Session 2

Harmonizing Smart Manufacturing Standards with Use Cases

Fumihiko Kimura

Moderator of the Panel Session

Chairman of AG1: Standardization, RRI

The University of Tokyo
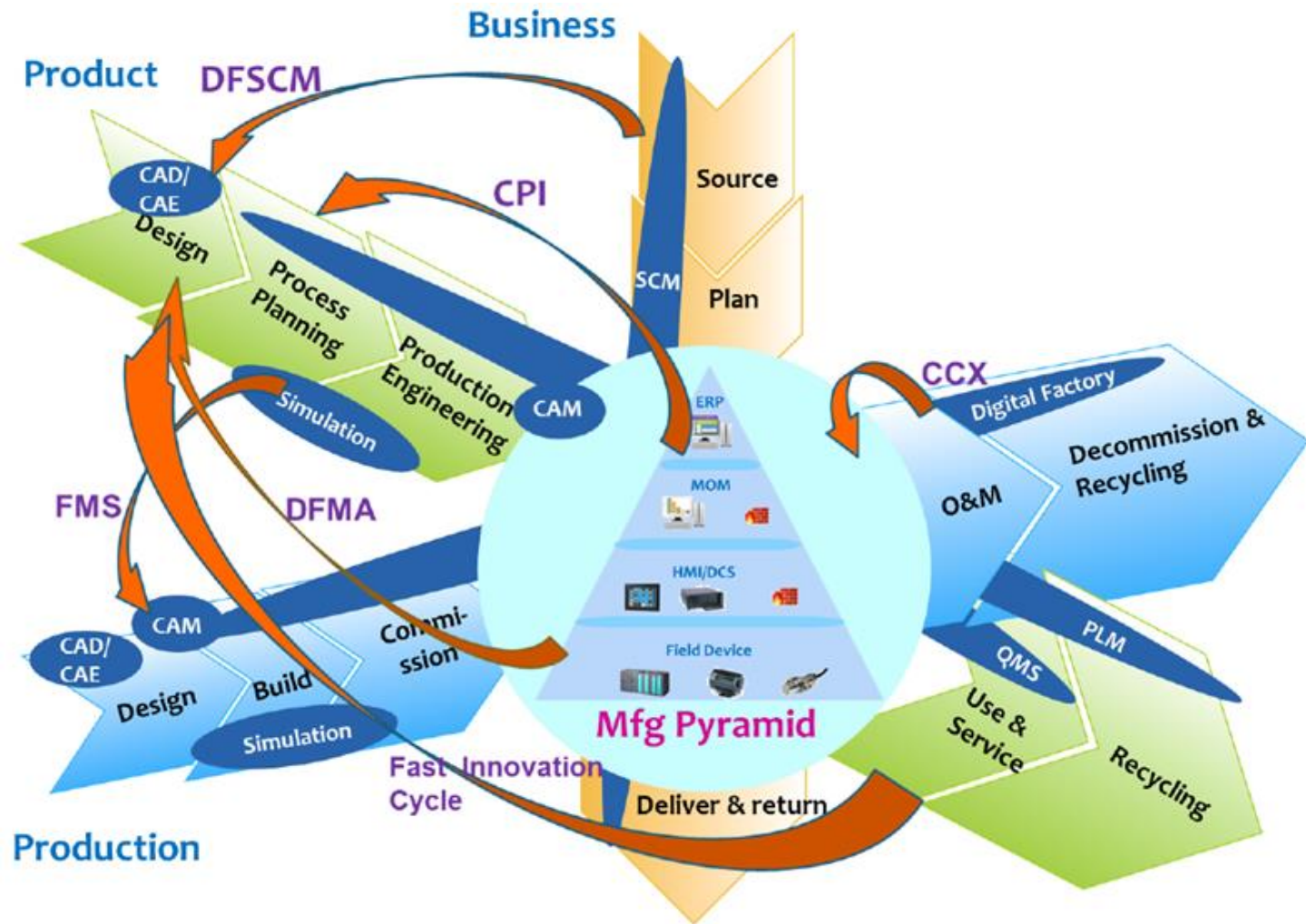
Smart Manufacturing and Standardization

Smart Manufacturing

Flexible horizontal & vertical integrations
among life cycles (value chains) :
business, product, production
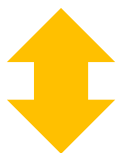
Entities can talk each other intelligently.
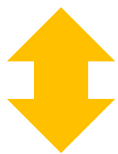
Standardization mandatory !

Smart Manufacturing Standards Landscape (NISTIR 2016)

IIRA: Industrial Internet Reference Architecture
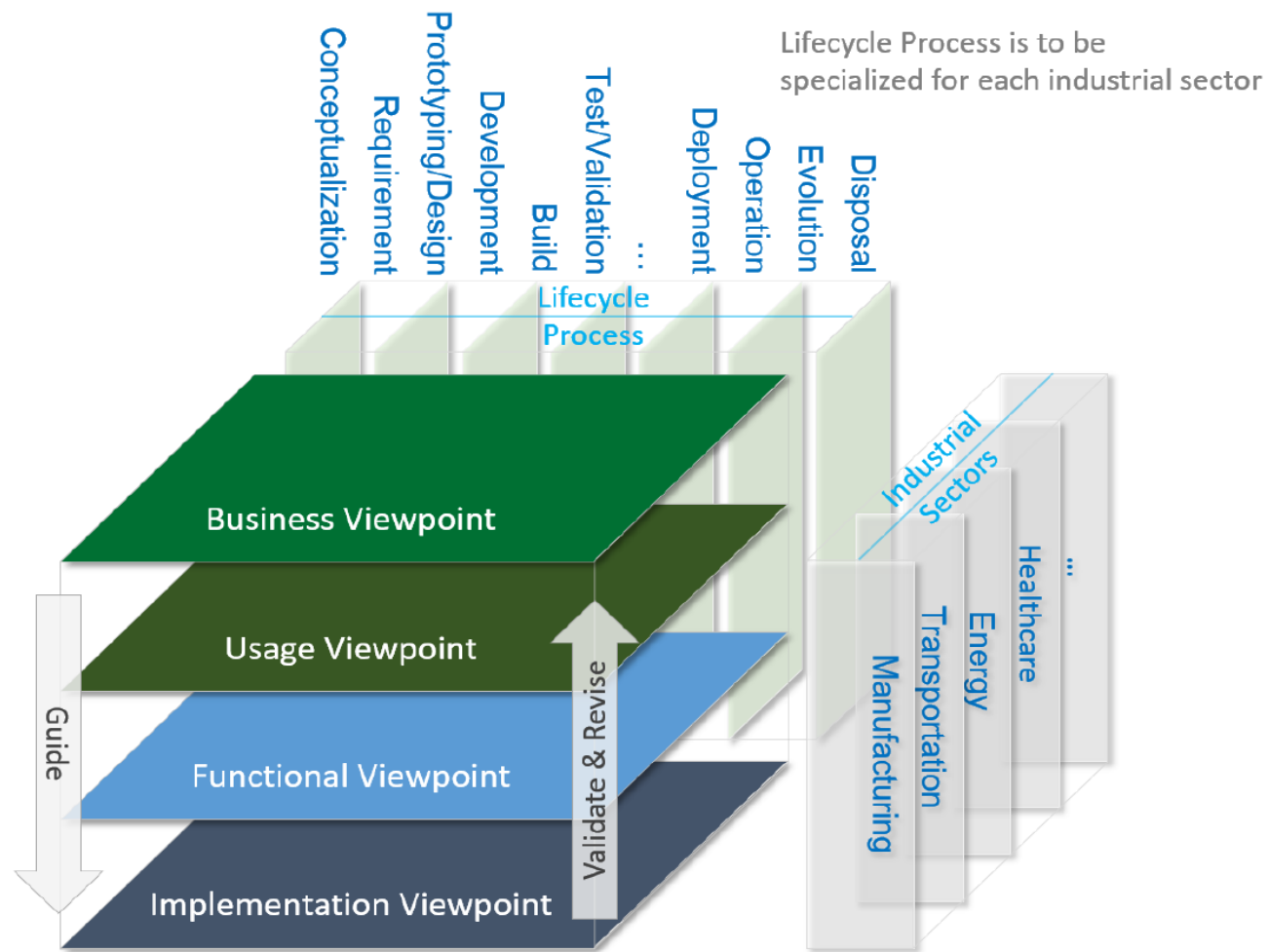
Top-down/Bottom-up Approach

Possible future business scenarios

⇕

Technical use cases

⇕

New products, solutions, services
&
Standardization requirements

Relationship among IIRA Viewpoints, Application Scope and System Lifecycle Process

Germany-Japan Experts Task Force

1. Ulrich Löwen, Siemens:
   Practical application of openAAS (open Asset Administration Shell)

2. Toru Ishikuma, Azbil:
   Value-Based Service From Usage Viewpoint to Functional Viewpoint

3. Youichi Nonaka, Hitachi:
   Clarifying and Assisting Smart Manufacturing Standardization with URM-MM

The common strategy on international standardization in field of the Internet of Things/Industrie 4.0

PLATTFORM INDUSTRIE 4.0 | ROBOT REVOLUTION INITIATIVE | STANDARDIZATION COUNCIL INDUSTRIE 4.0

INDUSTRIE4.0   STANDARDIZATION COUNCIL INDUSTRIE 4.0

1. Most important messages and keywords by the panelists

2. Importance of standardization: Customer benefits

3. Importance of standardization: Who makes What for Whom ?

4. Future of smart manufacturing and standardization