

# ‘Artificial Intelligence and Sustainability-driven GVCs’

**Mohammad B. Rana**

Associate Professor of International Business and Strategy

Aalborg University Business School

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# AI in Platforms and Sustainability-driven GVCs

## ❖ Open Vs Closed Platform and AI

- ❖ Purpose and Boundary
- ❖ How do we determine home and host context?
- ❖ How cultures affect interactions or perceptions in virtual reality experience (3D)?
- ❖ e.g. Metaverse

## ❖ Why Platforms?

- Virtual Space for transactions and value creation
- Information sharing and Intelligent decision making
- Co-construction of values
- Higher predictability and efficiency
- Higher level of customization

## ❖ Pure Service Vs Product-based Platform and GVCs

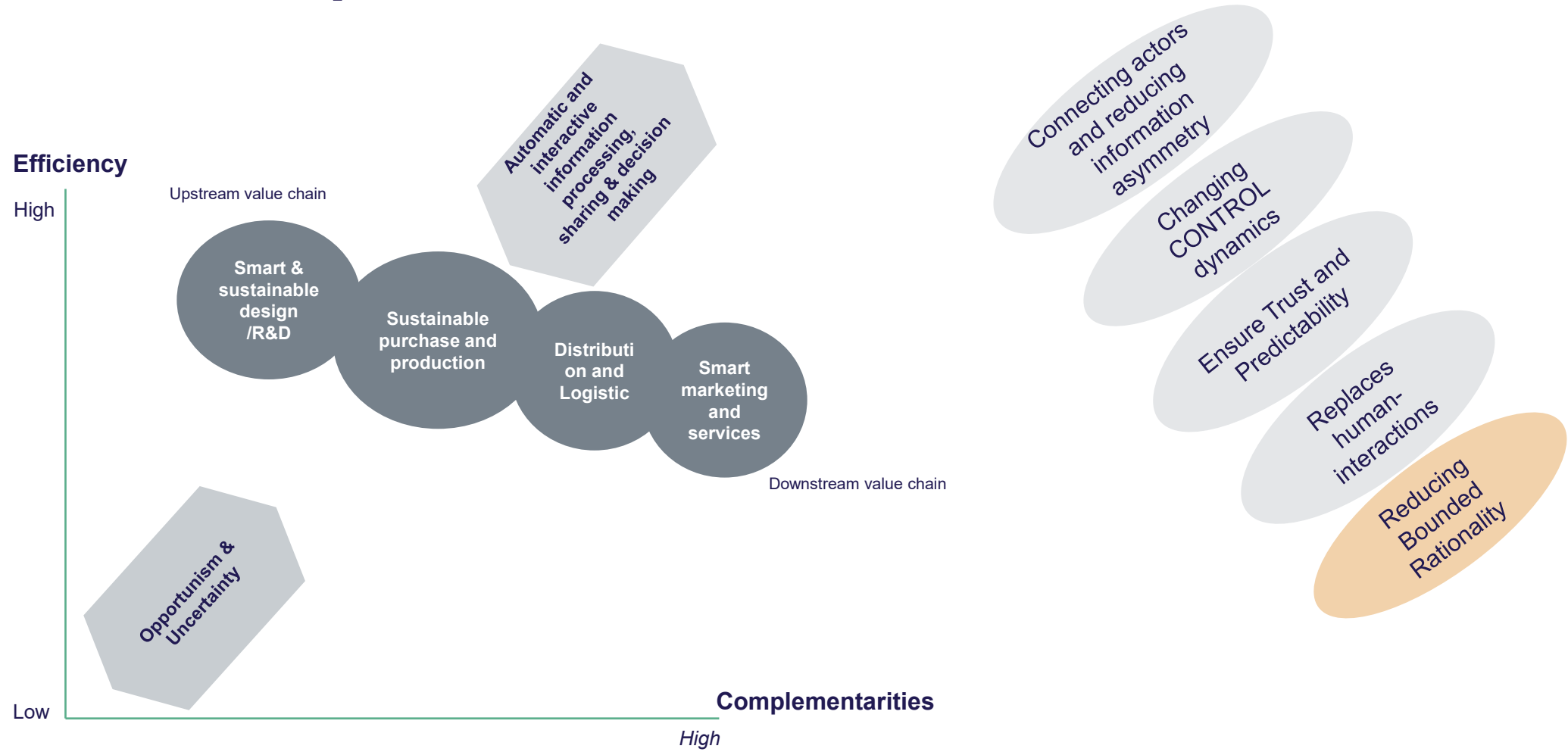
## ❖ Sustainability Logics drive Platforms in GVCs (i.e. economic, social, environmental)

## ❖ Underlying tool for decision making in Platform-system is AI



Global value chain

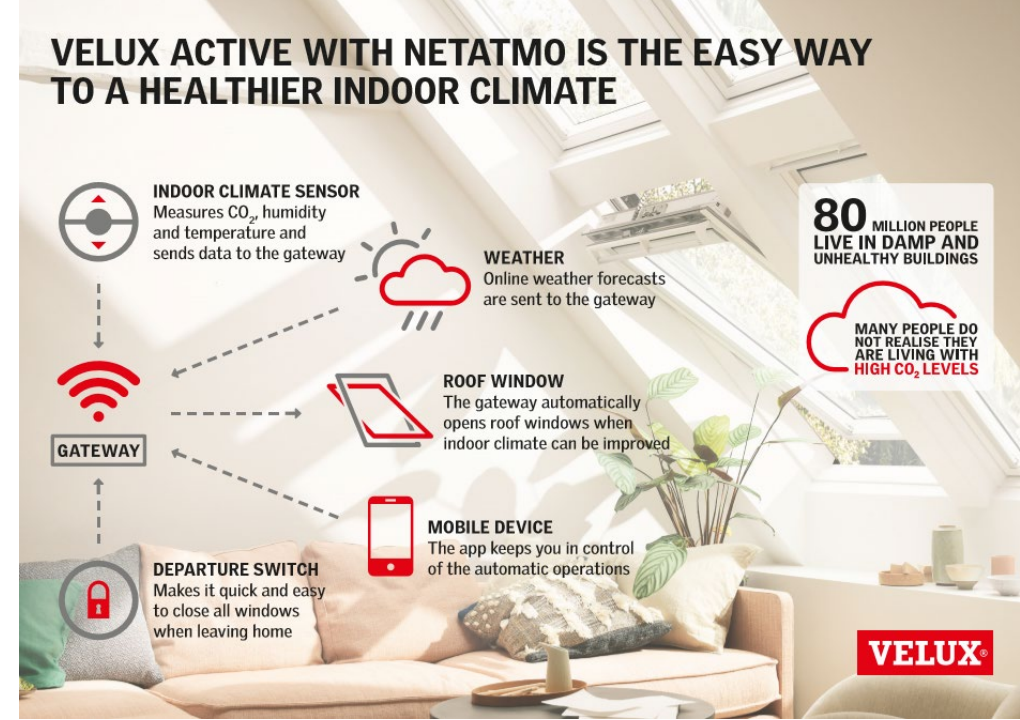
# AI underpinning Platform-systems and its Impact on GVCs?



# CASE: VELUX, Closed-Platform of GVCs

## AI in Sustainability-driven GVCs

- Sensing the changes more accurately and in real-time
- Connecting multiple actors across GVCs and demand and supply side activities
- Reducing **time-loss, operational loss, and wastage** (i.e. raw materials)
- Save **energy** and water consumption
- Optimize **efficiency** (production) and interdependent value creation
- Efficient **coordination** of activities and **high trust**



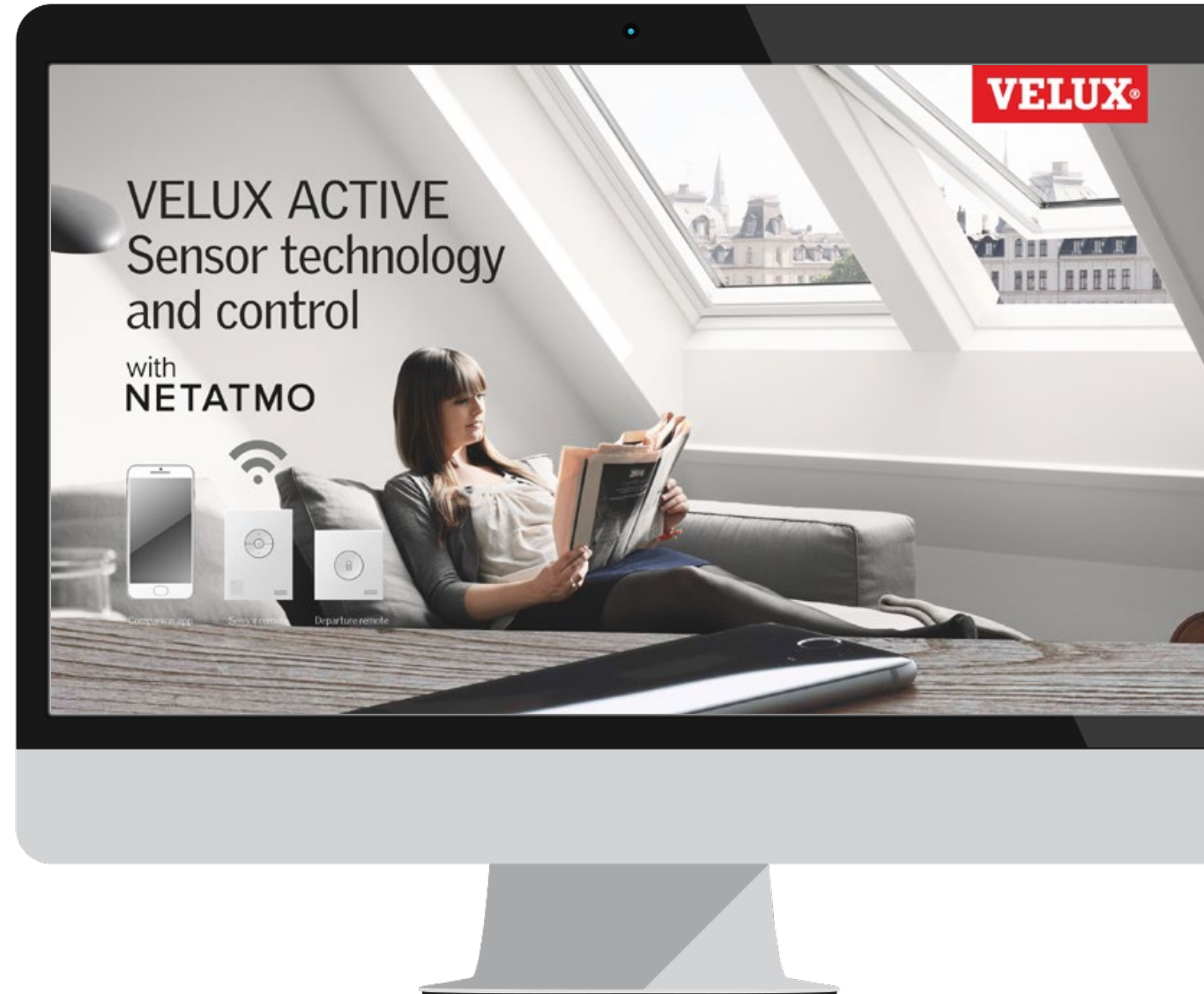


# CASE: VILUX

## AI in Sustainability-driven GVCs

- ▶ AI-driven decisions on routine tasks save time and avoid **human-complexity**
- ▶ **Shared governance and shared-responsibility** due to information sharing
- ▶ **Empowering** all value chain actors (i.e. buyers and suppliers) in GVCs
- ▶ Downstream and Upstream activities can be linked & **data-driven**
- ▶ **Measuring** environmental sustainability becomes accurate and strategic

(CO<sub>2</sub>, water-consumption, wastage)



# Issues related to AI-Based Platforms in the context of GVCs?

- ▶ **Data Privacy and data sharing** for organisations and individuals
- ▶ **Technical knowledge and Adaptation of GVC partners to use the AI-Platform**
- ▶ Managerial and entrepreneurial desire to change and leave partial authority to AI-based decision making. (i.e. Governance issue)
- ▶ **Digital infrastructure of Value chain partners** or their countries may not be ready to adapt
- ▶ Changing **customers mindset and habit**
- ▶ Ability to **reskill** manpower's and the **concern for layoff**
- ▶ **Security and control over data** and AI, and the **trust issues**
- ▶ Ethical concerns mostly lie on **downstream value chains**, i.e. **consumers with non-rational value proposition** (i.e. Anxiety, distress, privacy)

