

# ORGANIZING IN THE AGE OF DIGITAL PRODUCT PLATFORMS

The work of Integrated Vehicle Control Engineers

@Work

@Digitization

@Ethnography

@Neo-STS

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# WHAT IS A DIGITAL PRODUCT PLATFORM?

Previously physical products such as cameras, cars are digitized and connected to the internet of things

The layered architecture of digital platforms is added to the modular architecture of the industrial age products

## **Layered Modular Architecture**

Digitization of the industrial-age products changes the architecture of these products

Digitized connected products become platforms for other firms to develop other services and components by recombining bits and pieces in the architecture of DPP

# WHAT ABOUT ORGANIZING AND DIGITAL PRODUCT PLATFORMS?

**Product architecture affects the managerial rationale for designing and evolving specific organizational arrangements in response to an enterprise's environmental and strategic imperatives**



**How do firms support the development of DPP by designing and evolving their organizational arrangements?**

# RESEARCH QUESTION?

❖ **How do engineers form viable work practices when developing digital product platforms?**

- **What are the steps the engineers take to prepare for developing digital product platforms ?**
- **What are the consequences of these steps on practice?**

# CONTRIBUTIONS

- Aligning our knowledge of organizing with the digitization trend of our era
- Practical implications of pervasive digitization for organizations

## STS: Joint Optimization

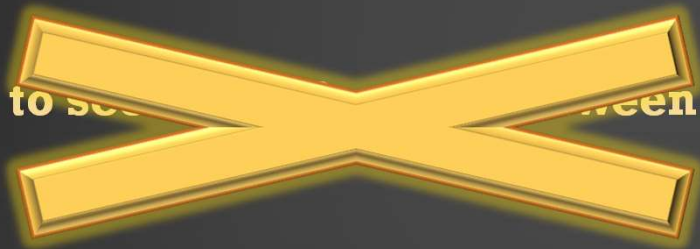
- Highly innovative product development work contexts
- Forming work systems that will support fast and adaptive product development in a thriving network of heterogenous firms

# THEORY: NEO-ST'S APPROACH

**Joint optimization**  **Continual negotiation**

# CONTEXT OF STUDY

- **Automotive start-up**
- **Open to new forms and practices**
- **Difficult to see the connection between past and present**
- **Less about the organizational fossilized practices**
- **More invested in aligning their organizational arrangements with the requisites of the current time**



# **METHOD**

**24-months ethnographical research**

**9 months study of Integrated vehicle control engineers**

**Integrating the electric control units (ECUs) for  
propulsion, steering and braking**

**Preparing the software architecture of the IVC as a platform  
for new autonomous functionalities**



**THANK YOU FOR LISTENING!**