

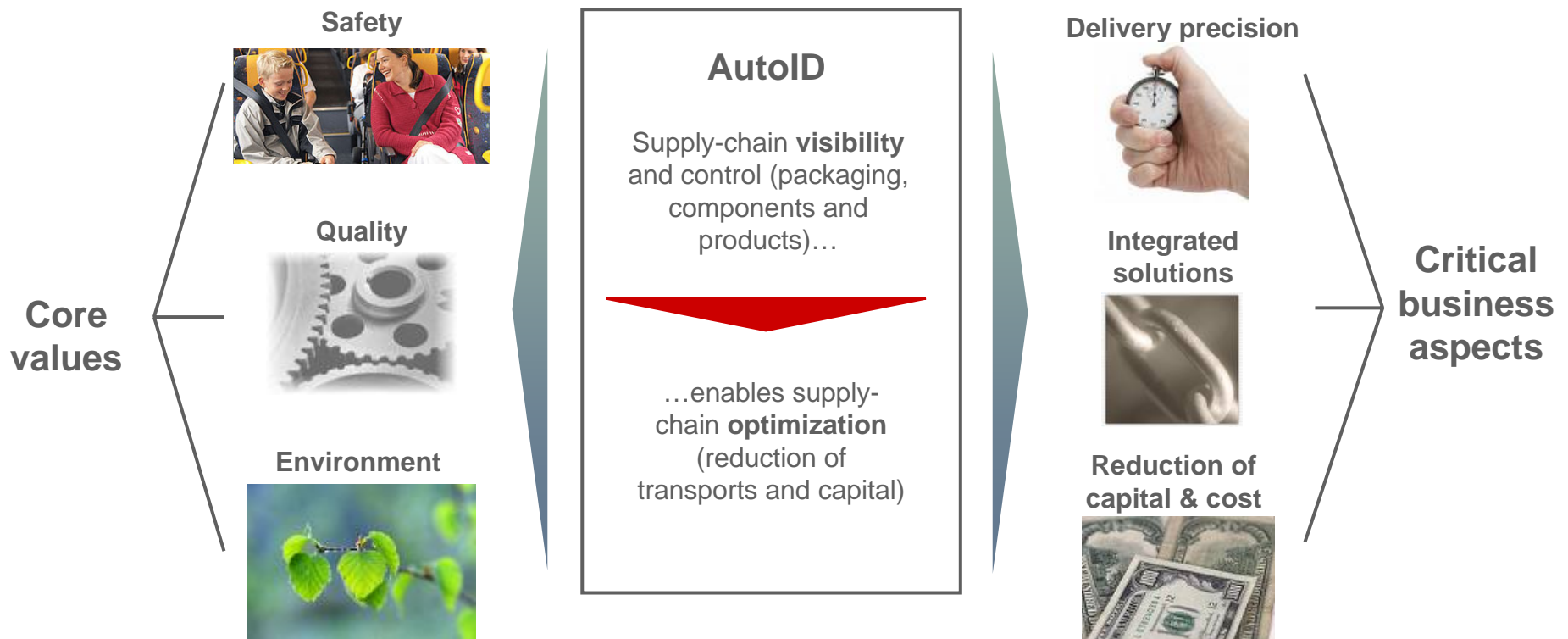
# **VOLVO**

**A glimpse into RFID**

**2008-06-17**

# AutoID

AutoID solutions will support Volvo in its pursuit towards achieving critical business aspects in line with core values



# Auto ID vs RFID

RFID is just one technology for realizing automatic data capture but the technology has evolved and gained a lot of attention in recent years

AutoID = Automatic IDentification



RFID = Radio Frequency IDentification



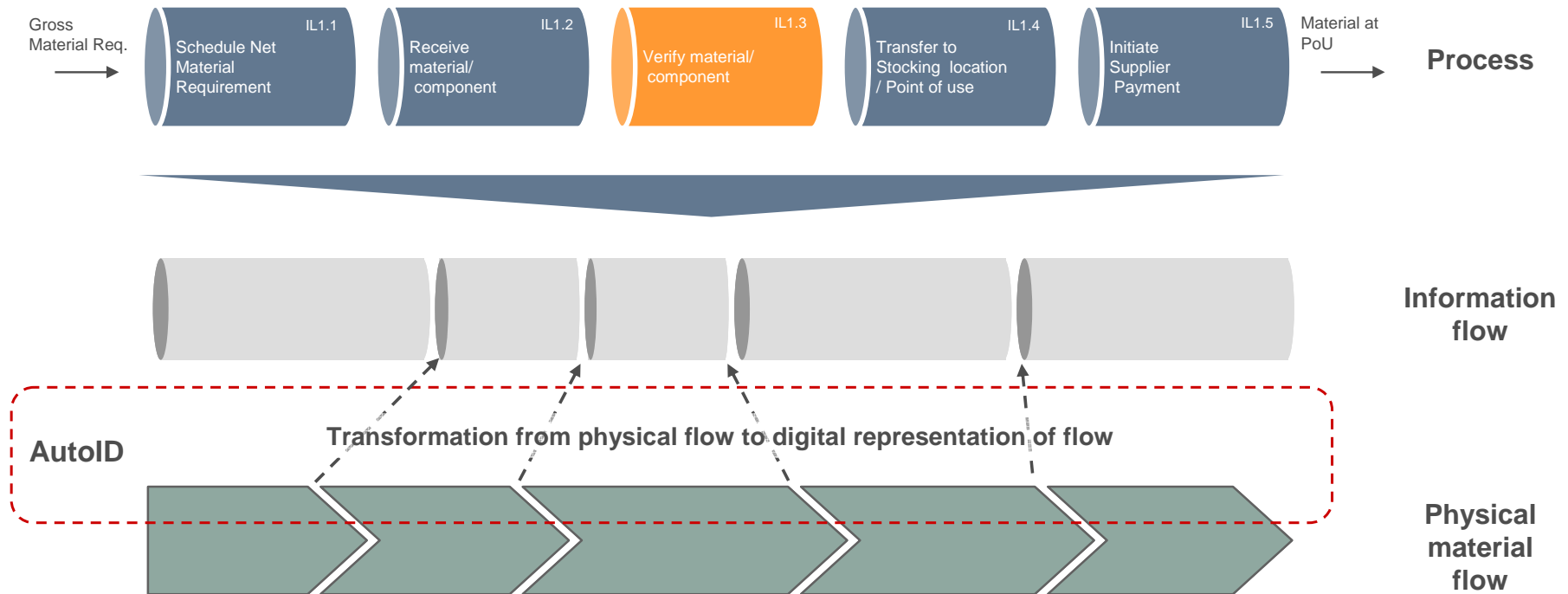
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*“RFID is only one of many technologies providing the possibility of automatic identification”*

# Auto ID role

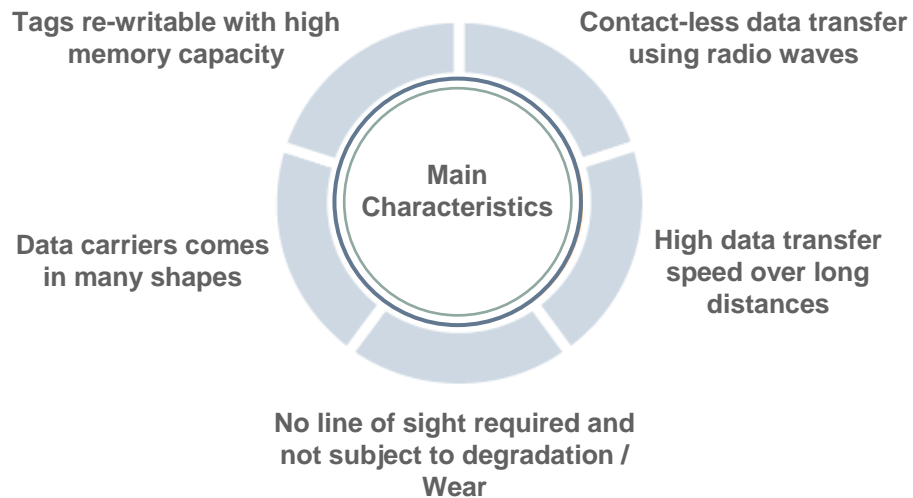
Data capture technologies aims to bring material flows and information flows into sync in order to enable process optimization



# RFID

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The RFID technology has a number of appealing characteristics at the same time facing challenges for large scale diffusion



Reach a global automotive standard

Define information structure guidelines

Data safety aspects

Manage the supplier – customer collaboration

# Odette RFID involvement

Odette is putting substantial effort into laying important groundwork to enable and facilitate an increased use of RFID within the entire supply chain

## Odette RFID initiatives

### ➔ Unique identification tag encoding scheme

- Odette has driven a global initiative to develop a RFID tag encoding scheme to be used for returnable transport items and automotive parts/components for B2B purposes
- The encoding scheme proposal is accepted within Europe (VDA etc.) and should be anchored with Japanese Jama/Japia and American AIAG in Detroit in July 2008
- A part of the encoding initiative is the development of a unique company coding scheme
- This solution is based using the latest available generation of 18000-6C tags (with 240 bits in UII)

JAIF RTI Guideline Project common scope		Japan	North America	Europe
<b>Layer 5</b> Motor vehicles		✗ Out of Scope	✗ Out of Scope	✗ Out of Scope
<b>Layer 4</b> Freight Containers		✗ Out of Scope	✗ Out of Scope	✗ Out of Scope
<b>Layer 3</b> Units and <b>Layer 2</b> Transport Units		○ In Scope	○ In Scope	○ In Scope
<b>Layer 1</b> Product Packaging		✗ Out of Scope	✗ Out of Scope	✗ Out of Scope
<b>Layer 0</b> Individual Items		✗ Out of Scope	✗ Out of Scope	✗ Out of Scope

# Odette RFID involvement

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Odette is putting substantial effort into laying important groundwork to enable and facilitate an increased use of RFID within the entire supply chain

## Odette RFID initiatives

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### ➔ Finished vehicle distribution

- The vehicle distribution project started in VDA with the intention to use a “Smart Label” for identification of individual vehicles
- Data content is mainly agreed, including unique ID rules (VIN) and UHF technology will likely be used
- VDA will present their guideline as an input to a European recommendation in the next Odette RFID meeting in early July



### ➔ RFIDNU

- RFIDNU is a recently finished national initiative investigating extended cross-company loops using RFID technology and has contained several RFID pilots in supplier companies



# Volvo RFID involvement

The RFID initiatives within the Volvo Group are tactical solutions as well as initiatives aimed at broader solutions

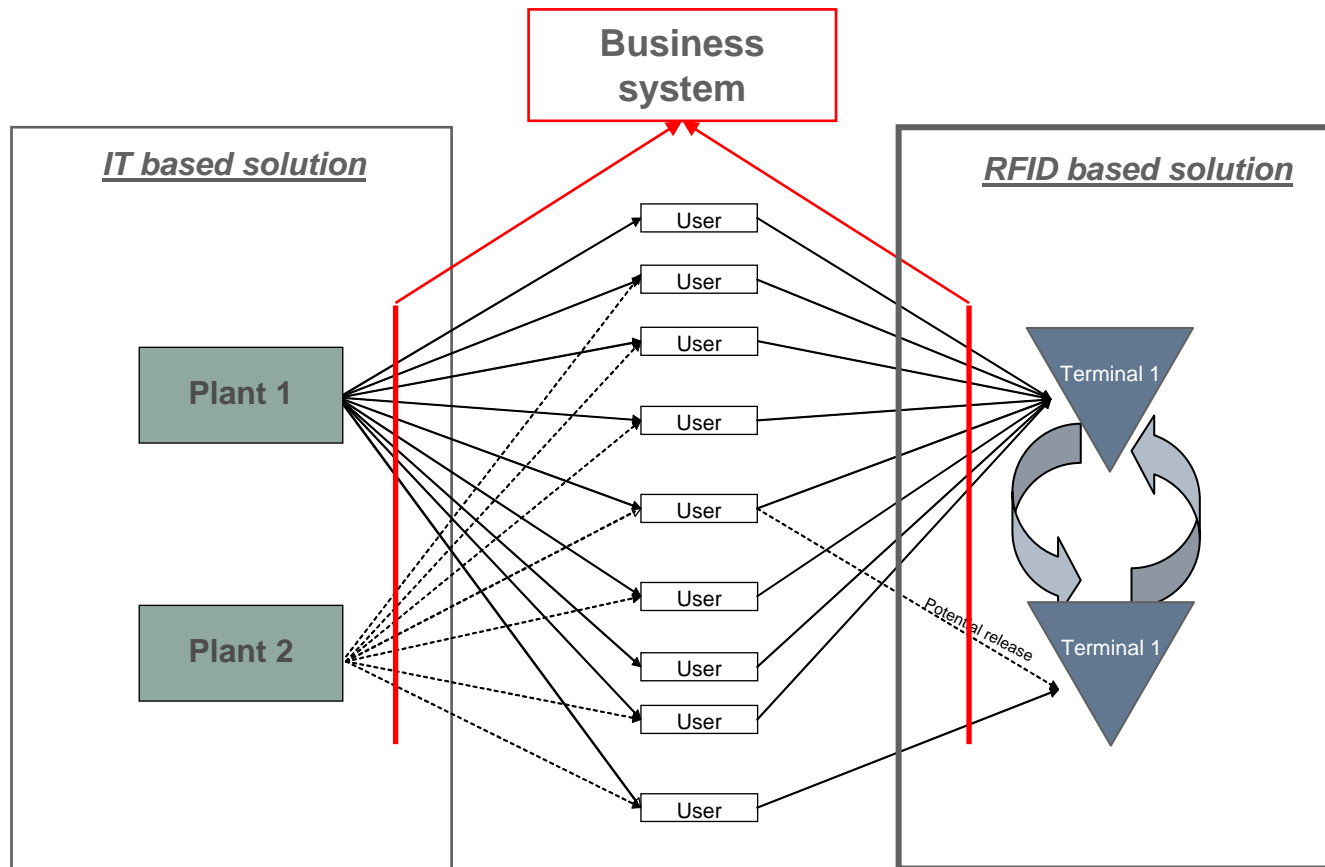


Closed loop solutions  
Involved in standardization  
Solutions using unique id's  
Involving suppliers



# Volvo RFID example

To gain control, information are sent to the business system from two different points in the process one secured with RFID technology



# Summary

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The aim for this presentation has been to convey a few key messages

- ➔ RFID is a “new” way of capturing data, supporting e-business, having advantages of its own but the true value is realized in process enhancements
- ➔ The RFID technology has a number of appealing characteristics at the same time facing challenges for large scale diffusion
- ➔ Odette is putting substantial effort into laying important groundwork in line with Odette principles to enable and facilitate an increased use of RFID within the entire supply chain
- ➔ Volvo is a part of and supports the Odette work at the same time realizing value from tactical RFID solutions

## Questions & Answers

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