

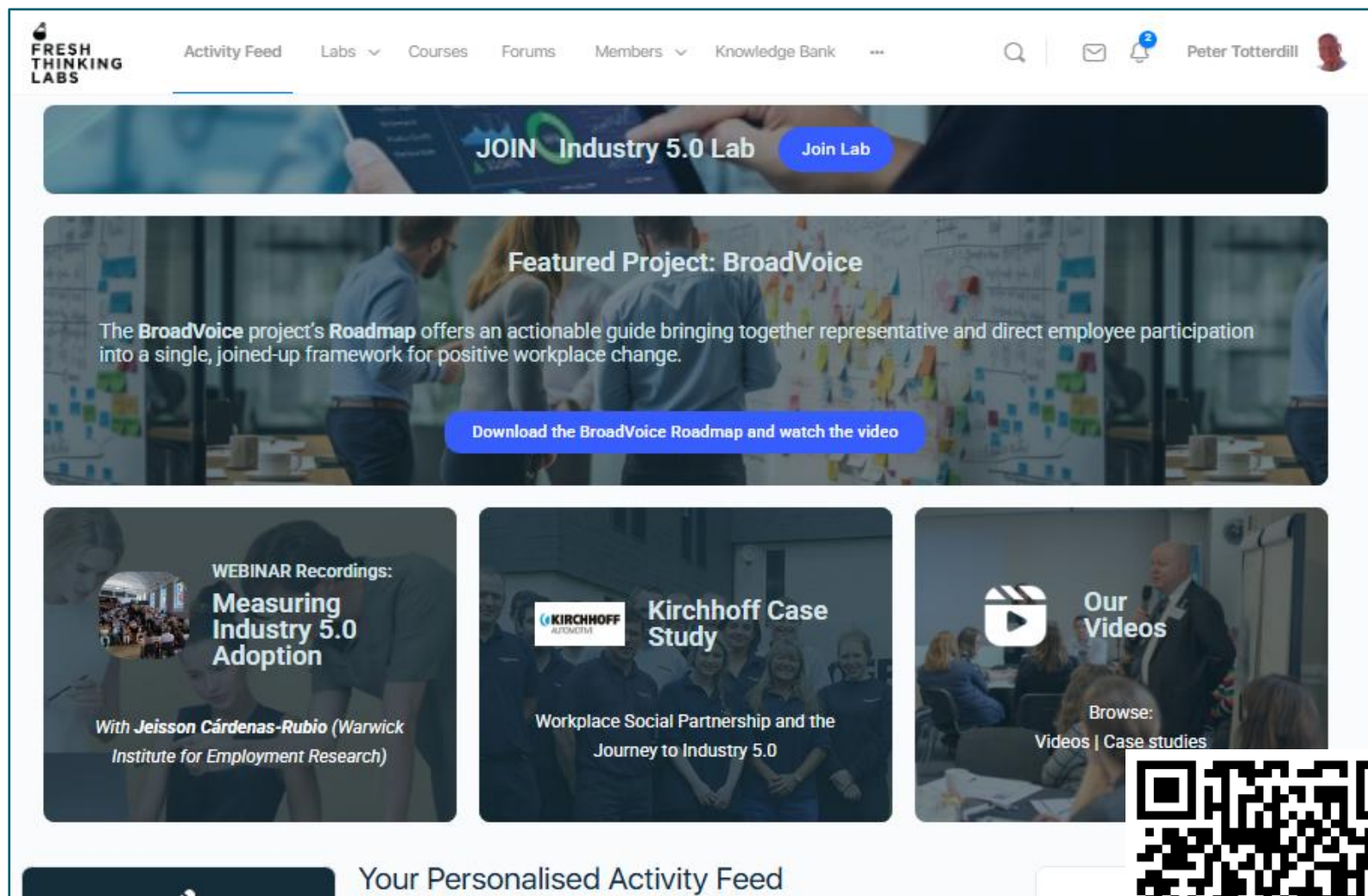
# Why Industry 5.0 matters for Europe's competitiveness in a human-centric AI era



**Peter Totterdill**  
*Director, Workplace Innovation Europe CLG*

**bridges**<sup>5.0</sup>

# Welcome to the Industry 5.0 Platform.



Web Gateway i5-0.eu

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Large Knowledge Bank

Themed Labs

- Discussion forums
- Content sharing
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### Supporting Digital Transformation:

The projects collectively aim to enable businesses, workers, and policymakers to adapt to the rapid digitalisation of the economy. They focus on understanding and shaping the impact of AI and related technologies on labour markets and society.



### Promoting Social Inclusion:

The initiatives emphasise the importance of inclusive growth, seeking to minimise inequalities by supporting vulnerable groups and regions in accessing opportunities created by technological advancements.



SEISMEC

### Fostering Skills Development:

A central goal is the upskilling and reskilling of the European workforce, ensuring that individuals are equipped with the competencies required for new and emerging roles, particularly in digital and green sectors.

### Enhancing Policy And Practice:

By generating evidence-based insights and innovative frameworks, these projects inform policy development and organisational strategies at both national and EU levels.





**High Road or Low Road?**

# Industry 4.0

- Productivity
- Automation
- Quality
- Customisation
- Resource efficiency
- Focus on technical skills





**COLLABORATE**

**INSPIRE**

**REFLECT**

**EMPATHISE**

**INNOVATE**

**MOTIVATE**

# INDUSTRY 5.0

**A vision of industry that aims beyond efficiency and productivity as the sole goals, and reinforces the role and the contribution of industry to society.**

**It places the wellbeing of the worker at the centre of the production process and uses new technologies to provide prosperity beyond jobs and growth while respecting the production limits of the planet.**

**It complements the existing "Industry 4.0" approach by specifically putting research and innovation at the service of the transition to a sustainable, human-centric and resilient European industry.**

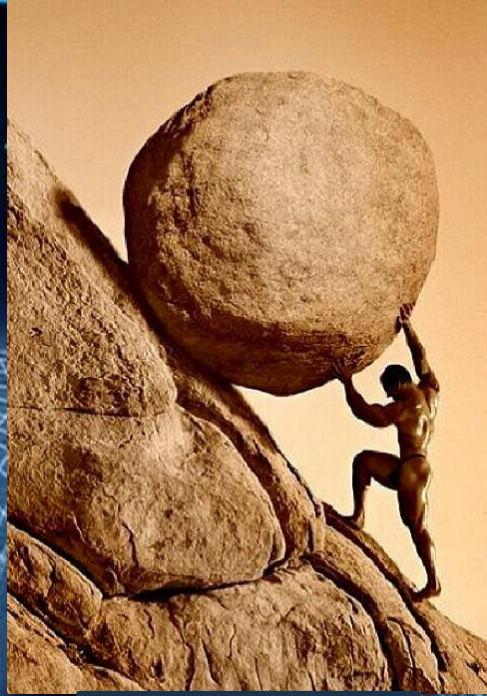
# INDUSTRY 5.0



Human Centricity



Sustainability



Resilience

# Europe's Competitive Advantage?

- Market differentiation driven by talent
- Job fulfilment and well-being as a competitive advantage
- A strategic choice – social value rather than shareholder value



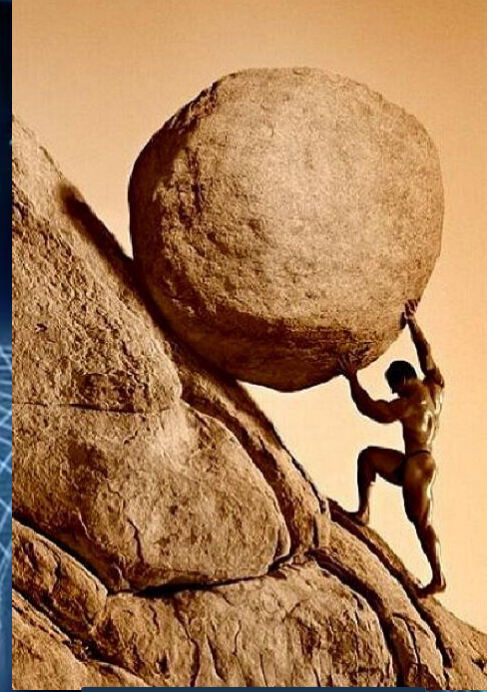
# Are all the Pillars Equal?



Human Centricity



Sustainability

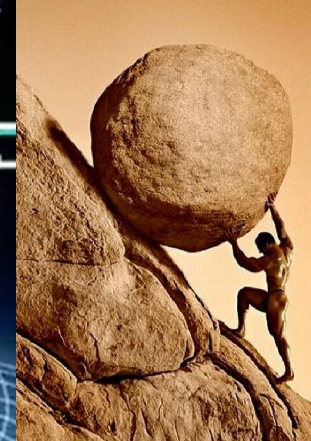


Resilience

# Human Centricity as Enabler



Sustainability



Resilience

Human Centricity

# Defining the High Road

Technologies do not determine the design of jobs and organisations – the choices we make do so.

Digital technologies are most effective when they enhance human labour – not replace it.

The best outcomes for innovation, productivity and employment occur where high technology adoption and high learning capacity coincide.

Organisations only achieve a full return on digital investments when they are combined with workplace innovation.

# Defining the High Road

- Technical skills training is less significant than experiential learning, the development of core competencies and emotional intelligence.
- We need to shift the emphasis from skills supply to the Learning Capacity of Organisations, empowering workers to become the co-designers of their own learning.



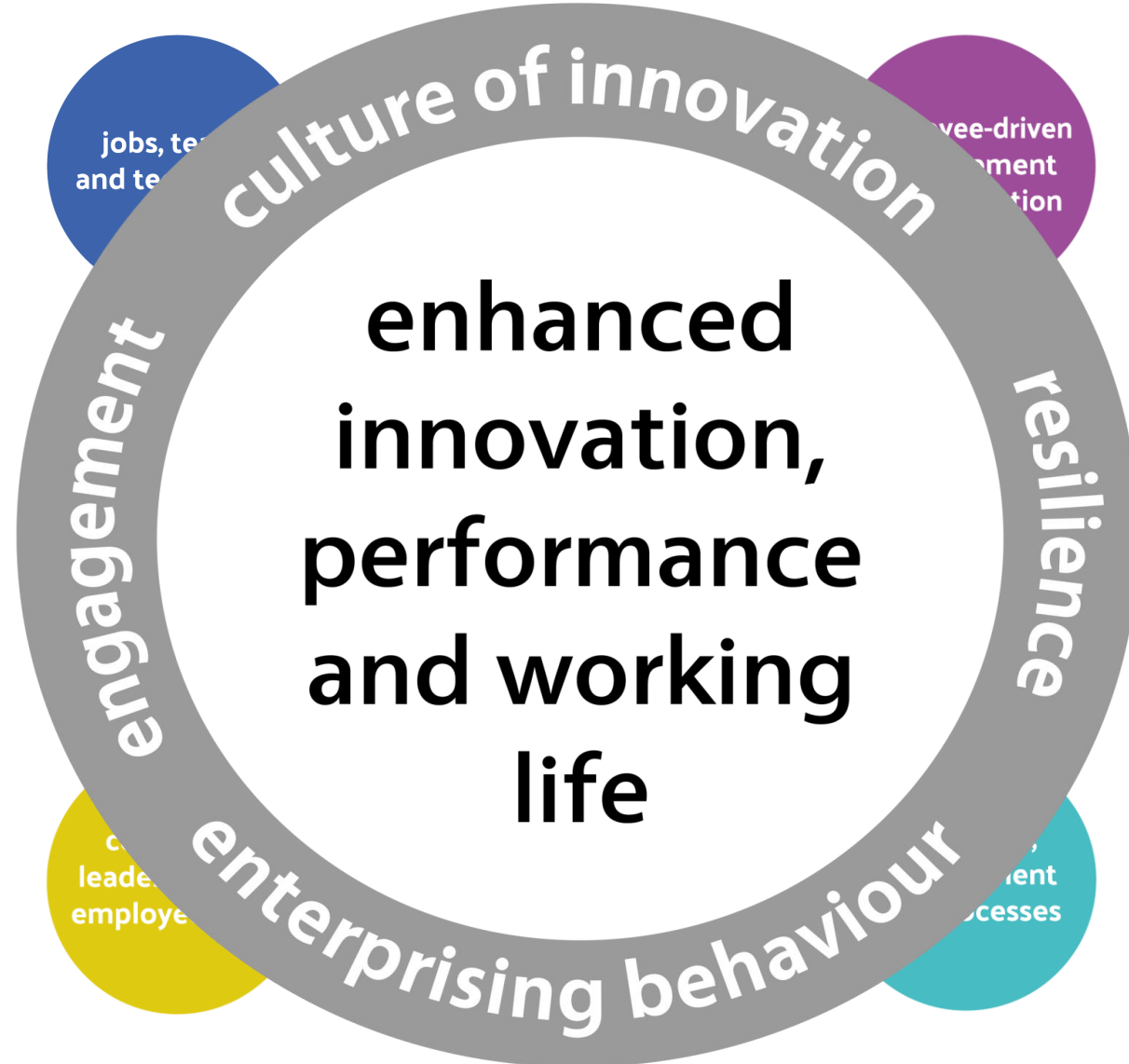
# Teaching & Learning Factories 5.0

- Experiential learning.
- Real world problems.
- Co-created solutions.
- Grounded competencies.
- Workplace innovation.

# Defining the High Road

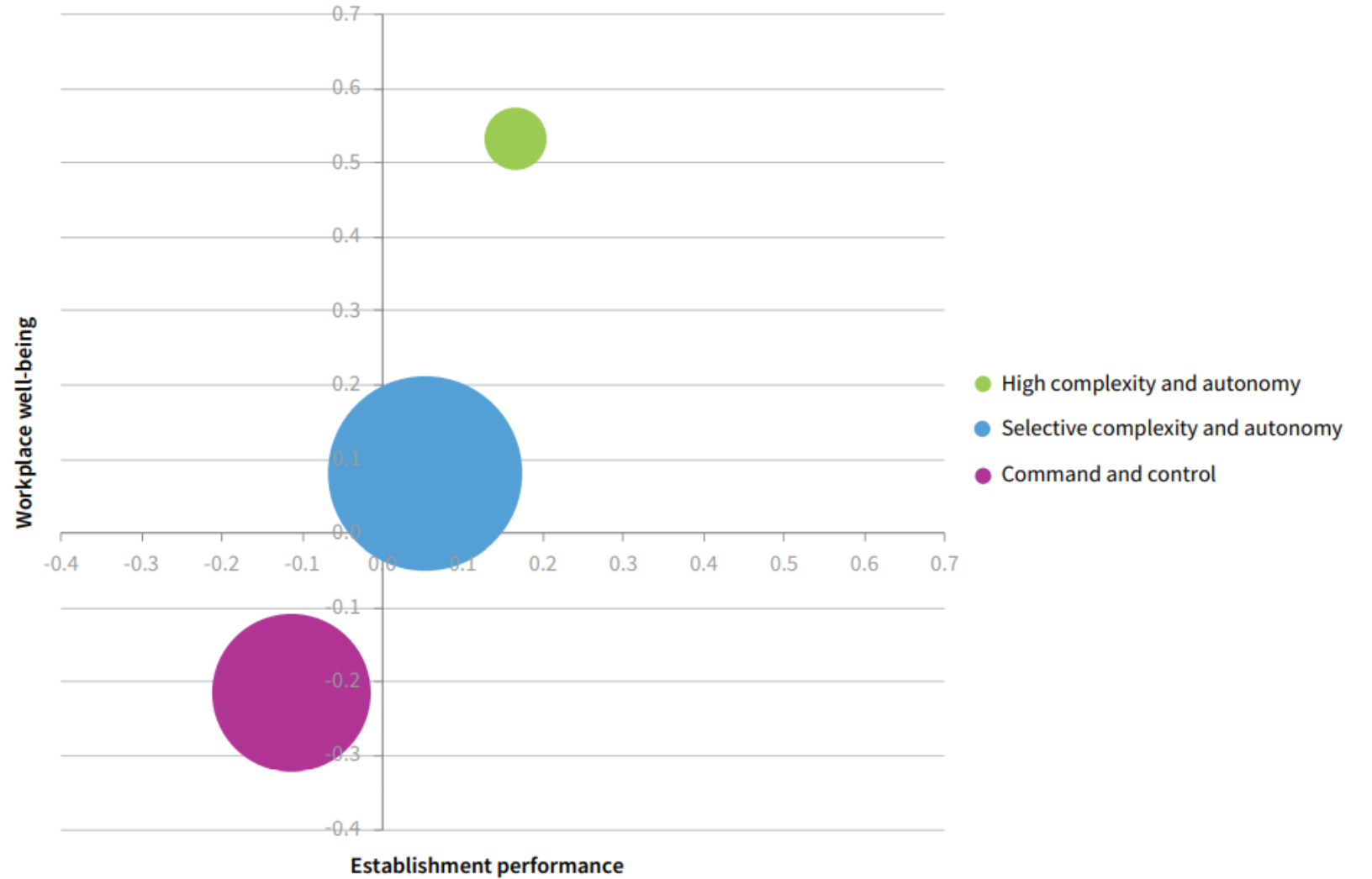
In short, the focus is on organising work in ways that use and develop employee potential to the full.

# What is Human Centricity?



# Job Complexity & Autonomy

jobs, teams  
and technology



Source: ECS 2019 management questionnaire

# Creating Digital and Human Synergies



jobs, teams  
and technology

Automation removes repetitive, low value tasks  
Remote assistance & AI aid devolved problem solving  
Distributed data supports employee/team autonomy

structures,  
management  
and procedures

Electronic workflow and flexible production processes  
break down silos, enable agile working and support  
devolved decision-making

employee-driven  
improvement  
and innovation

Distributed access to data and tools for innovation  
Ideation platforms enable collaborative innovation  
Gaming technologies enable scenario exploration

co-created  
leadership and  
employee voice

Communication technologies can close the leadership  
gap and facilitate employee voice in decision-making



# Socratic AI: Upskilling & Empowering Workers

## **Guided questioning, not instructions**

Builds critical thinking, judgement and problem-framing skills.

## **Learning embedded in real work**

Upskilling happens while solving day-to-day problems, not classrooms.

## **Makes experience visible**

Captures tacit knowledge, reasoning and know-how through dialogue.

## **Strengthens autonomy and employee voice**

Workers explore options, challenge assumptions and inform decisions.

## **Scales capability, not control**

Enhances human expertise instead of deskilling or standardising work.

## **Enhances career development through continuous learning**

**Potential applications include participative workplace redesign, team decision-making, skills development, and health & safety.**

jobs, teams  
and technology



# Digital transformation as a participative process

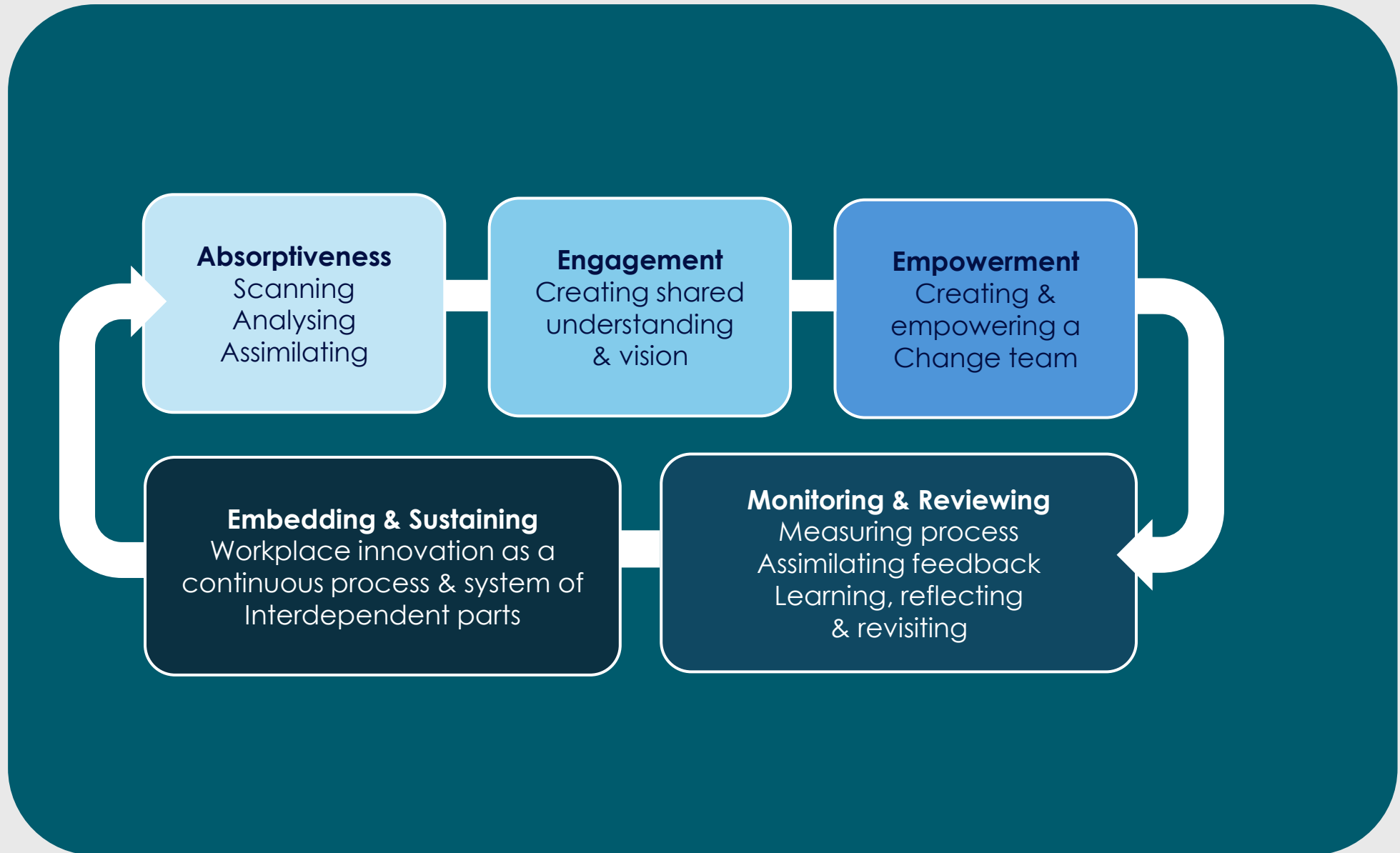


**BOOTH WELSH**  
Integrated Engineering Services



**BM**  
**SILO**

# People-Centred Change



# The Road to Industry 5.0

- Employee participation is a critical differentiator.
- Digitalisation may be outpacing organisational innovation.
- Management capability is a bottleneck.

# Welcome to the Industry 5.0 Platform.

The screenshot shows the homepage of the Fresh Thinking Labs Industry 5.0 Platform. At the top left is the logo 'FRESH THINKING LABS'. The navigation bar includes 'Activity Feed', 'Labs', 'Courses', 'Forums', 'Members', and 'Knowledge Bank'. On the right, there is a search icon, an envelope icon, a notification bell with a '2' badge, and a user profile for 'Peter Totterdill'. The main content area features a 'JOIN Industry 5.0 Lab' banner with a 'Join Lab' button. Below this is a 'Featured Project: BroadVoice' section with a description: 'The BroadVoice project's Roadmap offers an actionable guide bringing together representative and direct employee participation into a single, joined-up framework for positive workplace change.' and a 'Download the BroadVoice Roadmap and watch the video' button. Further down are three featured content cards: 'WEBINAR Recordings: Measuring Industry 5.0 Adoption' with a guest 'Jeisson Cárdenas-Rubio (Warwick Institute for Employment Research)'; 'Kirchhoff Case Study' about 'Workplace Social Partnership and the Journey to Industry 5.0'; and 'Our Videos' with a 'Browse' button for 'Videos | Case studies'. At the bottom, there is a section for 'Your Personalised Activity Feed'.

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