

The Robot Revolution and Industrial IoT International Symposium 2019

**"Global tops talk : Future Vision of Industrial IoT:
Requirements and Approaches"**

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Chair

**Robot Revolution &
Industrial IoT Initiative**

- **Recognition**
- **Purpose and approach**
- **Recent results**
- **Expectations for today's symposium**

Value Chain



- 1) From factory improvement to total optimization of engineering chain and supply chain
- 2) From single product to system
- 3) From manufacturing / goods to services
- 4) Maximizing pre-competitive collaboration, avoiding useless competition



- 1) Aiming for sustainable, inclusive economic growth as shown in Society 5.0**
- 2) Aiming for a structure that creates new user experience from accelerating innovation to support economic growth**

- **Growth through incorporating new business created by innovation, as represented in such cities as Silicon Valley, Shenzhen**
- **Growth through "KAIZEN" (improvements) rooted in 3 key factors in Japan's Monodzukuri (genba, genbutsu, genjitsu principle)**

New management that integrates both elements is demanded in the era of IoT, digital transformation

Thought leadership is essential

Key points for RRI's effort

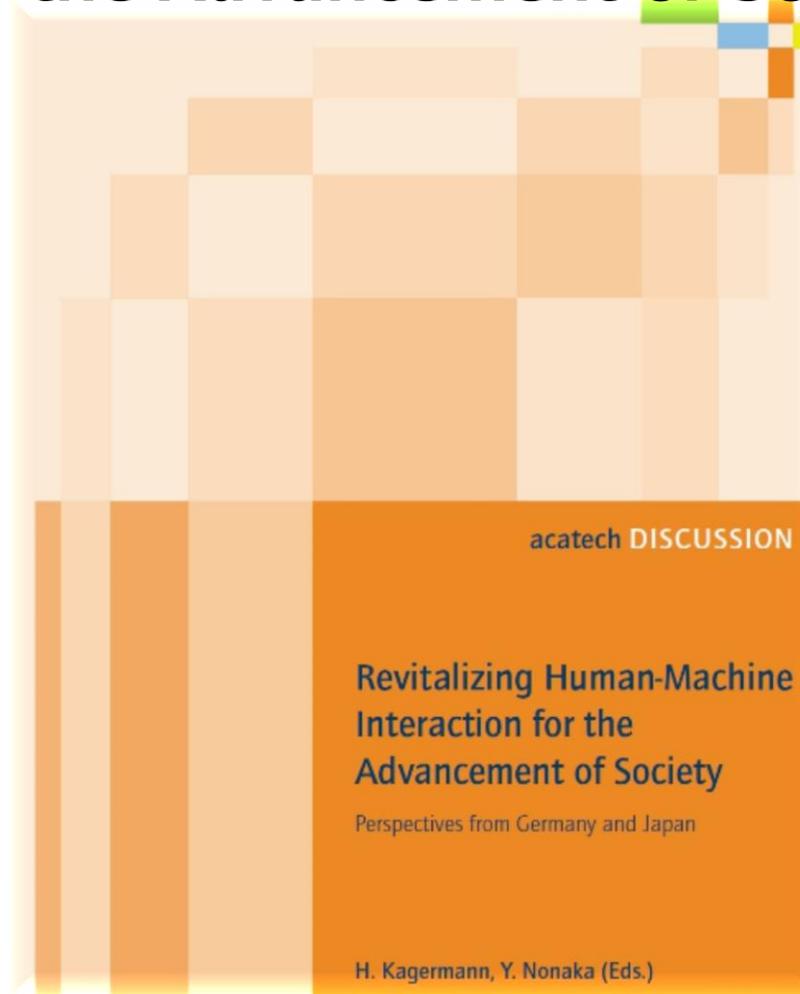
- **Sharing the future image of the society and manufacturing by domestic and international discussion**
- **Creating rich experience value for the customers through smart products and smart services**
- **Utilizing technologies such as IoT, CPS*, and AI that support above**
- **Realizing an ecosystem that can plan and develop these, eg.**
 - **Engineering transformation and dissemination of systems engineering**
 - **Maximizing cooperation in the pre/post-competitive area**

CPS : Cyber Physical System

Usage View of Asset Administration Shell



Revitalizing Human-Machine Interaction for the Advancement of Society



IEC/SyC* Smart Manufacturing

CAG (Chair's Advisory Group)

AhG*1 Marketing

AhG2 Use cases

AhG3 Terminology

AhG4 Navigation Tools

OF*1 Standard Map

RRI is Participating all the activities



SyC : System Committee, AhG : Adhoc Group, OF : Open Forum

Structure of today's symposium



Federal Ministry
for Economic Affairs
and Energy



ロボット革命イニシアティブ協議会
Robot Revolution & Industrial IoT Initiative



経済産業省
Ministry of Economy, Trade and Industry



TOYOTA
RESEARCH INSTITUTE

INTERNATIONAL DATA
SPACES ASSOCIATION



Future vision in
globalized community

System approach in
diverse perspectives