 kids



Today's menu

FPI – the cluster in a nutshell

Twin transition – our concepts & actions

Twin transition – relevance for SIA development

Brief summary & take home



FPI in a nutshell

- 1996 initiated by Ministry of Economic Affairs of the State of North Rhine-Westphalia / Germany
- November 2000 foundation of association
- Organisation with 118 members
- Networks & projects with regional, national and international partners.

www.foodprocessing.de



Mission statement

Connecting competencies for innovative solutions!

- ✓ Initiate & moderate dialogue between actors of the innovation ecosystem
- ✓ Fostering collaboration (b2b & b2s).
- ✓ Dissemination and exploitation of new knowledge from R&D projects.
- ✓ Supporting implementation of innovative solutions.



Main topic areas

-
- Quality & safety
 - Sustainable production
 - Alternative Proteins
 - Digital transformation
 - HR development
 - Knowledge & tech transfer
 - Collaboration (b2b & b2s)
 - International networks



Connecting competences for innovative solutions!

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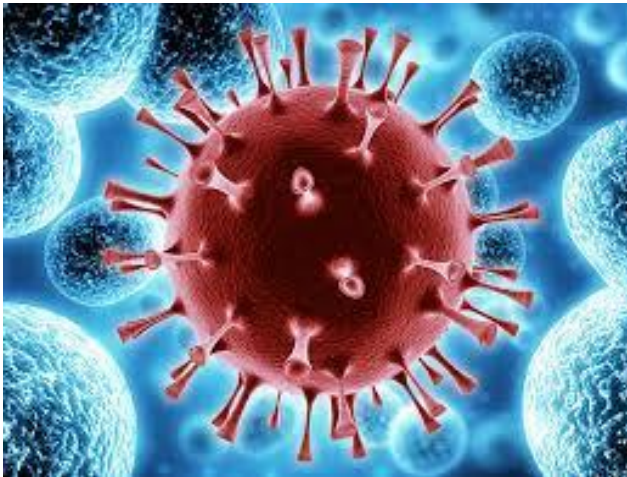
Twin transition – relevance for SIA development

Brief summary & take home



We need to talk about ...

- Actual & future crises



*Consequently, we are experiencing vulnerable value chains!
Transformation towards sustainability and resilience!*

Challenges & drivers

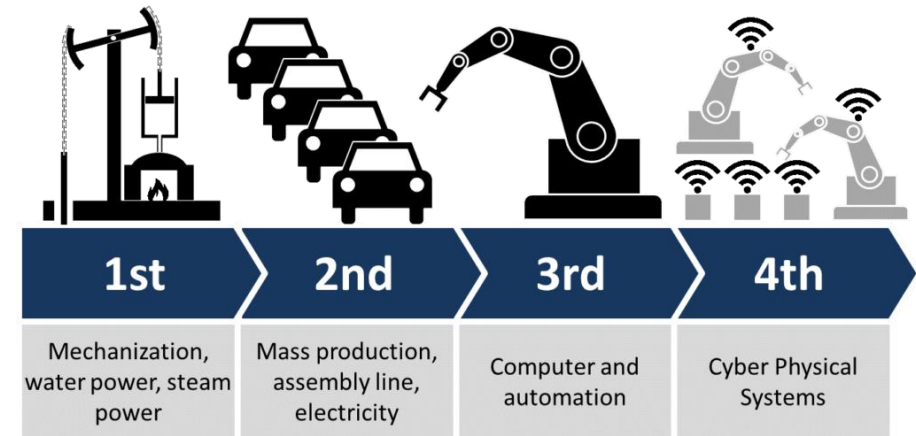
- Rising prices! (energy, raw materials, personnel)
- Disrupted international value chains & availability of components.
- From resource efficient to climate neutral production.
- From linear to circular approaches.
- Digital solutions as key enabling technology.
- Twin transition of the food system as target.



Way forward: twin transition



- Green Deal: December 2019 net-zero industry, zero emission till 2050



- Industry 4.0 as means towards sustainability (KET)

Sustainability + Digitalization = twin transition

Mission-driven innovation: From challenge to (digital) solutions

Real time QC



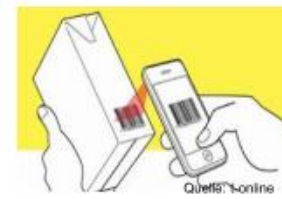
Shelf Life



Resource Efficiency



Transparency

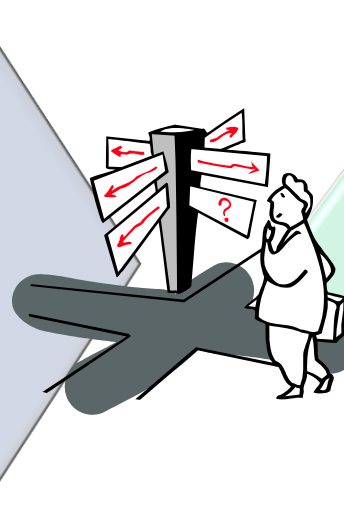


Individualisation



OFFERS INDUSTRY 4.0

- ✓ Big Data
- ✓ Cloud Computing
- ✓ Artificial Intelligence
- ✓ Human-Machine-Interaction
- ✓ Cyber-physical systems
- ✓ Internet of Things
- ✓ ...



- ✓ Quality
- ✓ Safety
- ✓ Resource efficiency
- ✓ Transparency
- ✓ Individualization
- ✓ Digital twins
- ✓ Cost reduction
- ✓ ...

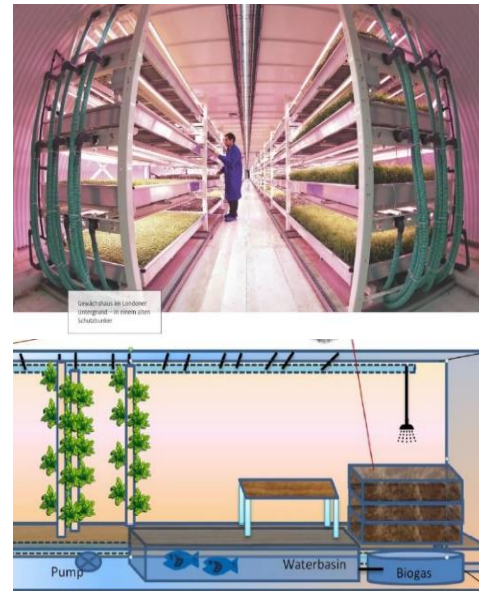
DEMANDS AGRIFOOD

Companies are looking for applicable, added-value solutions!

Broad range of digital opportunities



Better use of water and nutrients



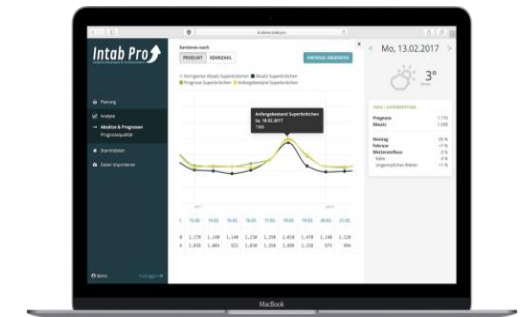
New ways of agriculture



Autonomous quality control



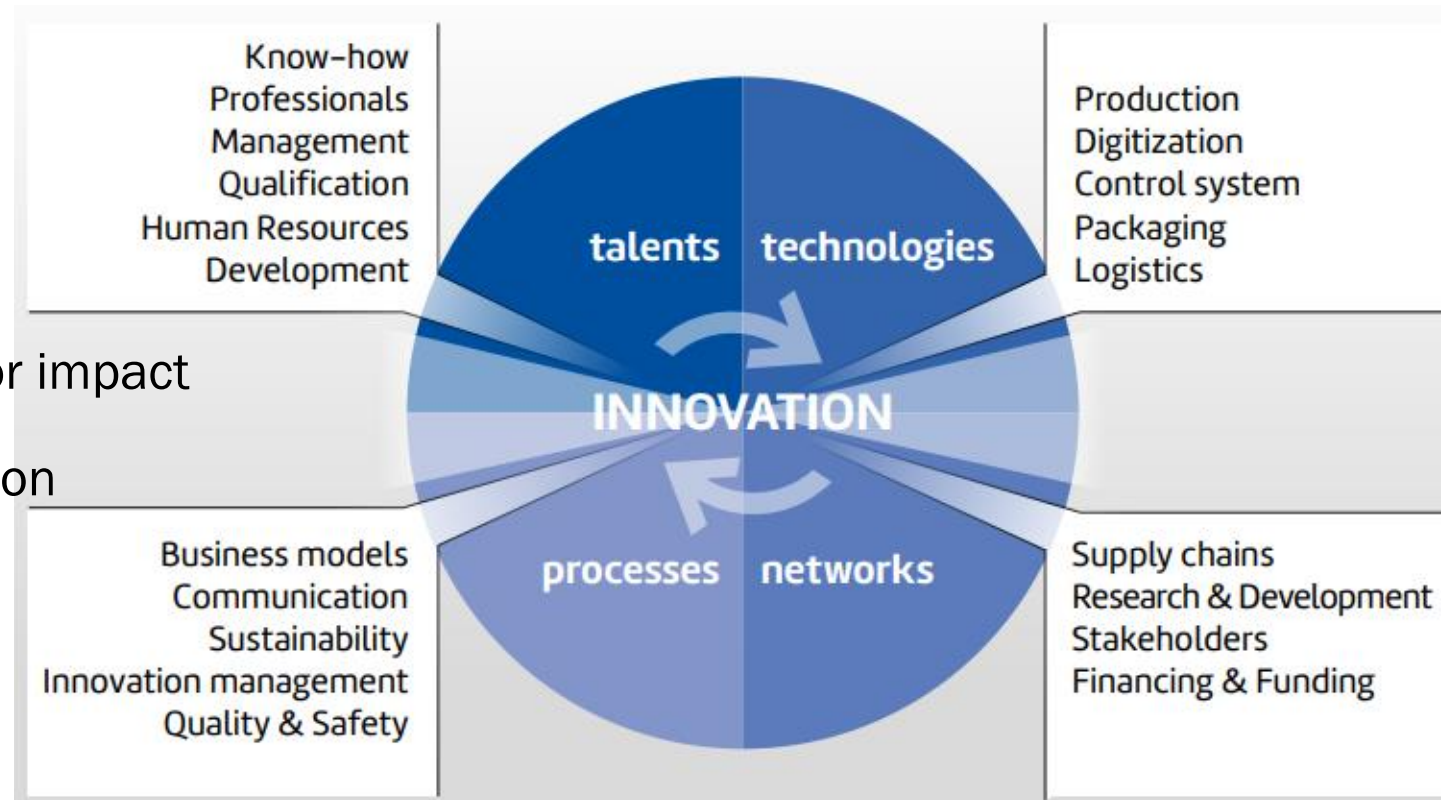
AI for reducing food waste in bakeries



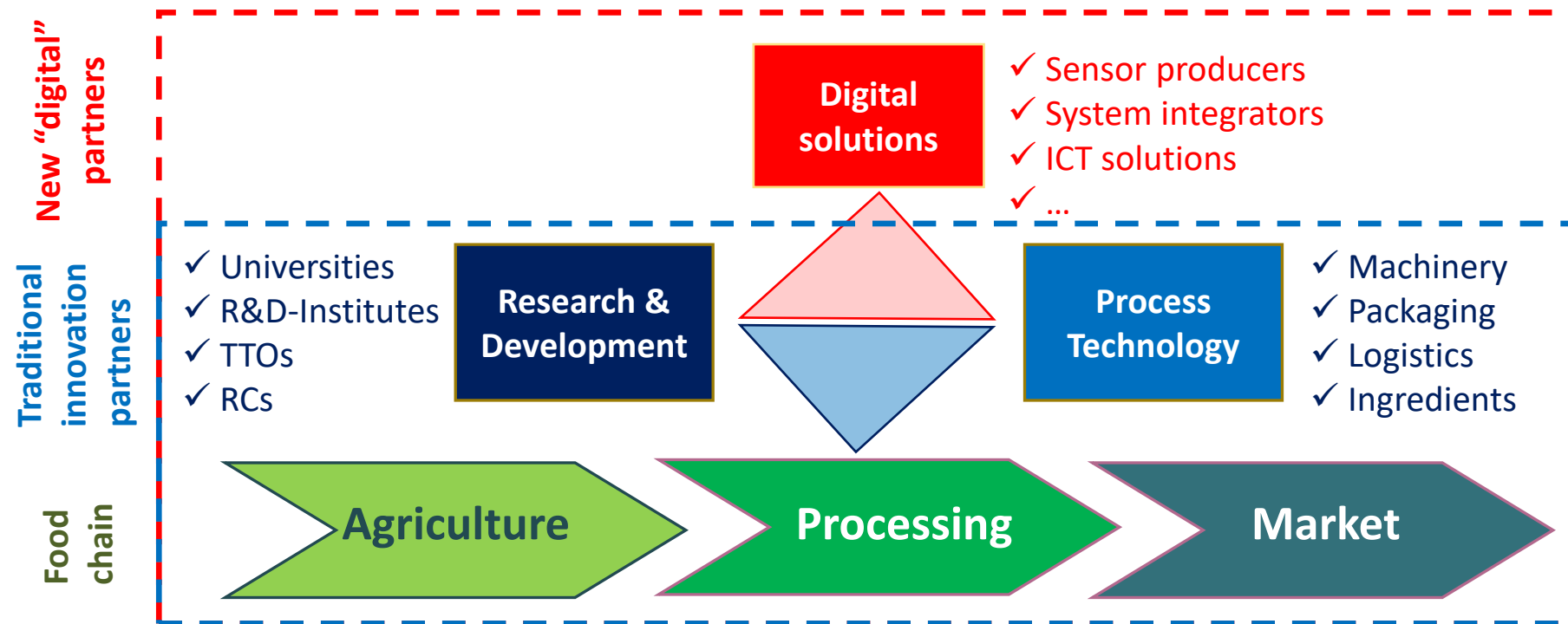
Our view on innovation

More than ...

- ✓ Research & development
- ✓ Competences & resources
- ✓ Only application in practices allows for impact
- ✓ Organisational & system transformation towards innovation



Innovation Eco-System Approach



Connecting the actors for innovative solutions and sustainable development.

Establishing living labs

■ Test before invest

- ✓ Strategic Research as joint pre-competitive R&D
- ✓ Provision of technology infrastructure
- ✓ Development & validation of concept
- ✓ Demonstrator & prototyping

■ Skills and training

- ✓ Workshops & seminars
- ✓ Technological infrastructure for education



FUTURE
FOOD
FACTORY
OWL



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OWL



Collaborate for success: Smart Sensors 4 Agri-Food



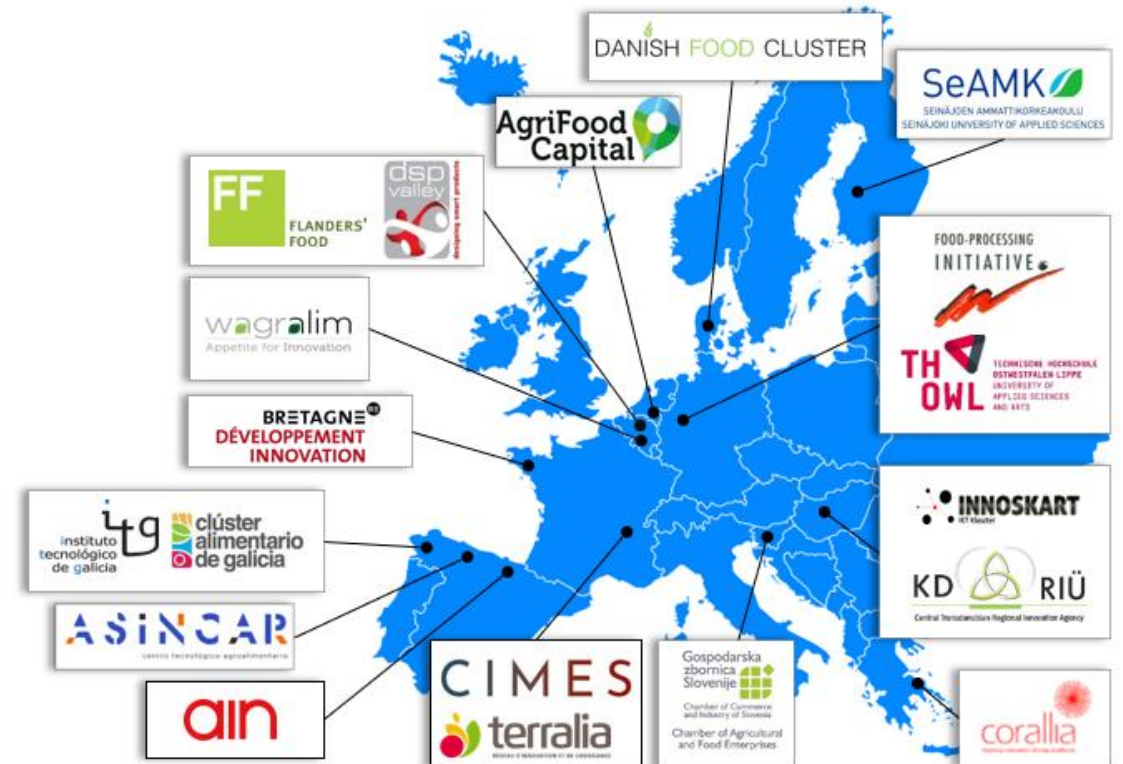
www.ss4af.com

■ Mission

- ✓ towards a smart, sustainable, and resilient agri-food system in Europe

■ Objectives

- ✓ Support food SMEs on their “digital journey”
- ✓ Connection actors of the “digital innovation eco-system”
- ✓ Quicker access to applicable solutions
- ✓ Facilitate the implementation of smart solutions



S3FOOD: funding smart solutions

*Smart **S**ensor **S**ystems for **F**ood Safety, Quality Control and Resource Efficiency in the Food Processing Industry*

Main Targets:

- ✓ Support the implementation of innovative "smart" solutions in SMEs in the food sector (high TRL).
- ✓ Voucher system with up to € 60,000 for SMEs 100% subsidised.
- ✓ S3FOOD runs for 3 years and has a voucher budget of € 2.875.000



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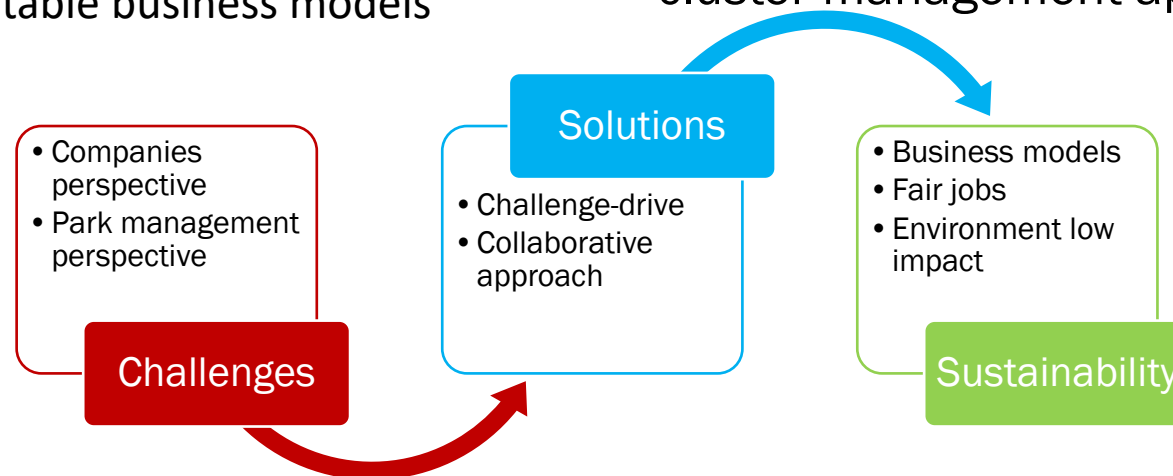
Twin transition – relevance for SIA development

Brief summary & take home



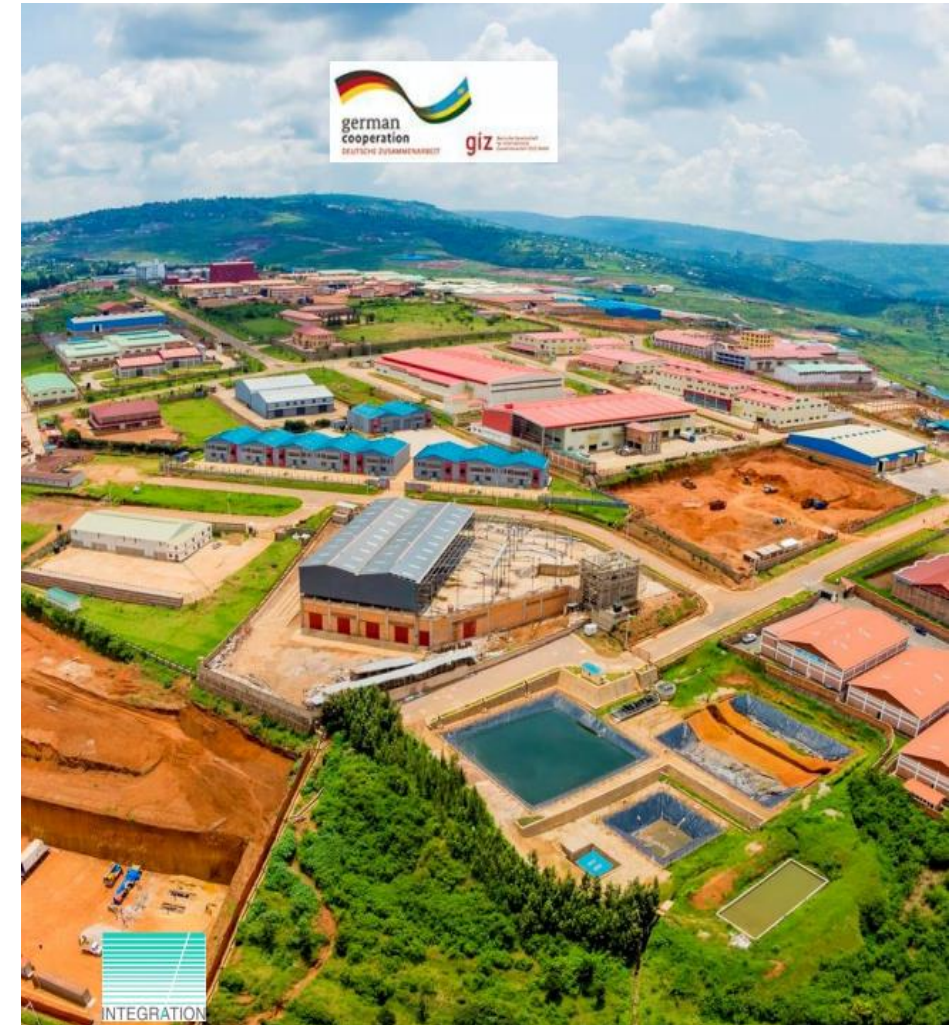
Twin transition – relevance for SIA development

- Why “twin transition” as core topic for SIA development?
- Sustainable development as core mission for all of us.
 - Resource efficient & zero emission production
 - Creation of fair jobs
 - Economically profitable business models
- Digital solutions as key enablers for sustainability.
- Knowing the „customers“ and starting from their needs & challenges.
- Connecting the actors in the “eco-system”.
- Consider development from park / facility to cluster management approach.



Twin transition – example of SIA development

- Development of Kigali Special Economic Zone towards sustainable “business model”.
- Added-value services for tenants / companies.
- Cluster approach w.r.t. customer relations, organisational concepts, and marketing.
- Digital platform for interaction / exchange between park management, companies, and (external) service providers.



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- Sustainability is ultimate target of actions.
- Digital solutions facilitate sustainable development of companies and industrial areas.
- Relevant topic for (international) investors.
- “Cluster perspective” as option for industrial areas management.
- Knowing the „customers“ and understanding their challenges & needs.
- Develop (marketable) cluster services (revenues).
- Change process needs leadership.





George Bernard Shaw

*If you have an apple and I have an apple and we exchange these apples, then you and I will still each have **one apple**.*

*But if you have an idea and I have an idea and we exchange these ideas, then each of us will have **two ideas**.*



**We will be happy to
share ideas with you!**

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